

17

# **Education**

#### Introduction

What is the Education Requirement?	2
For Initial Licensure	2
For NCARB Certification	2
The Education Standard	2
About NCARB	3
NCARB Services	3
Licensure	4
NCARB Certification	5
Accrediting Boards	. 6

#### Satisfying the Education Requirement

#### Foreign-Educated Applicants 8

Licensure for Foreign-Educated Applicants	9
Certification for Foreign-Educated Applicants	11

## The Education Alternative to NCARB Certification

#### The Education Evaluation Services for Architects

2

7

12

About EESA	
The EESA-NCARB Education Evaluation	
When an EESA-NCARB Education Evaluation is Required	
The EESA Evaluation Process	
Applying for the EESA-NCARB Education Evaluation	
Ways to Fulfill Your Education Deficiencies	
Request for Reconsideration of an EESA-NCARB Education Report	21
Appeal of a Denial of a Request for Reconsideration	
of an EESA-NCARB Education Evaluation Report	
The Education Standard	23
About the NCARB Education Standard	
Liberal Arts	
History, Theory, and Human Behavior	
Design Synthesis	
Building Technology	
Professional Practice	
Electives	
Resources	40

© 2023 National Council of Architectural Registration Boards (NCARB)

This document, effective December 2023, supersedes all previous editions of the *Education Guidelines* and the *Education Standard*. Please check NCARB's website, <u>www.ncarb.org</u>, regularly for updates to this publication and for the most current information regarding the Architectural Experience Program® (AXP®) and the experience requirement for NCARB certification.

## What is the Education Requirement?

#### FOR INITIAL LICENSURE

A professional degree from a program accredited by the National Architectural Accrediting Board (NAAB) or the Canadian Architectural Certification Board (CACB) is the most accepted way (and sometimes the only way) to satisfy U.S. jurisdictions' education requirements.

Each jurisdiction sets its own specific education requirements, so the type of degree you earn may also have an impact on whether you can become licensed in multiple jurisdictions. These requirements may change, so it's a good idea to check in with your individual board to verify their current standards.

#### FOR NCARB CERTIFICATION

In order to gain an NCARB Certificate, you must meet NCARB's education requirement by earning a professional degree in architecture from a program accredited by the NAAB or the CACB. Program accreditation must have occurred not more than two years after your graduation or without revocation for two years or less before your graduation. A professional degree in architecture certified by the CACB from a Canadian university also meets the education requirement.

If you do not have an accredited degree as described above, there are two alternative ways to satisfy the education requirement for NCARB certification:

- Satisfy the requirements as specified for the education alternative.
- Hold a degree in the field of architecture that is not accredited by NAAB or CACB, and obtain an EESA-NCARB Education Evaluation report stating that you have satisfied the <u>NCARB Education Standard</u>. The EESA evaluation may identify additional courses you will need to complete.

#### THE EDUCATION STANDARD

The NCARB Education Standard is an approximation of a professional degree from a NAAB-accredited degree program. It includes liberal arts, professional studies, and electives, which together comprise a professional education in architecture. A detailed description of the subject categories and the number of semester credit hours required in each subject category is available in the NCARB Education Standard in this document.

## About NCARB

The National Council of Architectural Registration Boards' membership is made up of the architectural licensing boards of the 50 states, the District of Columbia, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands. NCARB, in collaboration with these boards, facilitates the licensure and credentialing of architects to protect the health, safety, and welfare of the public.

To achieve these goals, NCARB works with its Member Boards and volunteers to develop and facilitate standards for licensure, including the national examination and experience program. NCARB also recommends regulatory guidelines for licensing boards and helps architects expand their professional reach through the NCARB Certificate.

#### NCARB SERVICES

NCARB exists to help you advance from student to practicing architect, so our services span the many phases of your career—think of us as your professional guide. Whether you're navigating the Architectural Experience Program<sup>®</sup> (AXP<sup>®</sup>), completing the Architect Registration Examination<sup>®</sup> (ARE<sup>®</sup>), or earning your NCARB Certificate, NCARB is here to help.

We can store all your major milestones, including official transcripts, employment history, examination successes, and more—a safe record of all of your achievements and accomplishments, ready to be transmitted to the jurisdiction of your choice.

#### **NCARB** Mission

NCARB, in collaboration with licensing boards, facilitates the licensure and credentialing of architects to protect the health, safety, and welfare of the public.

### Licensure

Before you can officially call yourself an architect, you have to earn a license. Once you do, you'll prove to your firm and your community that you're able to protect the health, safety, and welfare of those who live and work in the built environment. Each licensing board has its own set of requirements, but navigating them doesn't have to be complicated. NCARB has developed a number of tools and resources to help you succeed in meeting your jurisdiction's specific standards in the following three areas:

#### - Licensure/Registration

NCARB uses the words "licensure" and "registration" interchangeably when talking about the process of becoming an architect.



#### EDUCATION

The typical first step to becoming an architect is finding a school that offers a professional degree in architecture from a program accredited by the <u>National Architectural Accrediting</u>. <u>Board</u> (NAAB).

With over 120 schools to choose from, the NAAB can help you find a school that fits your vision—but if you don't have a degree from a NAAB-accredited program, you can still pursue licensure through one of the additional paths available in some jurisdictions.

Ready to start your education in architecture? All the information you need can be found in this document.



#### **EXPERIENCE**

Licensure candidates also have to gain experience under the supervision of a practicing architect. The AXP provides the framework to guide you through earning and recording your professional experience—covering everything from site design to project management. And you can start reporting experience after graduating high school or an equivalent.

We know you'll be busy learning the ins and outs of architecture. That's why we offer a number of tools—including a free mobile app—that can help you log experience hours and understand the program requirements. And since completing the AXP is a core component for certification, you'll be on your way to earning your NCARB Certificate, too.

More information about earning experience can be found in the AXP Guidelines.



#### EXAMINATION

Another key part of becoming an architect is demonstrating your knowledge and skills through the ARE. With exam divisions that are designed to reflect the current profession, the ARE assesses your competency to practice architecture independently. Passing the exam is another big step toward finally getting that license.

Whenever you need a helping hand, our tips, guides, and inspiring success stories are there to make sure you have what you need to get it done. To learn more about the exam and start planning, read the *ARE Guidelines*.

## **NCARB** Certification

Following initial licensure, obtaining an NCARB Certificate ensures you can get the most out of your career in architecture. It provides mobility and signifies that you have met the national standards that guide the 55 licensing boards. With an NCARB Certificate in hand, it's simpler to get licensed across jurisdictions—allowing you the freedom and flexibility to pursue your career and connect with clients regardless of location.



#### **BENEFITS OF THE CERTIFICATE**

Once you've earned your NCARB Certificate, you can take advantage of all the following benefits:

#### **NCARB Credential**

Obtaining and maintaining an NCARB Certificate demonstrates that you've met national standards. You can now use the letters "NCARB" after your name.

#### Reciprocity

The Certificate streamlines the process for obtaining a license in a new jurisdiction.

#### Mobility

Gaining reciprocity in multiple jurisdictions allows you the freedom to go wherever the work takes you.

#### **Competitive Edge**

Setting yourself apart from other architects can be key for your career; the greater flexibility you'll enjoy as a Certificate holder is often an important factor for firms when hiring and promoting.

#### Security

As an NCARB Certificate holder, you don't have to worry about record keeping—all your information is stored on our secure servers, ready whenever you need it.

#### **Free Continuing Education**

Earning continuing education hours in Health, Safety, and Welfare (HSW) has never been easier, thanks to NCARB's online <u>Continuum Education Series</u>—free for Certificate holders!

For more information about how to access all the opportunities the NCARB Certificate has to offer, read the <u>Certification Guidelines</u>.

## **Accrediting Boards**



#### **ABOUT NAAB**

The National Architectural Accrediting Board (NAAB) establishes the criteria by which professional degree programs in architecture in the United States are evaluated and accredits programs that meet those standards. NAAB also administers the Education Evaluation Services for Architects (EESA) program on NCARB's behalf. NAAB and NCARB are related organizations; however, NAAB is an independent organization and is not affiliated with any architectural registration board.

