ASHRAE Building Energy Modeling Professional (BEMP)

Exam Content Outline

Black Font = Weightings beginning June 1, 2025; Red Font = Weightings on current exam

Content Domain	Weighting	# Items
Domain 1: Establishing the Modeling Scope	17%	17
Domain 2: Components of Building and Energy Systems	29% 38%	29 38
Domain 3: Applications of Energy Models for Buildings	27% 22%	27 22
Domain 4: Interpretations of Energy Model Results	27% 23%	27 23
TOTAL	100%	100

Weighting of Subdomains

Domain 1: Establishing the Modeling Scope		*Complexity Level and Number of Items*			
Subdomain	**Description**	**Recall**	**Application**	**Analysis**	**Total**
1.1	Modeling Objectives	1 0	2 1	2	5 3
1.2	Analysis Methodologies	1 2	2 3	2 3	5 8
1.3	Software and Tool Selection	1	2	1	4
1.4	Project Scheduling and Budget Considerations	0	2 1	1	3 2
	Totals	**3**	**8 7**	**6 7**	**17**

Domain 2: Components of Building and Energy Systems		*Complexity Level and Number of Items*			
Subdomain	**Description**	**Recall**	**Application**	**Analysis**	**Total**
2.1	Location and Climate Definition	1	1	1	3
2.2	Building Envelope and Partitions	1	2	2	5
2.3	Building HVAC and Domestic Hot Water Systems	1 3	2 3	2	5 8
2.4	Lighting Systems	1	2 1	1	4 3
2.5	Other Internal and Process Loads	1 2	1	1 2	3 5
2.6	District Energy Systems	1 0	1	0 1	2
2.7	Renewable Energy Systems	0 1	1	1	2 3
2.8	Controls	1 2	2 4	2 3	5 9
	Totals	**7 11**	**12 14**	**10 13**	**29 38**

Domain 3: Applications of Energy Models for Buildings		*Complexity Level and Number of Items*			
Subdomain	**Description**	**Recall**	**Application**	**Analysis**	**Total**
3.1	Defining Appropriate Key Performance Indicators (KPIs)	2 3	3 5	3 2	8 10
3.2	Simulation Comparisons	2	3	4 2	9 7
3.3	Evolution of Simulation Techniques to Meet Project Methods	0	3 1	2 1	5 2
3.4	Baseline Building Models	2 1	2 1	1	5 3
	Totals	**6**	**11 10**	**10 6**	**27 22**

Domain 4: Interpretations of Energy Model Results		*Complexity Level and Number of Items*			
Subdomain	**Description**	**Recall**	**Application**	**Analysis**	**Total**
4.1	Verification and Troubleshooting of the Simulation	1	2 3	3	6 7
4.2	Analyzing and Comparing Modeling Results	1 2	2 4	3 2	6 8
4.3	Greenhouse Gas (GHG) Emissions Analyses (NEW)	1	1	1	3
4.4	Economic Analyses	1	1	1	3
4.5	Sensitivity Analyses	1 0	2 1	3 1	6 2
4.6	Project Deliverables	1	1	1	3
	Totals	**6 5**	**9 10**	**12 8**	**27 23**