BUILDING CONSTRUCTION AND CABINETMAKING (AS-BCM)

Program Overview

Associate in Science Degree

The Associate in Science degree program in Building Construction Technology has two tracks: Building Construction and Cabinetmaking and Building Construction and Design, and is designed to cover topics in the residential, commercial building, cabinetmaking, and design trades. It also focuses on the role of computers in the estimating, design, and manufacturing components of the industry.

Construction topics include site work and framing procedures for floors, walls, rafters, dormers, and stair systems. Interior installation treatments include drywall installation, taping, and spackling; finished openings, casing, baseboard and molding. The applicable building codes are viewed extensively. Methods of sizing all components are stressed, as are the design considerations mandated by the code. Students who successfully complete the OSHA class receive an OSHA10 card. Students who successfully complete the Lead-Safe Remodeler/Renovator Training course are recognized as certified Lead Renovators by virtue of their training certificate.

The construction and cabinetmaking components of the program include manual and computer-assisted drafting (CAD), print reading, and manual and computer-aided estimating. The use of computers is emphasized to make students better prepared for these fast-paced industries.

Internships are available as options in the curriculum. It is the responsibility of the student to secure the internship site.

Building Construction and Cabinetmaking (BCM)

The cabinetmaking component includes the study of machinery and tools, wood as a material, cabinetmaking joints and assembly. Cabinets are built and completed in the lab. The cabinetmaking portion also includes the setup, programming, and operation of a Computerized Numerical Control (CNC) router. Graduates of this program are eligible to continue on for a Bachelor of Science Degree in Business Management.

Curriculum

Course	Title	Quarter Credit Hours
Term I		
CR 114	Technical Fundamentals of Building Construction	5
CR 116	Tool and Site Work Lab	2
CR 117	Introduction to Blueprint Reading	2
MGM 104	Computer Skills – Word and Excel	1
EN 100	Introduction to College Writing (COM Core) [1]	4
	Quarter Credit Hours	**14**
Term II		
CR 122	House Framing I	5
CR 121	House Framing I Lab	2
CR 126	Introduction to Building Codes	2
OSH 010	OSHA Construction Safety & Health	2
EN 200	Workplace Communications (COM Core) [1]	4
Choose one of the following (depending upon Math Placement):		4-5
MA 105	Basic College Math with Lab [1]	
MA 110	Introduction to College Math [1]	
Elective	100-200 Level Math/Science Core [1]	
	Quarter Credit Hours	**19-20**
Term III		
CR 118	SketchUp 1	4
SS 236	Small Business and the Law	4
Choose one of the following:		4
MA 125	Technical Math I (MA/SCI Core) [1]	
MA 200	Applied Math for Business (MA/SCI Core) (BS Students) [1]	
Choose one of the following options:		6-7
Option 1		
CR 222	Introduction to Computerized Numerical Control (CNC) Programming	
CR 223	Introduction to Computerized Numerical Control (CNC) Lab	
CR 236	Introduction to Finishing and Spraying	
Option 2		
CR 131	House Framing II	
CR 132	House Framing II Lab	
	Quarter Credit Hours	**18-19**
Term IV		
CR 120	SketchUp 2	3
CR 212	Cabinetmaking I	4
CR 211	Cabinetmaking I Lab	2
CR 217	Professional Seminar	1
Elective	100-200 Level Humanities (or Arts/Foreign Language) Core [1]	4
	Quarter Credit Hours	**14**
Term V		
CR 230	Cabinetmaking II	4
CR 231	Cabinetmaking II Lab	4
Elective	100-200 Level Humanities (or Arts/Foreign Language) Core [1]	4
Choose one of the following:		2-3
CR 250	Internship I	
CR 210	Lead-Safe Remodeler/Renovator Training	
	Quarter Credit Hours	**14-15**
Term VI		
Elective	100-200 Level Social Sciences Core [1]	4
Choose one of the following options:		8-9
Option 1		
CR 237	Cabinetmaking III	
CR 238	Cabinetmaking III Lab	
CR 242	Kitchen and Bath Design and Installation	

CR 243	Kitchen and Bath Design and Installation Lab	
Option 2		
ABT 137	Introduction to Environmental Systems	
ABT 138	Surveying & Civil Technology	
Business Management Elective		
Choose one of the following:		3
CR 226	Sustainable Design and Construction Methods	
CR 254	Internship II	
	Quarter Credit Hours	**15-16**
	Total Quarter Credit Hours	**94-98**

[1] Liberal Arts Core.

Business Management Electives

Course	Title	Quarter Credit Hours
MGM 133	Principles of Management	4
MGM 210	Marketing Communications	4
MGM 233	Planning Your Financial Future	4
MGM 243	Career Development	4
MGM 277	Leadership in Action	4

Legend

C = Number of lecture hours per week
L = Number of laboratory hours per week
T = Total Quarter Credit Hours where each lecture hour per week is one credit, every 2-4 laboratory hours are one credit depending on the expected amount of pre- or post-lab work.

All associate degree students are required to take 32 credits of liberal arts and math/science courses as selected from the liberal arts core. See the course descriptions section of this catalog for a list of the core area courses. Students who place out of MA 105 Basic College Math with Lab/MA 110 Introduction to College Math must still take 32 credits of core courses.

Subject to change.