Since most state registration boards in the United States require applicants for registration to have graduated from a NAAB-accredited or CACB/CCCA-accredited program, obtaining such a degree is an essential aspect of preparing to become an architect. While graduation from a NAAB or CACB/CCCA-accredited program does not assure registration, the accrediting process is intended to verify that each accredited program substantially meets standards that, as a whole, comprise an appropriate education for an architect.



#### **ABOUT CACB/CCCA**

Canadian Architectural Certification Board/Conseil canadien de certification en architecture (CACB/CCCA) establishes the criteria by which professional degree programs in architecture in Canada are evaluated and accredits programs that meet those standards.

## Satisfying the Education Requirement

#### FOR INITIAL LICENSURE

A professional degree in architecture from a NAAB- or CACB/CCCA-accredited program satisfies NCARB's recommended education requirement for initial and reciprocal registration in most U.S. and Canadian jurisdictions. If you received your education in a foreign country, refer to our **Foreign-Educated Applicants** section.

#### FOR NCARB CERTIFICATION

Before you receive your NCARB Certificate, you must be licensed and satisfy the NCARB education requirement. In order to meet this requirement, you must meet one of the following requirements:

- Hold a professional degree in architecture from a program accredited by NAAB or CACB/CCCA that either:
  - o Received accreditation no later than two years after your graduation, or
  - o Was accredited and remained accredited, without revocation, two years or less before your graduation.
- Have an EESA-NCARB education evaluation report that indicates satisfaction of the <u>NCARB</u> <u>Education Standard</u>.

A professional degree may be a Bachelor of Architecture, a Master of Architecture, or a Doctor of Architecture. For a list of accredited programs, visit **NAAB's website**.

Degrees in architectural studies, Master of Architecture degrees from non-NAAB accredited programs, and degrees in related fields do not satisfy the education requirement for NCARB certification.

If you do not have a professional degree in architecture from a NAAB- or CACB/CCCA-accredited program, refer to the **Education Alternative** section.

## Foreign-Educated Applicants

If you have a recognized education credential in architecture in a country other than the United States or Canada, you may be able to satisfy the NCARB recommended education requirement for initial licensure by having your education evaluated through the <u>Education Evaluation</u> <u>Services for Architects (EESA)</u>.

If you have a recognized education credential in architecture in a country other than the United States or Canada and **are licensed to practice architecture in a foreign country** with unlimited practice, you may be eligible to pursue NCARB certification through the Foreign Architect Path

#### Keep in Mind

U.S. jurisdictions have different requirements, so check with the jurisdiction you would like to be registered in to verify registration and practice requirements.

by meeting the education, experience, and examination requirements. Learn more about the Foreign Architect Path.

Note: If you earned a degree from a program outside the U.S. or Canada that is accredited by the NAAB, you are considered to have met NCARB's standard education requirement.

Licensure for Foreign-Educated Applicants	9
Certification for Foreign-Educated Applicants	11

#### Foreign Educated vs. Foreign Licensed

#### **Foreign-Educated**

- Your education was earned outside the United States or Canada
- You DO NOT hold a license to practice architecture anywhere in the world, or
- You DO have a foreign license, but it does not allow the unlimited practice of architecture
- Learn more in this document.

#### Foreign Architect Path

- You hold a current license to practice architecture in country other than the United States or Canada
- Your foreign license allows for the unlimited practice of architecture (any size, any building use or construction type, nationwide)
- The foreign country has a formal record-keeping mechanism for disciplinary actions in the practice of architecture
- Learn more in the *Certification Guidelines*.

## Licensure for Foreign-Educated Applicants

The process for initial licensure varies from jurisdiction to jurisdiction; however, in most U.S. jurisdictions, you will need to do the following:

#### START AN NCARB RECORD

- Go to <u>www.ncarb.org/login</u> and click "Establish Record." After providing your information and creating an account, navigate to your My NCARB homepage, and then add the "NCARB Record" service.
- Fill out all of the requested information, including the payment method. If you are interrupted or need additional information to complete the application, you can save the information and return later to complete the process.
- Once you click on "Submit" you will receive two emails. The first email will confirm acceptance of your payment. The second email will give you your NCARB Record number and advise you what transcripts and employment verifications are required. The email will include links to the forms you will need to download from the NCARB website.

#### Fees for Foreign-Educated Applicants for Initial Licensure

#### NCARB Record Application: \$100

**EESA Evaluation:** This non-refundable fee is charged by and paid directly to NAAB. Please visit the **NAAB** website for more information.

#### How to begin the EESA process:

Log in to your NCARB Record and request eligibility to apply.

If eligible, you will receive notification from NCARB to complete the application and pay the EESA fee to NAAB through the NCARB site.

NAAB will evaluate your application and notify you of next steps and their decision.

Please note: Fees may be updated from time to time. For the latest fees, please visit www.ncarb.org/fees.

#### ALREADY HAVE AN NCARB RECORD?

Please check your status by accessing your **Record online**.

#### **NEED ASSISTANCE?**

#### NCARB Customer Relations

EMAIL: customerservice@ncarb.org PHONE: 202-879-0520 MONDAY - FRIDAY: 8:30 a.m. - 5:30 p.m. ET

#### LETTERS MAY BE ADDRESSED TO:

NCARB Customer Relations 1401 H Street NW, Suite 500 Washington, DC 20005

#### OBTAIN AN EESA-NCARB EDUCATION EVALUATION

If you have a recognized education credential in architecture in a country other than the United States or Canada, and your degree meets the requirements for licensure in that country, you can obtain an EESA-NCARB Education Evaluation to determine if you meet the *NCARB Education Standard*.

If your EESA-NCARB Education Evaluation report indicates that you have met the *NCARB Education Standard*, you will have satisfied the NCARB recommended education requirement for licensure, and you may have met the education requirement for initial licensure in a U.S. jurisdiction.

#### Please Note

There are jurisdictions that do not currently accept an EESA evaluation of foreign education for initial licensure. Registration requirements, including reciprocal registration, may change. It is always advisable to check with the <u>individual</u> <u>board</u> to verify registration and practice requirements.

If your report identifies deficiencies, you will need to complete additional education. For more information go ww to www.naab.org/eesa.

If you have a degree in architecture from a NAAB- or CACB/CCCA-accredited program, you may have satisfied the education requirement and do not need to have your foreign education evaluated by EESA.

#### **DOCUMENT YOUR EXPERIENCE**

Document your experience to satisfy the Architectural Experience Program (AXP) requirement or alternative requirements as specified in the <u>AXP Guidelines</u> using the online reporting system. The architect who supervised you at the time you completed the experience must approve your reports. You may also satisfy the experience requirement by fulfilling the alternatives to the AXP experience requirement specified in the AXP Guidelines.

Please note that formal completion of the AXP is the nationally recognized standard for satisfaction of the experience requirement. Using an alternative method to satisfy the experience requirement may not be accepted for **registration** by all U.S. registration boards.

#### TAKE THE EXAMINATION

You must have completed the Architect Registration Examination (ARE), or its then-current predecessor (see our *Exam Equivalency Guide*) to satisfy the examination requirement. NCARB will request an official examination history report from the registration board where you were initially licensed.

## **Certification for Foreign-Educated Applicants**

Once you have received an initial license in a U.S. jurisdiction and met NCARB's education, experience, and examination requirements, you will need to do the following to complete your path to certification:

#### FINAL EVALUATION OF YOUR NCARB RECORD AND CERTIFICATION

After you complete the preceding steps, your NCARB Record will go through a final evaluation to ensure that all necessary information has been provided and all remaining requirements have been met. If any information is missing, you will need to send it to NCARB before you are approved for an NCARB Certificate. Once all the required information has been received and verified, your NCARB Certificate will be issued.

