



Completing the Certification Process

How to Apply & Prepare for the ACHA Examination

Become the 'Expert'



ACHA offers Board Certification in the specialized field of healthcare architecture.

Our vision

To be the organizational voice of the best and brightest healthcare architects

Our mission

To offer board certification within the specialized field of healthcare architecture

Our action

To improve the built environment through the dedication of our members

To provide our members networking, educational and marketplace opportunities



ACHA has been ***recognized*** by the AIA as a ***specialty certification*** program.



'Expert' Definition

A **Healthcare Architect** is:

- **Conversant** with healthcare delivery and trends as they relate to architectural settings.
- **Knowledgeable** of the functional, technical and regulatory issues as they apply to specific settings and is skillful in the planning, programming, design, construction, and management of these architectural settings.
- The typical ACHA member is **self-motivated** & a **life long learner** of the HC industry.



Six Steps to become 'the expert'

- 1 - Experience
- 2 - Application
- 3 - Portfolio
- 4 - Preparation
- 5 - Exam
- 6 - Continuing Education



1 - Experience

- Licensed architect for at least **5** years
- Current license in at least **1** State, US possession or Canada
- Healthcare architecture is the majority of the applicant's full-time practice for at least **3** of last **5** years
- **3** letters of recommendation from architects (not in firm where employed)
- **3** letters of reference from clients



2 - Application

- A completed and signed application must be filled out and returned along with a portfolio of projects.
- 1 Copy of original application & portfolio bound in 8 ½" X 11" loose-leaf format
- 1 CD containing all of the application and portfolio pages saved in 1 Adobe .pdf format file.



Application Deadlines

- March Examination Cycle - 1st - 31st
Application Deadline December 31
- June Examination Cycle – 1st - 30th
Application Deadline March 31
- September Examination Cycle – 1st-30th
Application Deadline June 30



Application Q & A

- Q. What if I have questions about my portfolio, application or the exam?
 - Contact the ACHA office & you will be put in touch with the appropriate ACHA members.
 - Be the 'aggressive consumer'.



3 - Portfolio

- Up to 9 projects from past 5 years.
- Sample of portfolio is available 'on-line'.
- **Hint** - Use your marketing 'project sheets & plans' for your portfolio.
- The portfolio is not intended to be an 'arduous Herculean' effort.
- It is to be a **physical demonstration of your knowledge of the Healthcare industry**.



4 - Preparation

- When the applicant is deemed eligible, the ACHA Executive Office will e-mail out an eligibility and examination scheduling instructions
- Eligible Candidate has **1** year to take the examination
- **'Hint'** – if you do not approach the exam 'date' with the same focus as you would a RFP 'submission', other issues may take a priority and the **1** year eligibility will slip away.....



Exam Preparation

- Review the 'suggested reading list' in the Candidate Handbook
- Attend educational programs/forums
- AIA Guidelines and Life Safety Codes
- ACHA - Planning & Programming Workshop
- ACHA - Web Resource Center
- **Hint** – **Take the Practice Exam**
- **Hint** - **Find a Mentor**



Preparation Q & A

- Q. Are there successful tips for passing the exam?
 - Read the question **'slowly'**. Do not read more into the question than what is being asked.
 - Don't rush your answer.
 - Plan review/study time of approximately 16 - 24 hours prior to the exam.
 - **Find a Mentor**
 - If you know the material, the answer will be obvious.
 - All Options (A, B, C, D) will be plausible.
 - There is no penalty for guessing.



Preparation Q & A (cont'd)

- Q. What do I need to study?
 - Read the Detailed Content Outline – all questions are based on the 'DCO'.
 - [Review the helpful hints 'white paper' on the ACHA website.](#)
- Q. How do I find a mentor who has passed the exam?
 - Contact the ACHA office for locations of successful applicants near you.



Preparation Q & A (cont'd)

- Q. Is there a practice exam available?
 - Yes. **A practice exam is available 'on-line'**. It has 50 questions & is proportional in subject matter and complexity to the real exam. See ACHA website for detailed information.
- Q. Is there study guide available?
 - No. The ACHA exam is designed to test a **'body of knowledge'** of the Healthcare Architecture Industry that results in a professional certification that is legally defensible and professionally sound. It is not a test that can be 'memorized' that results in a 'certificate'.



5 - Exam



The exam content will directly follow the 'Detailed Content Outline' located in the Candidate Handbook.



