

Proficiency Levels of Design/Construction Disciplines vs. Key Courses/Skills

Draft Example

Key “Building Science” Courses For Quality, High Performance Buildings	Engineering				Design		Construction Management	Other - Sustainability /Housing Studies/ etc.
	Civil	Mech.	Arch. Engr.	Other - Material Science	Architecture - Bldg. Perf., Other	Other -		
Accreditation	ABET				NAAB, other		ACCE	Other
Building Science Fundamentals (<i>Building Science 101</i>)								
Building Enclosure Characterization & Optimization (<i>Hygrothermal Analysis; Structure & Control Layers</i>)								
Material Science for Buildings								
HVAC (MEP/other Building Services) Design, Analysis & Installation								
Indoor Air Quality								
Building Performance Tools & Analysis								
Advanced Design/ Construction Documentation (<i>detailing, scopes-of- work, specifications, etc.</i>)								
Quality Management/ Commissioning								
Integrated Design Process/ Multi- Disciplinary Project Management								
Systems Engineering/Integration- (ability to assess system implications)								
Other, e.g., <ul style="list-style-type: none"> • Facility operations & management • Testing; forensics • BIM, Etc. 								

NOTE: Proficiency levels are initially being addressed in terms of Bloom’s Taxonomy e.g., (1 = Remember (knowledge), 2 = Understand (comprehension), 3 = Apply (application), 4 = Analyze (analysis), 5 = Evaluate (synthesis), 6 = Create (design)). Skills descriptions can be expanded in terms of desired learning outcomes supporting specific job related core competencies.