#### **NEED ASSISTANCE?**

NCARB Customer Relations EMAIL: customerservice@ncarb.org PHONE: 202-879-0520 MONDAY - FRIDAY: 8:30 a.m. - 5:30 p.m. ET

#### **LETTERS MAY BE ADDRESSED TO:**

NCARB Customer Relations 1401 H Street NW, Suite 500 Washington, DC 20005

## The Education Alternative to NCARB Certification

The education alternative allows applicants with the required years of architectural practice in a U.S. jurisdiction to demonstrate, through experience, satisfaction of the education requirement for NCARB certification.

Steps to Certification for Education Alternative Applicants	
Step 1: Start an NCARB Record	
Request Transcripts	
Document Your Experience	
Verify Your Examination and Registration History	
Step 2: Education Alternative Eligibility	
Step 3: Satisfy Deficiencies	
Additional Education	
Education Alternative	
Documenting 2X AXP	
NCARB Certificate Portfolio	
NCARB Certificate Portfolio Review	

#### Step 4: Final Evaluation of Your NCARB Record and Certification 16

## Steps to Certification for Education Alternative Applicants

If you do not hold a professional degree in architecture from a NAAB-accredited program, you may be able to meet the requirements of the *NCARB Education Standard* through the education alternative.

#### **STEP 1: START AN NCARB RECORD**

- Go to <u>www.ncarb.org</u> and click "Create New Account." Skip to the new account information and enter the required fields.
- Verify your account.
- Once you are logged into "My NCARB," add the NCARB Record service. Fill out all required information, including method of payment.
- If you are interrupted or need additional information to complete the application, you can save the information and return later to complete the process.
- Once you click "Submit," you will receive two emails. The first email will confirm acceptance of your payment. The second email will assign your NCARB Record number and provide further instructions.
- In order to establish an NCARB Record, you must complete the application and submit payment. You will not receive your NCARB Record number until you have completed the application including payment.

#### **Fees for the Education Alternative Process**

New Certificate Application Fee: \$1,280

NCARB Certificate Portfolio Review: Free

**EESA Evaluation:** If you choose to get an optional EESA, this non-refundable fee is charged by and paid directly to NAAB. Please visit <u>http://www.naab.org</u> for more information.

**Please note:** Fees may be updated from time to time. For the latest fees, please visit www.ncarb.org/fees.

#### ALREADY HAVE AN NCARB RECORD?

Please check to see if your Record is active by accessing your **Record online**.

#### **NEED ASSISTANCE?**

NCARB Customer Relations EMAIL: customerservice@ncarb.org PHONE: 202-879-0520 MONDAY - FRIDAY: 8:30 a.m. - 5:30 p.m. ET

#### LETTERS MAY BE ADDRESSED TO:

NCARB Customer Relations 1401 H Street NW, Suite 500

#### **STEP 1: START AN NCARB RECORD (CONTINUED)**

#### **Request Transcripts**

Download and mail the <u>transcript request form</u> and any fee to your school(s). The school must submit your transcript directly to NCARB. NCARB will only accept an official transcript submitted by the school, preferably sent electronically. A transcript is required for determination of eligibility and requirements in step 2.

#### **Document Your Experience**

Document your experience to satisfy the Architectural Experience Program (AXP) requirement or alternative requirements as specified in *Certification Guidelines* using the online reporting system.

#### Please Note

If you are a **U.S., Canadian, or foreign licensed architect** documenting your experience to satisfy the AXP experience requirement for NCARB certification, the **reporting requirement** does not apply to you. This rule is only applicable to unlicensed individuals.

The architect who supervised you at the time you completed the experience must approve your experience reports. You may also satisfy the experience requirement by fulfilling one of the alternatives to AXP specified in the *Certification Guidelines*. Please note that formal completion of the AXP is the nationally recognized standard for satisfaction of the experience requirement. Using an alternative method to satisfy the experience requirement may not be accepted for reciprocal registration by all Member Boards.

Completion of the AXP verifies that you have met the experience requirement for certification.

#### Verify Your Examination and Registration History

NCARB must receive a Certification of Registration and Examination History report from the registration board where your examination history is held, as well as from all state and provincial boards where you hold an active registration. This report verifies that you have met the NCARB examination and registration requirements for certification.

NCARB will send a form requesting the report directly to the registration board. In the event a fee is required, we will send the report request form to you so that you can send it to the board with the required fee.

#### **STEP 2: EDUCATION ALTERNATIVE ELIGIBILITY**

To be eligible for the education alternative, you must have at least three years of continuous licensure for the last three consecutive years in any U.S. jurisdiction, and you must not have been subject to disciplinary action.

Once eligibility is confirmed, you will satisfy the education requirement for certification through one of two prescribed methods outlined in step 3.

#### Please Note

Before beginning this process, please contact <u>EducationAlternative@ncarb.org</u> to establish your eligibility.

#### **STEP 3: SATISFY DEFICIENCIES**

There are two ways to satisfy your education deficiencies: additional education or completion of the education alternative by one of the prescribed methods outlined below.

#### 1. Additional Education

Applicants may take additional courses to satisfy education deficiencies (see <u>page 20</u> for information on satisfying education deficiencies through additional education).

#### 2. Education Alternative

Your level of education as determined by NCARB will determine your requirements for satisfaction of the education alternative as indicated below.

- **Documentation of AXP:** If you have earned a four-year bachelor's degree that includes significant coursework in architecture (as determined by NCARB), you will need to document two times (2X) AXP; or
- NCARB Certificate Portfolio: If you do not have a four-year degree with significant coursework in architecture (as determined by NCARB), you will be required to submit work experience through an online portfolio that demonstrates competence in the areas in which your education is deficient.

#### **Documenting 2X AXP**

Applicants who have a four-year bachelor's degree that includes significant coursework in architecture (as determined by NCARB) may qualify to document two times the AXP requirements. This is two times each experience area as outlined below. Any hours already approved will count toward this requirement. Architects who need to fulfill this requirement are not limited by the reporting requirement and may submit eligible experience from any point in the past, pre- or post-licensure. All experience must be in accordance with the *AXP Guidelines*.

#### **Experience Areas**

The six AXP experience areas and the required 2X hours are:

- Practice Management: 160 Hours x 2 = 320 Hours
- Project Management: 360 Hours x 2 = 720 Hours
- Programming & Analysis: 260 Hours x 2 = 520 Hours
- Project Planning & Design: 1,080 Hours x 2 = 2,160 Hours
- Project Development & Documentation: 1,520 Hours x 2 = 3,040 Hours
- Construction & Evaluation: 360 Hours x 2 = 720 Hours

#### **NCARB Certificate Portfolio**

The NCARB Certificate Portfolio allows you to submit work experience (completed post-licensure) to satisfy the *NCARB Education Standard*. You must satisfy all subject areas of the *NCARB Education Standard* to earn the NCARB Certificate. You may choose to get an EESA to minimize the subject areas included in your Certificate Portfolio. NCARB will send you a detailed description of the required format and instructions for submitting your portfolio.

#### STEP 3: SATISFY DEFICIENCIES (CONTINUED)

You are not required to submit a portfolio if your EESA-NCARB Education Evaluation report:

- Identified no deficiencies;
- Identified only general education deficiencies, and you hold a baccalaureate degree from a U.S. regionally accredited institution of higher learning;
- Identified deficiencies that you subsequently satisfied through additional education.

#### **NCARB Certificate Portfolio Review**

You will upload exhibits to your NCARB Certificate Portfolio through your NCARB Record. Once all subject areas have been addressed, the portfolio will be assigned to two trained volunteer architect reviewers. The reviewers will determine if you have adequately addressed your education deficiencies. You may be requested to provide additional documentation or answer any questions about the work from the reviewer(s). Be sure to refer to NCARB's <u>Certificate</u>. <u>Portfolio Applicant Guide</u> for additional guidance.

Once your portfolio is approved, you will have satisfied the requirements of the education alternative. The time required to complete the portfolio review will vary depending upon the number of deficiencies and the need for additional documentation.