Exam Format

110 Total test items
100 Scored plus 10 Non-scored
Multiple forms are developed
Two hour time limit
All multiple choice



Non-Scored Questions

- Non scored questions are being tested prior to their use in the real exam.
- Data on the number of correct answers, comments from candidates are reviewed by the Exam Committee
- Questions will be reviewed for an entire 1 year exam cycle before they can be added to real exam



Six Content Areas

Planning	20 Items
Programming	19 Items
Design	27 Items
Documentation	17 Items
Constr. Administration	11 Items
Post Construction	<u>6 Items</u>
TOTAL	100 Items



Question Types

Recall	20 Items
Application	49 Items
Analysis	<u>31 Items</u>
TOTAL	100 Items



Question Type - 1

RECALL –

Requires only the recall or recognition of specific factual information.

Examples of recall items will ask for information that could be directly found in a textbook or other resource.



Question Type - 2

APPLICATION –

Requires the comprehension, interpretation, or manipulation of concepts or data, in which the response or outcome is situationally dependent.

Examples include: basic calculations or finding relationships between concepts.



Question Type - 2

ANALYSIS –

Requires integration of a variety of concepts to solve a problem.

Examples of these questions are unusual situations, complex calculations... where understanding of the variables will dictate the correct answer.



Exam Questions/Items

15 questions, 15 minutes, all 3 levels of questions, all areas of the 'Detailed Content Outline'

Let the **games'** begin....



Exam Question/Item - 1

When considering the design for information systems in any inpatient or outpatient healthcare project, the acronym EMR refers to:

- A. Equipment Management Roster
- B. Electronic Medical Record
- C. Emergency Medical Response
- D. Electrical Maintenance Report



Exam Question/Item - 1

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- A. Equipment Management Roster
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Exam Question/Item - 2

Which of the following design criteria is LEAST important in planning a pediatric critical care unit?

- A. Visibility of the Patient
- B. Ability to Accommodate Patient Families
- C. Access to Patient Toilets
- D. Ability to Accommodate Crisis Interventions



Exam Question/Item - 2

Which of the following design criteria is LEAST important in planning a pediatric critical care unit?

- A. Visibility of the Patient
- B. Ability to Accommodate Patient Families
- C. Access to Patient Toilets
- D. Ability to Accommodate Crisis Interventions



Exam Question/Item - 3

Which of the following analytical approaches could be used in the evaluation of building options?

- 1. Net present value analysis
 - 2. Initial Construction Cost Analysis
 - 3. Goodness of fit analysis
 - 4. Operational cost impact
- A. 1, 2 and 3 only
 - B. 1, 2 and 4 only
 - C. 1, 3 and 4 only
 - D. 2, 3 and 4 only



Exam Question/Item - 3

Which of the following analytical approaches could be used in the evaluation of building options?

- 1. Net present value analysis
 - 2. Initial Construction Cost Analysis
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Exam Question/Item - 4

According to the Life Safety Code, which of the following conditions is NOT required to allow occupancy of new construction or an existing building that is in violation of the Life Safety Code?

- A. A plan of correction has been approved.
- B. A fire watch has been instituted.
- C. The occupancy classification remains the same.
- D. No serious life safety hazard exists as judged by the AHJ.



Exam Question/Item - 4

According to the Life Safety Code, which of the following conditions is NOT required to allow occupancy of new construction or an existing building that is in violation of the Life Safety Code?

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Exam Question/Item - 5

The Emergency Dept. staff have stated that they do not have sufficient space as evidenced by patients and equipment located in the corridor. The architect should first

- A. review volume and capacity data.
- B. study expansion options.
- C. propose fast track care unit.
- D. assess clinical decision unit length of stay.



Exam Question/Item - 5

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Exam Question/Item - 6

In the programming analysis of spaces in a hospital, which of the following conditions present the most significant operational challenges?

- 1. Surgery separated from SICU
 - 2. C-section separated from OB Unit
 - 3. Pathology separated from Surgery
 - 4. Emergency separated from Imaging/Radiology
- A. 1, 2, and 3 only
 - B. 1, 2, and 4 only
 - C. 1, 3, and 4 only
 - D. 2, 3, and 4 only



Exam Question/Item - 6

In the programming analysis of spaces in a hospital, which of the following conditions present the most significant operational challenges?

- 1. Surgery separated from SICU
 - 2. C-section separated from OB Unit
 - 3. Pathology separated from Surgery
 - 4. Emergency separated from Imaging/Radiology
- A. 1, 2, and 3 only
 - B. 1, 2, and 4 only
 - C. 1, 3, and 4 only
 - D. 2, 3, and 4 only



Exam Question/Item - 7

A common departmental adjacency relationship would be to locate a Clinical Decision Unit (CDU) adjacent to which of the following departments

- A. surgery
- B. medical records
- C. emergency
- D. nursing units



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- C. emergency
- D. nursing units



Exam Question/Item - 8

An architect is programming an operating suite for 6,000 annual surgery procedures. The following information is available:

- operates 250 days/year, 8 hrs/day.
- 65% outpatient cases w/an avg. time (including turnaround) of 60 minutes.
- 35% inpatient cases with an avg. time (including turnaround) of 135 minutes.

