



**CERTIFIED COMMISSIONING SPECIALIST
CCXS ONLINE TRAINING**

KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP
COMMISSIONING SPECIALIST CURRICULUM





PREPARING FOR THE CCXS EXAMINATION

KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP
COMMISSIONING SPECIALIST CURRICULUM



LEARNING OBJECTIVES



CCxS Exam Preparation

Suggested References for CCxS Examination

CCxS Examination Content Outline

CCxS Exam Sample Questions

CCxS Code of Ethics



PREPARING FOR THE CCXS EXAMINATION

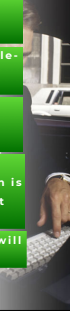
The CCxS examination is comprised of 120 four-option multiple-choice questions, administered in a computer-based examination format.

Applicants are allotted 2.5 hours in which to complete the exam. Each multiple-choice question has four answer choices; only one answer choice is correct.

Applicants have access to an on-screen calculator at all times during the examination, and will be provided with scratch paper that will be collected after the test administration.

The examination may include commissioning scenario-based questions. For each scenario, a set of two or more questions may be asked. The examination is written from the perspective that the applicant is a third-party, independent CxA authority.

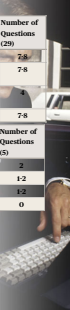
Credit is given only for questions that have responses. Questions left blank will be scored as incorrect. There is no penalty for guessing.



EXAMINATION CONTENT OUTLINE

1.Managing Commissioning Projects (18% weight)	Number of Questions (22)	2.Preparing Commissioning Documentation (Weight 19%)	Number of Questions (23)
Identify the scope of the project	1-2	Assist in developing the OPR	1-2
Develop a commissioning team	1-2	Create system/equipment list	1-2
Manage a commissioning budget	1-2	Create commissioning process tracking matrices	1-2
Identify commissioning deliverables	1-2	Develop the commissioning plan	2
Participate in VE activities	1-2	Develop commissioning schedules	1-2
Review project documents	1-2	Develop communications plans	1-2
Monitor the construction/project schedule	1-2	Create commissioning specifications	1-2
Participate in project meetings	1-2	Write system verification checklists	2
Conduct commissioning meetings	1-2	Create FPDs	4
Track deficiencies (issues log)	2	Determine site visit protocols (logistics)	0
Facilitate risk assessment as it relates to commissioning activities	2	Develop issues logs	1-2
Assess pass/fail criteria for functional test results	4	Document commissioning meetings	1-2
Identify tasks for completion of commissioning processes	2	Write commissioning reports	2
		Create systems manuals	1-2
		Develop end of warranty review processes	1-2

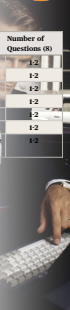
3.Conducting Commissioning Activities (24% weight)	Number of Questions (29)
Plan commissioning construction activities	7-8
Monitor commissioning construction activities	7-8
Facilitate the completion of construction checklists	7-8
Facilitate the acceptance phase	7-8
4.Managing Training Activities (4% weight)	Number of Questions (5)
Develop training plan	2
Facilitate training coordination meeting	1-2
Facilitate training activities	1-2
Conduct training follow-up activities	0



EXAMINATION CONTENT OUTLINE

5.Completing Warranty Phase Activities (5% weight)	Number of Questions (6)	6.Conducting Existing Building Commissioning (23% weight)	Number of Questions(20)
Facilitate off season testing	1-2	Determine Scope of Project	1-2
Troubleshoot facility issues	1-2	Conduct a building performance assessment	4
Measure energy performance	3	Prepare a CFR	1-2
Facilitate end of warranty meeting	1-2	Conduct a systems assessment	4
		Conduct a site investigation	4
		Recommend corrections and improvements	4
		Oversee implementation of corrective measures	4
		Conduct performance verifications	5

7.Conducting Ongoing Commissioning (7% weight)	Number of Questions (8)
Measure BTR performance	1-2
Evaluate building systems performance	1-2
Review building operating plan	1-2
Review maintenance activities	1-2
Accommodate space/function changes	1-2
Implement corrective actions	1-2
Publish measurement and performance results to stakeholders	1-2



CCXS EXAM SAMPLE QUESTIONS



While performing a routine submittal review, the Commissioning Provider(CxP) discovers that all variable air volume boxes scheduled to ship have omitted the control transformer. The CxP should?

- ☐ A. Send a written report to the design team and owner/owner's representative.
- ☐ B. Notify the mechanical and electrical contractors and inform them they must furnish a field-mounted transformer.
- ☐ C. Notify the supplier that there is an electrical problem.
- ☐ D. Notify the electrical engineer of the oversight.

CCXS CODE OF ETHICS



As a condition of earning and maintaining certification, applicants for the CCxS certification must agree to uphold and abide by the Code of Ethics, the tenets of which are set forth as follows:

- ☐ Take care of professional duties according to a reasonable industry standard of care.
- ☐ Do your job duties with trust, honesty, and integrity.
- ☐ Put the health and safety of the public ahead of everything else when doing your job.
- ☐ Work in a way that is in line with all laws and rules that apply; show integrity, honesty, and fairness in everything you do; and strive for excellence in all ethical matters.

CCXS CODE OF ETHICS+



- ☐ Be honest in any relationship with an employer or client, and tell the employer or client in full if you have a conflict of interest because of your business ties or personal interests
- ☐ Give a true and accurate account of your qualifications.
- ☐ Only offer products and services in areas where you have the skills and knowledge to meet the needs of clients and the public.
- ☐ Agree to follow and uphold all policies, procedures, guidelines, and requirements of the certification programme; use the designation as authorised and only in the approved way; acknowledge that the certificate and marks are the property of their respective owners; and return the certificate and stop using the designation and marks when asked to do so.

CCXS CODE OF ETHICS+

- Take responsibility for keeping the credential up to date by getting rectified and always following the Code of Ethics.
- Immediately and voluntarily report any felony convictions or other legal decisions that would be a violation of this Code of Ethics that have not already been reported, no matter when they happened, as well as any conditions that make it impossible to do the job as outlined in the competency requirements.



BEYOND
SMART CITIES

**GIVE
THANKS**