## STEP 4: FINAL RECORD EVALUATION AND CERTIFICATION

After completion of the education alternative, whether through documentation of 2X AXP or approval of an NCARB Certificate Portfolio satisfying the <u>NCARB</u> <u>Education Standard</u>, you will be recommended for certification. Your NCARB Record will go through a final evaluation to ensure that all necessary information has been provided and all requirements have been met. If any information is missing, you will need to send it to NCARB before you are approved for an NCARB Certificate.

Once all the required information has been received and verified, your NCARB Certificate will be issued.

#### Obtain an EESA-NCARB Education Evaluation

You may choose to get an EESA-NCARB Education Evaluation if you do not have a four-year degree with significant coursework in architecture and have 64 or more semester credit hours (or 96 quarter credit hours) of post-secondary education. NCARB will determine whether or not your four-year degree meets the criteria.

If your education does not meet the NCARB Education Standard, then the EESA-NCARB Education Evaluation report will identify specific areas in which your education is deficient. If your EESA-NCARB report states that you have met the NCARB Education Standard, then you have met the education requirement for certification.

You are not required to get an EESA evaluation. Without an EESA, you will be required to satisfy all subject areas in your NCARB Certificate Portfolio. The Liberal Arts subject area will be waived for architects with a bachelor's degree in any major from an institution with U.S. regional accreditation.

#### **Please Note**

Requirements for reciprocal registration vary between jurisdictions and not all jurisdictions accept an NCARB Certificate issued through satisfaction of the education requirement through the education alternative. You should confirm specific requirements for reciprocal licensure directly with the individual registration board where you would like to be registered.

## Education Evaluation Services for Architects

This section provides an overview of the **Education Evaluation Services for Architects (EESA)** and the EESA-NCARB Education Evaluation process.

About EESA	
The EESA-NCARB Education Evaluation	
When an EESA-NCARB Education Evaluation is Required	
The EESA Evaluation Process	
Applying for the EESA-NCARB Education Evaluation	19
Ways to Fulfill Your Education Deficiencies	
Request for Reconsideration of an EESA-NCARB Education Evaluation Report	
Appeal of a Denial of a Request for Reconsideration of an EESA-NCARB Education Evaluation Report	

## About EESA

#### The Education Evaluation Services for Architects (EESA)

is administered by NAAB. It was established to assist applicants who do not have a professional degree in architecture from a NAAB- or CACB/CCCA accredited program who wish to apply for NCARB certification or for registration with an NCARB Member Board. EESA evaluates the education of architects licensed in a U.S. jurisdiction applying for certification through the education alternative and foreign-educated licensure candidates.

#### **Please Note**

You'll find more details about EESA at <u>www.naab.org</u>. Any questions about the EESA application process, required documents, and fees should be directed to NAAB at <u>eesa@naab.org</u> or 202-783-2007, or by writing:

National Architectural Accrediting Board Attn: EESA – NAAB 107 S. West St Suite 707 Alexandria, VA 22314

## The EESA-NCARB Education Evaluation

EESA evaluates an applicant's academic transcript in comparison with the *NCARB Education Standard*, an approximation of the requirements of the professional degree from a NAAB-accredited degree program. The EESA-NCARB Education Evaluation report states which areas of the *NCARB Education Standard* have been met and which areas (if any) are deficient.

#### **Please Note**

If I have a Bachelor of Architecture degree from a foreign program and a Master of Architecture degree from a NAABaccredited program in the United States, will I be required to get an EESA-NCARB Education Evaluation?

No, if you have a professional degree in architecture from a NAAB- or CACB/CCCAaccredited program, you satisfy the education requirement for NCARB certification and do not need to have your foreign education evaluated by EESA.

## When an EESA-NCARB Education Evaluation is Required

#### You do not need an EESA-NCARB Education Evaluation if:

- You are an Education Alternative applicant with a four-year architecture-related degree;
- You are an Education Alternative applicant with fewer than 64 semester credit hours (or 96 quarter credit hours) of post-secondary education; or
- You are seeking NCARB certification through the Foreign Architect Path, unless NCARB has specifically requested an EESA-NCARB Education Evaluation.

#### You will need an EESA-NCARB Education Evaluation for initial licensure if:

• You have a professional degree in architecture from a country other than the United States or Canada, and your degree meets the requirements for licensure in that country.

#### You may choose to get an EESA-NCARB Education Evaluation if:

- You are an education alternative applicant without a four-year architectural-related degree and at least 64 semester credit hours (or 96 quarter credit hours) of post-secondary education.
- You wish to reduce the number of portfolio exhibits required and believe your architecture-related courses might qualify.

## The EESA Evaluation Process

To fulfill the <u>NCARB Education Standard</u>, you need a total of 150 semester credit hours or 225 quarter credit hours (one semester credit hour equals 1.5 quarter credit hours). The minimum semester credit hours in each subject area total 138 semester credit hours. You may take the additional 12 semester credit hours in any one or more of the five subject areas and/or in elective subjects. Acceptable elective subject areas include architecture, business administration, computer science, engineering, interior design, law, public administration, and other courses that in the opinion of NAAB are acceptable toward the elective requirement. You'll find a detailed description of the subject areas and the number of semester credit hours required in each subject area in the NCARB Education Standard.

Your secondary education (high school) and continuing education will not be evaluated by EESA, as it is not eligible for satisfaction of the education requirement for NCARB certification.

## Applying for the EESA-NCARB Education Evaluation

You can apply for an EESA-NCARB Education Evaluation online through your NCARB Record.

**Six Subject Areas** 

### Ways to Fulfill Your Education Deficiencies

If an EESA-NCARB Education Evaluation report states that you have not met the *NCARB Education Standard* because of one or more deficiencies and you wish to satisfy those deficiencies through additional education, please refer to guidelines provided by NAAB at <u>www.naab.org</u>. NAAB will provide pre-approval of any proposed courses and determine if they will satisfy deficiencies. Information is included with the initial EESA-NCARB Education Evaluation report. When the deficiencies have been remedied, official transcripts should be submitted to NAAB for a supplementary EESA-NCARB Education Evaluation. Updates to EESA-NCARB Education Evaluations are provided through the NCARB Record within two weeks after receipt of transcripts documenting the additional coursework completed.

EESA will compare your education to the six subject areas described in the NCARB Education Standard:



#### Semester Credit Hours Required

12 hours 2 hours 40 hours 27 hours 2 hours 17 hours Upon receipt of the EESA-NCARB Education Evaluation report, an applicant may request reconsideration of the evaluation results. When making a request for reconsideration, the applicant must be prepared to present evidence that either of the following is true:

- The evaluation did not take into account factual evidence cited in the applicant's record as it was submitted for the evaluation, or
- The evaluation process failed to comply substantially with established guidelines in the *NCARB Education Standard* and the departure significantly affected the evaluation.

Reconsideration of an EESA-NCARB Education Evaluation report may not be requested to redress failure of the applicant to provide information, including transcripts and course descriptions, to EESA in a timely manner when completing their application.

Reconsiderations are conducted by a team consisting of the NAAB's EESA evaluators.

#### 1. Initiating a Request for Reconsideration of an EESA-NCARB Education Evaluation report:

- a. The reconsideration must be requested by the applicant within 60 calendar days of receiving the EESA-NCARB Education Evaluation report.
- b. The request must identify the factual information not taken into account by the evaluator, or evidence that the evaluation process failed to comply with established guidelines and that any such departure significantly affected the results of the evaluation.
- c. The request must be sent via email to <u>eesa@naab.org</u> with the subject of "Reconsideration Request."
- d. All days refer to regular calendar days, excluding U.S. national holidays.