Based on this information and industry standard utilization rates, how many operating rooms will be needed?

- A. 4
- B. 6
- C. 8
- D. 10



Exam Question/Item - 8

An architect is programming an operating suite for 6,000 annual surgery procedures. The following information is available:

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- 65% outpatient cases w/an avg. time (including turnaround) of 60 minutes.
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Based on this information and industry standard utilization rates, how many operating rooms will be needed?

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- B. 6**
- C. 8
- D. 10



Exam Question/Item - 9

The presence of which medical gas dictates the requirement that all medical gases be independently valved at each operating room?

- A - nitrous oxide
- B - medical air
- C - carbon dioxide
- D - oxygen



Exam Question/Item - 9

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- C - carbon dioxide
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Exam Question/Item - 10

Per the *Guidelines* negative air pressure is found in which of the following rooms?

- 1. bronchoscopy
 - 2. emergency waiting
 - 3. patient room toilet
 - 4. trauma
- A. 1, 2, and 3 only
 - B. 1, 2, and 4 only
 - C. 1, 3, and 4 only
 - D. 2, 3, and 4 only



Exam Question/Item - 10

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 - 4. trauma
- A. 1, 2, and 3 only
 - B. 1, 2, and 4 only
 - C. 1, 3, and 4 only
 - D. 2, 3, and 4 only



Exam Question/Item - 11

Nuclear Imaging scans typically allow observations of which of the following?

- A. brain activity thru electronic physiological monitoring
- B. ambulatory EKG recorded over a 24 hour period
- C. EEG & EKG monitoring via both video & audio monitoring
- D. cardiovascular performance through monitoring & SPECT



Exam Question/Item - 11

Nuclear Imaging scans typically allow observations of which of the following?

- A. brain activity thru electronic physiological monitoring
- B. ambulatory EKG recorded over a 24 hour period
- C. EEG & EKG monitoring via both video & audio monitoring
- D. cardiovascular performance through monitoring & SPECT



Exam Question/Item - 12

Vibration considerations must be usually considered in the ceiling mounted equipment for which types of surgery

- 1 - neurological
 - 2 - ophthalmic
 - 3 - oral
 - 4 - cardiovascular
- A. 3 and 4 only
 - B. 2 and 4 only
 - C. 1 and 2 only
 - D. 1 and 3 only



Exam Question/Item - 12

Vibration considerations must be usually considered in the ceiling mounted equipment for which types of surgery

- 1 - neurological
 - 2 - ophthalmic
 - 3 - oral
 - 4 - cardiovascular
- A. 3 and 4 only
 - B. 2 and 4 only
 - C. 1 and 2 only
 - D. 1 and 3 only



Exam Question/Item - 13

A healthcare design feature of the labor/delivery/recovery/postpartum (LDRP) unit is that

- A - only two patient moves are necessary
- B - there is less flexibility in room utilization
- C - it can provide single room maternity care
- D - cesarean section patients do not need to be moved



Exam Question/Item - 13

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Exam Question/Item - 14

Which is one of the most dynamic components for staffing of a 125 bed suburban community hospital due to cyclical demand?

- A. intensive care
- B. emergency
- C. ambulatory surgery
- D. imaging



Exam Question/Item - 14

Which is one of the most dynamic components for staffing of a 125 bed suburban community hospital due to cyclical demand?

- A. intensive care
- B. emergency
- C. ambulatory surgery
- D. imaging



Areas of 'Required Focus'

- Planning
- Programming

- 39% of the Exam
- Survey shows this to be critical to healthcare practice. ACHA believes that these sections truly differentiate Healthcare Architects from the other building types.
- **Hint** – Attend ACHA Planning & Programming Workshop
- Find a **mentor...**



Planning & Programming Study Points

- Adjacency of Departments
- Work Flow & Process
- Planning Modules and Formulas
- Comparisons and Constraints
- Industry standards and direction
- ACHA Planning & Programming Workshop
- Find a 'Mentor'



Exam Format

- Exam is computer administrated with on-site proctor at over 150 locations nationally (Monday – Friday)
- No exam is identical to another
- All questions are multiple choice



Exam Passing

- To pass...71 or more correct answers
- Passing point reflects appropriate level of knowledge – typically 70 to 75 correct
- Scoring is cumulative
- Score is automatically generated immediately after hitting the 'send' button....



6 - Continuing Education

- Passing the test = 20 HSW - AIA CEU's
- ACHA Members are required to maintain 18 CEU/year. 12 hours must be healthcare related subjects.
- The AIA CEU form is acceptable for submission



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