

Architectural, Engineering, & CAD Technologies

Honolulu Community College's Architectural, Engineering & CAD Technologies program (AEC) is designed to train students for immediate employment as architectural or engineering drawing technicians. The training is focused on AutoCAD and other technical drawing software in the creation of design and construction drawings.

Program Entry Requirements

English Requirements:

- Completion of ENG 22 or 60
- OR
- COMPASS* placement into ENG 100

Math Requirements:

- Completion of Math 20 BCD
- OR
- COMPASS* placement in Math 50 or 53 or higher

*UH Community College System placement test

Other Requirements:

- AEC 80
- OR
- Instructor approval based on high school drafting or other prior training/experience

Recommended Preparation

Classes in drafting, geometry, English, art, basic science, and computer literacy

Costs (not including tuition)

Books and supplies: \$400

Program Technical Standards

Our program technical standards have been developed to help students understand the minimum essential mental, physical, and behavioral skills necessary for participation in and completion of all core aspects of our curriculum.

As an AEC student, you will be expected to do the following:

General: Use technical, mathematical, and visualization skills to create computer-assisted drawings.

Specific: Read textbooks, handouts, blackboard instructions, online text, technical manuals, and blueprints.

Do basic math functions, solve simple equations, and complete ratios.

Select appropriate math operations to solve problems.

Distinguish important from unimportant information in problem solving.

Recognize patterns or similarities in how things work.

Create alternatives for accomplishing same tasks.

Replicate teacher-demonstrated procedures.

Visualize 2D and 3D geometric shapes and their rotations.



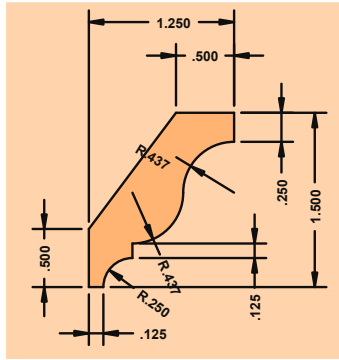
AEC student uses technical, mathematical and visualization skills to create a computer-assisted drawing.



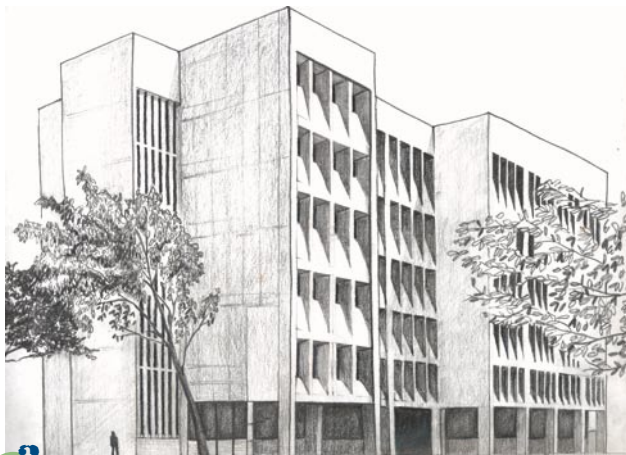
AEC student observes teacher-demonstrated procedures.



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Example of a diagram done by an AEC student using detailed measurements and angles.



Example of a drawing done by an AEC student of Building 2 on the HCC campus.



AEC student works diligently to meet project deadlines.

Sensory/
Observation
skills

2

General: Use sensory cues to do precise and accurate drawings.

Specific: Transfer ideas from rough sketches into detailed computer drawings.

Create and assess architectural and engineering designs on the computer.

Judge distance and space relationships of objects.

Distinguish basic colors.

Observe and replicate teacher-demonstrated procedures.

Motor
skills

3

General: Possess sufficient mobility and dexterity to do design work.

Specific: Produce lines, shapes, and figures on paper.

Execute computer commands and operations to draw, edit, render and animate designs.

Communication
skills

4

General: Communicate effectively to gather and convey information.

Specific: Obtain necessary information from oral and written sources.

Express information accurately and coherently.

Use correct spelling and grammar in drawing work and report writing.

Behavioral
skills

5

General: Behave appropriately in both self-directed and shared learning environments.

Specific: Work independently with minimal supervision.

Work cooperatively with partners and groups.

Follow through with responsibilities in a timely manner.

Work diligently and put in necessary time to complete tasks.

Persist on difficult tasks.

Exercise good judgment.

Environmental
tolerance

6

General: Function safely in a computer-assisted drafting lab.

Specific: Work for prolonged periods amidst:

Artificial lighting

Air conditioning

Electrical equipment

For More Information

If you are interested in our program, we encourage you to meet with our AEC counselor (phone: 845-9129) and refer to the information at <http://honolulu.hawaii.edu/aec/> to decide whether the AEC program is right for you.

Please keep in mind that you will have to fulfill additional requirements to be eligible for certification exams or licensure in the field. For more information go to <http://www.hcc.hawaii.edu/instruct/div6/drafting/FAQs.htm>

Disability Accommodations

We have developed our technical standards in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. We will provide reasonable accommodations to qualified students with disabilities. If you are interested in our program, we encourage you to review the program technical standards and course information at <http://honolulu.hawaii.edu/aec/> to decide whether the AEC program is right for you.

If you have questions about the AEC program, please call the HCC Counseling Office at 845-9129. Individuals with hearing impairments may call 845-9270 (v/t) or use the Telecommunication Relay Service at 1-877-447-5990.

If you have questions about disability access and accommodations, please direct them to HCC's Services for Students with Disabilities (SSD) at 845-9282 (v/t), 845-9272 (v/t), or e-mail access@hcc.hawaii.edu

SSD will be happy to meet with you, evaluate your disability documentation, and, as appropriate, recommend reasonable accommodations consistent with your documented limitations and the technical standards of the program. We will keep your disability information confidential within the parameters of the accommodation process.