#### 2. Sequence of Reconsideration of an EESA-NCARB Education Evaluation report:

- a. Upon receipt of a request for reconsideration of an EESA-NCARB Education Evaluation report, the Director of Global Programs shall review the applicant's request for reconsideration, the original evaluation results, and the applicant's educational credentials to determine whether the evaluation warrants reconsideration. The Director of Global Programs may reject a request for reconsideration if substantial evidence in support of the request is lacking, or if the applicant has failed to comply with the request for reconsideration guidelines stated herein.
- b. Should the Director of Global Programs determine that a request for reconsideration is valid, the request—along with all the applicant's documents—will be reviewed by the team. Upon completion of the reconsideration evaluation, NAAB will issue a response letter and update the applicant's credit summary report, if necessary, with a copy to NCARB.
- c. If Director of Global Programs grants the request for reconsideration, there is no additional fee to the applicant for the reconsideration.
- d. The result of the reconsideration evaluation is final and may not be appealed further.

## Appeal of A Denial of A Request for Reconsideration of an EESA-NCARB Education Evaluation Report

An applicant may appeal the response to a request for reconsideration only if the response resulted in a denial of reconsideration. Such appeals are made to the NCARB Education Committee. By entering an appeal process, the applicant agrees to accept the ruling of the NCARB Education Committee as final.

Appeals may only be made on the grounds that:

- The response to the request for reconsideration was not supported by sufficient factual evidence cited in the record; or that
- The NAAB's review of the request for reconsideration failed to comply with established guidelines in the <u>NCARB Education Standard</u>, and the departure significantly affected the response to the request for reconsideration.

Failure of the applicant to provide information to the NAAB in a timely manner does not provide a basis for requesting an appeal.

## 1. Initiating an Appeal of a Denial of a Request for Reconsideration of an EESA-NCARB Education Evaluation report:

- a. To initiate an appeal, the applicant must send a written request to the NCARB Education Committee within 60 calendar days of receiving official notice of the response to the request for reconsideration. The appeal must include a copy of the specific response to the request for reconsideration.
- b. The appeal must be sent to the NCARB Experience + Education Vice President; The National Council of Architectural Registration Boards (NCARB); 1401 H Street NW, Suite 500, Washington, DC, 20005, USA.
- c. The appeal must identify the incorrect or insufficient factual information cited by EESA in support of the response to the Denial of a Request for Reconsideration of an EESA-NCARB Education Evaluation report or evidence of failure of the evaluator team to comply with established guidelines for evaluation and the departure significantly affected the response.
- d. The appeal must be sent by certified mail, return receipt requested.
- e. All days refer to regular calendar days, excluding U.S. national holidays.
- f. The filing of an appeal automatically delays further processing of the applicant's NCARB Record.

#### 2. Appeal Sequence:

- a. Upon receipt of an appeal, the NCARB Experience + Education Vice President shall review the appeal for compliance with the appeal process and requirements and whether grounds for an appeal exist.
- b. If the appeal has merit, the appeal shall be reviewed by the NCARB Education Committee at the subsequent committee meeting; the committee's decision shall be communicated to the applicant within 30 calendar days of the committee meeting.
- c. The NCARB Education Committee may make one of two decisions:
  - i. To deny the appeal and to let the decision of the NAAB stand; or
  - ii. To grant the appeal and remand the application to EESA for a reconsideration evaluation.
- d. If the appeal is denied, the appeal shall not be reviewed by the NCARB Education Committee and no further consideration of appeals shall be entertained.

## **The Education Standard**

The NCARB Education Standard is an approximation of the requirements of a professional degree from a program accredited by the National Architectural Accrediting Board (NAAB). It includes liberal arts, professional studies, and electives, which together comprise a professional education in architecture.

Following are detailed descriptions of the subject areas and categories and the number of semester credit hours required.

About the NCARB Education Standard	24
1. Liberal Arts	26
2. History, Theory, and Human Behavior	. 29
3. Design Synthesis	31
4. Building Technology	33
5. Professional Practice	37
6. Electives	. 39

## About the NCARB Standard

The NCARB Education Standard is the criteria for the EESA-NCARB Education Evaluation (described on page 18 of the Education Guidelines). An EESA-NCARB Education Evaluation is an option for NCARB certification for applicants who do not have a degree in architecture from a program accredited by the NAAB.

The EESA-NCARB Education Evaluation process is described on page 19 and the Education Alternative is described on page 12 of the *Education Guidelines*. The education requirement for NCARB certification is described in the *Certification Guidelines*.

#### Please Note

An EESA-NCARB Education Evaluation is required by most jurisdictions for candidates seeking **initial licensure** who have a recognized education credential in architecture from a country other than the United States or Canada that has not been accredited by the NAAB.

The NCARB Education Standard, the individual subject areas and categories of the NCARB Education Standard, and means to satisfy any identified deficiencies are described on the following pages. The following definitions have been developed to approximate the requirements of a NAAB-accredited degree program in architecture.

A minimum of 150 semester credit hours<sup>1</sup> (225 quarter credit hours) of academic credit is required and is grouped into six subject areas: Liberal Arts; History, Theory, and Human Behavior; Design Synthesis; Building Technology; Professional Practice; and Electives.

This Education Standard in this document is effective December 18, 2024.

<sup>&</sup>lt;sup>1</sup> A "credit hour" is the unit of measuring educational credit, usually based on the number of classroom hours per week throughout a term. Students are awarded credit for classes on the basis of the Carnegie unit. This defines a semester unit of credit as equal to a minimum of three hours of work per week for a semester (Definition of a Carnegie Unit). Generally, in the United States, a semester credit hour is measured as 15-16 contact hours per semester.

#### NCARB EDUCATION STANDARD SUMMARY OF CREDIT HOUR REQUIREMENTS BY CATEGORY

Subject Area and Category	Semester Credit Hour Requirement
Liberal Arts	42 Hours Min.
A. Communication Skills	N/A
B. English Composition	3 Hours Min.
C. Humanities and Arts	N/A
D. Mathematical Sciences	N/A
E. Natural Sciences	N/A
F. Social Sciences	N/A
History, Theory, and Human Behavior	12 Hours Min.
A. History and Theory of Architecture	3 Hours Min.
B. History and Theory of Urbanism	3 Hours Min.
C. Human Health and Behavior	3 Hours Min.
Design Synthesis	40 Hours Min.
A. Fundamental Design	10 Hours Min.
B. Investigative Design	10 Hours Min.
C. Design and Building Integration	10 Hours Min.
Building Technology	27 Hours Min.
A. Structural Systems	6 Hours Min.
B. Environmental Control Systems	3 Hours Min.
C. Construction Materials and Assemblies	6 Hours Min.
D. Building Service and Enclosure Systems	3 Hours Min.
E. Technical Documentation	3 Hours Min.
F. Project Cost Analysis	3 Hours Min.
G. Building Performance	3 Hours Min.
Professional Practice	12 Hours Min.
A. Project Management	3 Hours Min.
B. Business Management	3 Hours Max.
C. Laws and Regulations	1 Hour Min.
D. Ethics and Professional Conduct	1 Hour Min.
Electives	17 Hours Min.
Total	150 Hours

#### Please Note -

Min.: Minimum, or the lowest number of hours that can be counted toward this area/category.

Max.: Maximum, or the highest number of hours that can be counted toward this area/category.

N/A: Not applicable—this area/category has no minimum or maximum number of hours.

## 1. Liberal Arts

A total of 42 semester credit hours are required. At least three (3) hours must be in English Composition. The remaining 39 hours may be in any one or more categories of the Liberal Arts subject area.

#### - Please Note

In each category, general means to satisfy deficiencies are listed at the end of the subject. Any additional means for a specific individual subject are listed with that subject.

#### **A. COMMUNICATION SKILLS**

Communication Skills is defined as effective written and oral communication using the conventions of Standard English as taught in English-speaking countries.

#### Acceptable Courses / Topics Within Courses

Acceptable courses include English grammar, public speaking, media communication, community consensus building, speech communication, and business communication.

#### Specific Exclusions, if Any

Courses in Graphic Communications

#### Semester Credit Hour Requirement: N/A

**Additional Means to Satisfy Deficiencies:** For post secondary and graduate degrees awarded outside the United States and Canada, proof of upper secondary coursework completed prior to admission to an architecture program may be accepted as determined by the NAAB.

#### **B. ENGLISH COMPOSITION**

English Composition is defined as a structured educational experience utilizing intentional practice and feedback through which students learn how to read critically, write effective arguments, understand the writing process, engage with others' ideas, properly utilize citations, and clearly articulate information.

#### Acceptable Courses / Topics Within Courses

Courses in English Composition, Writing, Business Writing, or Rhetoric and Writing, taught in English language institutions.

#### Specific Exclusions, if Any

Courses in English literature or English as a foreign language.

#### **Semester Credit Hour Requirement: 3**

#### **Additional Means To Satisfy Deficiencies**

In addition to post-secondary courses as described, the following tests will be recognized for waiver to deficiencies in English composition:

- a. The Test of English as a Foreign Language Internet Based Test (TOEFL iBT) with a score of 94 overall and 20 in the writing section; or
- b. the International English Language Testing System (IELTS) with a minimum score of 7; or
- c. a similar internationally recognized test of English proficiency if deemed equivalent by the NAAB.

#### **C. HUMANITIES AND ARTS**

Humanities and Arts is defined as the academic study of the expressions and artifacts of human experience in word, image, music, and gesture using methods that are primarily analytic, critical, or speculative and that apply rational thought to construct and assess opinions, ideas, and arguments.

#### **Acceptable Courses / Topics Within Courses**

Acceptable courses include philosophy, ancient and modern languages, literature, history, religion, visual, performing and applied arts, and foreign language courses.

#### Specific Exclusions, if Any

Courses in English as a foreign language.

#### Semester Credit Hour Requirement: N/A

**Additional Means to Satisfy Deficiencies:** For post secondary and graduate degrees awarded outside the United States and Canada, proof of upper secondary coursework completed prior to admission to an architecture program may be accepted as determined by the NAAB.

#### **D. MATHEMATICAL SCIENCES**

Mathematical Sciences is defined as the study of quantitative methods and rational, systematic steps based on sound mathematical procedures to arrive at a conclusion.

#### Acceptable Courses / Topics Within Courses

Acceptable courses include but are not limited to algebra, analytic and descriptive geometry, trigonometry, calculus, logical reasoning, pre-calculus, linear algebra, and statistics.

#### Specific Exclusions, if Any: None

#### Semester Credit Hour Requirement: N/A

**Additional Means to Satisfy Deficiencies:** For post secondary and graduate degrees awarded outside the United States and Canada, proof of upper secondary coursework completed prior to admission to an architecture program may be accepted as determined by the NAAB.

#### **E. NATURAL SCIENCES**

Natural Sciences is defined as the study of the universe using a naturalistic approach, which is understood as obeying rules or laws of natural origin. The term Natural Science is also used to distinguish study in those fields that use the scientific method to study science and nature.

#### Acceptable Courses / Topics Within Courses

Acceptable courses include astronomy, astrophysics, bacteriology, biology, chemistry, earth science, physics, geology, zoology, microbiology, biochemistry, natural resources, ecology, physical geography, and botany.

#### Specific Exclusions, if Any: None

#### Semester Credit Hour Requirement: N/A

**Additional Means to Satisfy Deficiencies:** For post secondary and graduate degrees awarded outside the United States and Canada, proof of upper secondary coursework completed prior to admission to an architecture program may be accepted as determined by the NAAB.

#### **F. SOCIAL SCIENCES**

Social Sciences is defined as the study of the fields of academic scholarship that explore human society.

#### **Acceptable Courses / Topics Within Courses**

Acceptable courses include anthropology, archaeology, economics, history, law, linguistics, human geography, political science, gender studies, racial/ethnic studies, international studies, psychology, and sociology.

#### Specific Exclusions, if Any: None

#### Semester Credit Hour Requirement: N/A

**Additional Means to Satisfy Deficiencies:** For post secondary and graduate degrees awarded outside the United States and Canada, proof of upper secondary coursework completed prior to admission to an architecture program may be accepted as determined by the NAAB.

#### SATISFYING DEFICIENCIES IN LIBERAL ARTS

In addition to the specific *additional means* identified above, relevant courses may be taken at any university, college, or community college that is accredited by one of the six regional accrediting associations in the United States: Middle States Commission on Higher Education, the Higher Learning Commission, New England Association of Schools and Colleges, Northwest Commission on Colleges and Universities, Southern Association of Colleges and Schools, and Western Association of Schools and Colleges. Information concerning regional accreditation is usually found on each academic institution's website. It can also be obtained from the admissions office or the registrar.

If a U.S. regionally accredited academic institution grants credit in relevant subjects on the basis of equivalency examinations administered by the institution or by the College Entrance Examination Board's Advance Placement Program, and if that credit is listed on an official transcript issued by that institution, then that credit can be used to satisfy the general education requirement.

The College Level Examination Program (CLEP) can be used to satisfy the general education requirement. The score required varies from subject to subject. Further information can be obtained from NAAB.

## 2. History, Theory, and Human Behavior

A total of at least 12 semester credit hours, with minimum requirements for each category as indicated.

The remaining three (3) semester credit hours may be in any one or more categories of the History, Theory, and Human Behavior subject area.

#### A. HISTORY AND THEORY OF ARCHITECTURE

History and Theory of Architecture is defined as the study of the traditions of architecture and the built environment, with attention to its broad contexts and the ways that it serves diverse human needs, values, and aspirations, and an understanding of cultural, climatic, ecological, technological, socioeconomic, and public health conditions.

#### Acceptable Courses / Topics Within Courses

Acceptable topics include historical movements in architecture; history of architecture and landscape architecture, history of building technology, and theory of architecture.

#### Specific Exclusions, if Any

Courses in art history, cultural history, economic history, and political history are NOT acceptable in this category, but they are acceptable in Liberal Arts.

#### Semester Credit Hour Requirement: 3

Additional Means to Satisfy Deficiencies: N/A

#### **B. HISTORY AND THEORY OF URBANISM**

History and Theory of Urbanism is defined as the study of cities as complex, interdependent, and evolving systems of urban form embedded in broad social, cultural, ecological, economic, technical, and political frameworks that inform various scales of settlement and habitation (i.e., block, neighborhood, region).

#### Acceptable Courses/Topics Within Courses

Acceptable topics include movements and theories of urban planning, urban design, transportation, public space, or land development.

#### **Specific Exclusions, if Any**

Courses in art history, cultural history, economic history, sociology and political history are NOT acceptable in this category, but they are acceptable in Liberal Arts.

#### Semester Credit Hour Requirement: 3

Additional Means to Satisfy Deficiencies: N/A

#### C. HUMAN HEALTH AND BEHAVIOR

Human Health and Behavior is defined as the study of effects of built environments on human physical and psychological health; the characteristics, nature, and behavioral norms of diverse individuals and groups that relate to the economic, physical, and spatial environments in which they function; and processes to assess and modify environments.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include the study of programming, environmental psychology and neuroscience, public health, ergonomics, human behavior, post-occupancy studies, cultural diversity, social diversity, and social response to the environment.

Specific Exclusions, if Any: None

Semester Credit Hour Requirement: 3

#### Additional Means to Satisfy Deficiencies: N/A

#### SATISFYING DEFICIENCIES IN HISTORY, THEORY, AND HUMAN BEHAVIOR

Relevant courses may be taken at any university, college, or community college that is accredited by one of the six regional accrediting associations in the United States: Middle States Commission on Higher Education, the Higher Learning Commission, New England Association of Schools and Colleges, Northwest Commission on Colleges and Universities, Southern Association of Colleges and Schools, and Western Association of Schools and Colleges.

All courses must be approved by NAAB in advance.

Where pre-approved by the NAAB, continuing education (CE) courses may substitute for traditional instruction. Such courses must, in aggregate, meet the credit-hour requirements for each category. Fifteen contact-hours of CE shall be considered equivalent to one semester credit-hour.

## 3. Design Synthesis

A total of at least 40 semester credit hours with a minimum of 10 hours in each category. The remaining 10 hours may be in one or more categories of Design Synthesis.

Design Synthesis is defined as collection of data or information, the analysis, synthesis, use of judgment, and development and communication tools and methods that architects use to understand, assess, bring together, and express the ideas that lead to a built project.

#### **A. FUNDAMENTAL DESIGN**

Learning experiences that require students to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards; use basic formal, organizational and environmental principles and the capacity of each to inform two-dimensional and three-dimensional design; application of the fundamentals of both natural and formal ordering systems and the capacity of each; and articulating effectively and using representational media appropriate for the assignment.

#### Acceptable Courses/Topics Within Courses: N/A

Specific Exclusions, if Any: None

Semester Credit Hour Requirement: 10

#### **Additional Means to Satisfy Deficiencies**

Fine arts courses that include lab components and similar content focused on design abstraction, drawing, and rendering can be used for satisfying this category.

#### **B. INVESTIGATIVE DESIGN**

Learning experiences that require students to engage in research, assessment, and analysis leading to a responsive design solution. These experiences include preparing a program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); reviewing relevant building codes and standards, and assessing their implications for the project; examining the fundamental principles present in relevant precedents and making informed choices about the incorporation of such principles into design projects; responding to site characteristics, including urban context and developmental patterning, historical fabric, topography, ecology, and climate in the development of project goals and design; gathering, assessing, recording, and comparatively evaluating relevant information and performance in order to support conclusions related to a specific project; and using theoretical and applied research methodologies and practices to inform the design process.

Acceptable Courses/Topics Within Courses: N/A Specific Exclusions, if Any: None Semester Credit Hour Requirement: 10 Additional Means to Satisfy Deficiencies: N/A

#### C. DESIGN AND BUILDING INTEGRATION

Learning experiences that require the student to evaluate options and reconcile the implications of design decisions across systems and scales; to synthesize variables from diverse and complex systems into an integrated architectural solution, while responding to environmental stewardship goals across multiple systems including building design and detailing, planning, programming with integrated structural, mechanical, environmental, building services systems, accessibility, site conditions, life safety, building enclosure systems and assemblies.

Acceptable Courses/Topics Within Courses: N/A

Specific Exclusions, if Any: None

Semester Credit Hour Requirement: 10

Additional Means to Satisfy Deficiencies: N/A

#### SATISFYING DEFICIENCIES IN DESIGN SYNTHESIS

All deficiencies in Design Synthesis must be satisfied in studio courses offered either within a professional degree program accredited by the NAAB or the CACB/CCCA or in a pre-professional architecture degree program offered at a four-year institution accredited by a U.S. regional accrediting agency. Studios must be administered or monitored by a member of the design faculty and must be taken for academic credit.

A list of NAAB- and CACB/CCCA-accredited programs can be found here.

Courses in graphic communication, computer-assisted design, and digital design media (e.g. building information modeling programs) may be counted only toward the total required credit hours for Design Synthesis if they are clearly integrated with studio courses.

All design studio courses must be approved by NAAB in advance.

## 4. Building Technology

A total of at least 27 semester credit hours, with minimum requirements for each category as indicated.

#### **A. STRUCTURAL SYSTEMS**

Structural Systems is defined as the study of the basic structural elements of buildings, their interaction as a support system, the forces that act on and in buildings, and the principles, theory, and appropriate applications of these systems.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include analysis of structural systems, construction, construction assemblies, determinate and indeterminate systems, equilibrium, forces and force systems, free body diagrams, gravity, lateral and seismic forces, loads, mechanics of materials, resolution of external forces, shear and bending moments, sizing of structural members, stability, statics, strength of materials, stress and strain, structural elements, structural systems in wood, steel and concrete, and theory of structures.

#### Specific Exclusions, if Any: None

#### Semester Credit Hour Requirement: 6

#### **Additional Means to Satisfy Deficiencies**

In addition to courses taught in Architecture programs as described below, Structural Systems deficiencies may also be met by completion of a course from regionally accredited four-year programs in:

- a. Engineering,
- b. Construction Management, or
- c. Construction or Building Science

#### **B. ENVIRONMENTAL CONTROL SYSTEMS**

Environmental Control Systems is defined as the study of building elements that pertain to the modification of the microclimate for purposes of human use and comfort.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include acoustics, air conditioning, building core systems, energy, energy efficiency, energy transmission, environmental systems, active and passive heating and cooling systems, lighting (natural and artificial), solar geometry, natural ventilation, indoor air quality, solar energy utilization, life cycle cost evaluation of various mechanical systems, and sustainability.

#### Specific Exclusions, if Any: None

#### Semester Credit Hour Requirement: 3

#### **Additional Means to Satisfy Deficiencies**

In addition to courses taught in Architecture programs as described below, Environmental Control Systems deficiencies may also be met by completion of a course from regionally accredited four-year programs in:

- a. Engineering,
- b. Construction Management, or
- c. Construction or Building Science

#### C. CONSTRUCTION MATERIALS AND ASSEMBLIES

Construction Materials and Assemblies is defined as the study of the basic principles and appropriate selection and application of interior and exterior construction materials, finishes, products, components, and the assemblies based on their inherent performance, including environmental impact and reuse.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include physical properties of building materials, fenestration, sustainable material selection, installation characteristics of material assemblies, life cycle cost evaluation, associated assembly cost for labor and materials, and material use and detailing.

#### Specific Exclusions, if Any: None

#### Semester Credit Hour Requirement: 3

#### **Additional Means to Satisfy Deficiencies**

In addition to courses taught in Architecture programs as described below, Construction Materials and Assemblies deficiencies may also be met by completion of a course from regionally accredited four-year programs in:

- a. Engineering,
- b. Construction Management, or
- c. Construction or Building Science

#### **D. BUILDING SERVICE AND ENCLOSURE SYSTEMS**

Building Service and Enclosure Systems is defined as the study of the appropriate selection and application of building service systems including plumbing, electrical, communication, vertical transportation, security, fire protection, non-thermal mechanical, control, circulation, and signal systems and application of building enclosure systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include curtain wall systems, sustainability, construction methods, facades, plumbing, electrical, vertical transportation, security, control, communication, door hardware, access control, security systems, wander management, active shooter prevention/emergency preparedness systems, and fire protection and life safety systems.

#### Specific Exclusions, if Any: None

#### Semester Credit Hour Requirement: 3

#### **Additional Means to Satisfy Deficiencies**

In addition to courses taught in Architecture programs as described below, Building Service and Enclosure Systems deficiencies may also be met by completion of a course from regionally accredited four-year programs in:

- a. Engineering,
- b. Construction Management, or
- c. Construction or Building Science

#### **E. TECHNICAL DOCUMENTATION**

Technical documentation is defined as the study of preparing technically clear and accurate drawings, preparing outline and comprehensive narrative specifications, and models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include but are not limited to project management, quality control/quality review, construction document preparation, technical documentation, consultant coordination, building information modeling (BIM), 3D rendering and visualization, clash detection, and system interfacing.

Specific Exclusions, if Any: None

Semester Credit Hour Requirement: 3

Additional Means to Satisfy Deficiencies: N/A

#### F. PROJECT COST ANALYSIS

Project Cost Analysis is defined as the study of building economics and the fundamentals of building costs, project financing, methods, and feasibility.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include building costs, cost and benefit analysis, cost control, development costs, estimating, finance, life cycle costing, site acquisition and development, and value engineering.

#### Specific Exclusions, if Any: None

#### Semester Credit Hour Requirement: 3

#### **Additional Means to Satisfy Deficiencies**

In addition to courses taught in Architecture programs as described below, Project Cost Analysis deficiencies may also be met by completion of a course from regionally accredited four-year programs in:

- a. Engineering,
- b. Construction Management
- c. Construction or Building Science, or
- d. Finance (with a specific emphasis on construction)

#### **G. BUILDING PERFORMANCE**

Building performance is defined as the study of the efficiency and efficacy of the design and occupancy of buildings and their related systems. Considerations should be given to how design and construction of buildings has an impact/influence on the financial, operational, environmental, social, physiological, and psychological effects of buildings.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include life cycle cost analysis, post occupancy evaluations, occupant surveys, energy modeling and performance reports, utility and infrastructure demand, staffing/FTE utilization, and related operational evaluations.

Specific Exclusions, if Any: None

Semester Credit Hour Requirement: 3

#### **Additional Means to Satisfy Deficiencies**

In addition to courses taught in Architecture programs as described below, Building Performance deficiencies may also be met by completion of a course from regionally accredited four-year programs in:

- a. Engineering,
- b. Construction Management, or
- c. Construction or Building Science

#### SATISFYING DEFICIENCIES IN BUILDING TECHNOLOGY

Courses to satisfy deficiencies in this category may be taken at:

- a. Four-year institutions that offer a professional degree program accredited by NAAB or CACB/ CCCA. A list of institutions with NAAB and CACB/CCCA-accredited programs can be found here; or
- b. Four-year institutions that offer a pre-professional degree in architecture but do not also offer a NAAB or CACB/CCCA-accredited program. Courses taken at community or junior colleges are <u>NOT</u> acceptable for satisfying deficiencies in Building Technology; or
- c. Regionally accredited four-year institutions offering degree programs in the collateral disciplines noted individually above in each category.

All courses must be approved by NAAB in advance.

If a U.S. regionally-accredited academic institution grants credit in relevant subjects on the basis of equivalency examinations administered by the institution, and if that credit is listed on an official transcript issued by that institution, then that credit can be used to satisfy these subject area requirements.

Where pre-approved by the NAAB, continuing education (CE) courses may substitute for traditional instruction. Such courses must, in aggregate, meet the credit-hour requirements for each category. Fifteen contact-hours of CE shall be considered equivalent to one semester credit-hour.

## 5. Professional Practice

A total of at least 12 semester credit hours are required with minimum credit hours as indicated below. The remaining seven (7) credit hours must be distributed across the categories, with a maximum of three (3) credit hours in Business Management.

#### **A. PROJECT MANAGEMENT**

Project Management is defined as the study of the entire range of activities involved in a typical architectural design project as it moves from inception through completion of construction including methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include bidding and negotiation, client relationships, leadership and collaboration, construction contract documents, construction management, construction contract administration, project management, and building code and accessibility analysis.

Specific Exclusions, if Any: None

Semester Credit Hour Requirement: 3

Additional Means to Satisfy Deficiencies: N/A

#### **B. BUSINESS MANAGEMENT**

Business Management is defined as the study of the concepts, standards, and practices related to different forms of organization for architectural practice.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include business management, financial management, risk management, office management, office organization, customer service, legal agreements, marketing, negotiating legal agreements, legal and licensure responsibilities, professional liability, risk management, and rules of professional conduct.

Specific Exclusions, if Any: None

Semester Credit Hour Requirement: 3 Maximum

Additional Means to Satisfy Deficiencies: N/A

#### C. LAWS AND REGULATIONS

Laws and Regulations is defined as the study of the body of common law, legislation, codes and standards, and regulation in the United States that affect architectural practice.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include accessibility standards, barrier-free design, building codes, laws affecting architectural practice, environmental regulation, life-safety systems, professional liability, professional service contracts, professional registration, tax laws, and zoning regulations.

#### Specific Exclusions, if Any

Courses in foreign law are NOT acceptable, but may be acceptable in the Electives subject area.

#### Semester Credit Hour Requirement: 1

#### **Additional Means to Satisfy Deficiencies**

Professional practice courses of more than 1 credit hour taught in the United States that demonstrably include a significant focus on laws and regulations within the course content.

#### D. ETHICS AND PROFESSIONAL CONDUCT

Ethics and Professional Conduct is defined as the study of ethical issues involved in the exercise of professional judgment in architectural design and practice. This also includes the role of the <u>NCARB Model</u> <u>Rules of Conduct</u> and the <u>AIA Code of Ethics</u> in defining professional conduct.

#### Acceptable Courses/Topics Within Courses

Acceptable topics include architectural practice ethics, business practice ethics; professional responsibilities to clients, colleagues, and the profession of architecture; post-licensure education and reporting requirements.

#### Specific Exclusions, if Any

Ethics courses taught outside the United States.

#### Semester Credit Hour Requirement: 1

#### **Additional Means to Satisfy Deficiencies**

Professional practice courses of more than 1 credit hour taught in the United States that demonstrably include a significant focus on architectural ethics within the course content.

#### SATISFYING DEFICIENCIES IN PROFESSIONAL PRACTICE

Relevant courses may be taken at any university, college, or community college that is accredited by one of the six regional accrediting associations in the United States: Middle States Commission on Higher Education, the Higher Learning Commission, New England Association of Schools and Colleges, Northwest Commission on Colleges and Universities, Southern Association of Colleges and Schools, and Western Association of Schools and Colleges.

All courses must be approved in advance by the NAAB.

If a U.S. regionally-accredited academic institution grants credit in relevant subjects on the basis of equivalency examinations administered by the institution, and if that credit is listed on an official transcript issued by that institution, then that credit can be used to satisfy these subject area requirements.

Where pre-approved by the NAAB, continuing education (CE) courses may substitute for traditional instruction. Such courses must, in aggregate, meet the credit-hour requirements for each category. Fifteen contact-hours of CE shall be considered equivalent to one semester credit-hour.

## 6. Electives

Electives are intended to encourage depth or concentration of study, including but not limited to minors, and may be from any of the five subject areas or the additional topics listed herein.

The minimum number of semester credit hours in each subject area listed above total 133 semester credit hours, with 17 credit hours of electives required.

#### Acceptable Courses/Topics Within Courses

Any category within the subject areas above, or:

- Business Administration
- Computer Science
- Engineering
- Interior Design
- Landscape Architecture
- Law
- Public Administration
- Urban Design/Planning
- Construction
- Material Science
- Research
- Political Science
- Others as pre-approved by NAAB

Semester Credit Hour Requirement: 17

Additional Means to Satisfy Deficiencies: N/A

## Resources

Both NCARB and the National Architectural Accrediting Board (NAAB) offer a number of programs and services for architects, licensure candidates, and those serving the profession.

## QUESTIONS ABOUT YOUR NCARB RECORD, NCARB CERTIFICATION, THE EDUCATION ALTERNATIVE, OR FOREIGN ARCHITECT PATH TO CERTIFICATION?

Contact Customer Relations via email at <u>customerservice@ncarb.org</u> or by telephone at 202-879-0520, Monday through Friday, 8:30 a.m. to 5:30 p.m. Eastern Time. Letters may be addressed to:

#### **NCARB Customer Relations**

1401 H Street NW, Suite 500 Washington, DC 20005

#### **QUESTIONS ABOUT EESA?**

You'll find more details about EESA at <u>www.naab.org/eesa</u>. Any questions about the EESA-NCARB Education Evaluation application process, required documents, and fees should be directed to NAAB at <u>eesa@naab.org</u> or 202-783-2007, or by writing:

#### **EESA**

National Architectural Accrediting Board 107 S. West St Suite 707 Alexandria, VA 22314

#### **ADDITIONAL RESOURCES**

NCARB	NAAB
www.ncarb.org	www.naab.org
Architectural Experience Program	
Architect Registration Examination	NAAB-Accredited Architectural Programs:
Registration Board Licensing Requirements	NAAB Accredited Program List
Certification	
Reciprocity	EESA
Education Alternative	www.naab.org
Foreign Architect Path to Certification	www.iiaab.org
Destination Architect	CACB/CCCA www.cacb-ccca.ca
NCARB Guidelines	
Certification Guidelines	
AXP Guidelines	ACSA
ARE Guidelines	www.acsa-arch.org