Program Mission, Goals, and Outcomes

Program Mission

The mission of the Building Construction Technology Program (BCD and BCM) is to provide an Associate Degree program to prepare students in all facets of the residential, and some facets of the commercial building trade, as well as all aspects of the cabinetmaking and design trade. The program also focuses on the role of computers in the estimating, designing, and manufacturing components of the industry.

Program Goals

Building Construction and Cabinetmaking (BCM)

1. The BCM program gives students an entry-level knowledge of both building construction and cabinetmaking.
2. The BCM program will prepare students in the appropriate use of machinery and tools, wood as a material, basic cabinetmaking joints and assemblies.
3. The BCM program will prepare students to estimate, perform site preparations, basic stair, roof, sill, joist, wall layouts; and complete interior finishes.
4. The BCM program will introduce students to CAD software to design and develop working drawings for select cabinetry and furniture projects.
5. The BCM program will prepare students to enter the bachelor's program in Business Management.

Program Outcomes

Graduates in Building Construction and Cabinetmaking will be able to:

1. Successfully develop entry-level knowledge of house framing including wall construction, headers, center beams, floor and ceiling joists, stairs and common rafters.
2. Successfully use CAD software (SketchUp) to develop multi-view detailed drawings for cabinetry and furniture projects.
3. Successfully complete projects using routers and templates, veneering, frame, panel construction, radius work, compound angles and dovetails.
4. Optionally, graduates may also select courses that will enable them to:
   - Successfully set-up, program, and operate a Computerized Numerical Control (CNC) router.
   - Successfully identify the appropriate use of HVLP and HP spray techniques, differentiate between lacquer and water-based products, as well as explain mixing proportions and colors and the variety of clear finishes.

Q&A and Technical Standards Questions & Answers

1. When do my classes meet?
Day Classes: Technical classes normally meet for at least three hours a day for up to five days a week. Classes normally begin in the early morning (7:45 a.m.), late morning (usually 11:25 a.m.), or mid-afternoon. A technical time slot may vary from quarter to quarter.

Evening Classes: Technical classes meet on the average of three nights a week, although there may be times when they will meet four nights a week. Classes normally begin at 5:45 p.m.

In addition, to achieve your associate degree, you will take a total of approximately eight liberal arts courses, which will be scheduled around your technical schedule over the course of your entire program. Each liberal arts course meets approximately four hours per week. Liberal arts courses are offered days, evenings, and Saturdays.

At the beginning of each quarter you will receive a detailed schedule giving the exact time and location of all your classes. The College requires that all students be prepared to take classes and receive services at any of NEIT's locations where the appropriate classes and services are offered.

When a regularly scheduled class falls on a day which is an NEIT observed holiday (Columbus Day, Veterans Day, Martin Luther King, Jr. Day, and Memorial Day), an alternate class will be scheduled as a

make up for that class. The make up class may fall on a Friday. It is the student's responsibility to take note of when and where classes are offered.

2. How large will my classes be?
The average size for a class is about 20 to 25 students; however, larger and smaller classes occur from time to time.

3. How much time will I spend in lab?
Almost half of your technical courses consist of laboratory work. In order for you to get the most out of your laboratory experiences, you will first receive a thorough explanation of the theory behind your lab work.

4. Where do my classes meet?
Students should be prepared to attend classes at any of NEIT's classroom facilities: either at the Post Road, Access Road, or East Greenwich campus.

5. I have not earned my high school diploma or GED: can I enroll in an Associate Degree Program?
A candidate for admission to an associate degree program must have a high school diploma, have earned a recognized equivalency diploma (GED), or meet the federal home school requirements.

6. How long should it take me to complete my program?
To complete your degree requirements in the shortest possible time, you should take the courses outlined in the prescribed curriculum. For a typical six-term curriculum, a student may complete the requirements in as little as 18 months.

To complete all your degree requirements in the shortest time, you should take at least one liberal arts course each term.

Students may also elect to complete some of their liberal arts requirements during Intersession (except for EN courses), a five-week term scheduled between spring and summer terms. Students will not be assessed any additional tuition for liberal arts courses taken during the Intersession but may be assessed applicable fees.

Students wishing to extend the number of quarters needed to complete the required technical courses in their curriculum will be assessed additional tuition and fees.

7. Is NEIT accredited?
NEIT is accredited by the New England Commission of Higher Education. Accreditation by NECHE is recognized by the federal government and entitles NEIT to participate in federal financial aid programs. Some academic departments have specialized professional accreditations in addition to accreditation by NECHE. For more information on accreditation, see NEIT's catalog.

8. Can I transfer the credits that I earn at NEIT to another college?
The transferability of a course is always up to the institution to which the student is transferring. Students interested in the transferability of their credits should contact the Office of Teaching and Learning for further information.

9. Can I transfer credits earned at another college to NEIT?
Transfer credit for appropriate courses taken at an accredited institution will be considered upon receipt of an official transcript for any program, biology, science, and mathematics courses in which the student has earned a "C" or above within the past three years and for English or humanities courses in which the student has earned a "C" or above within the last ten years. An official transcript from the other institution must be received before the end of the first week of the quarter for transfer credit to be granted for courses to be taken during that quarter. Students will receive a tuition reduction for the approved technical courses based on the program rate and will be applied against the final technical quarter of the curriculum's tuition amount. No tuition credit is provided for courses which are not a part of the technical curriculum.

10. What is the "Feinstein Enriching America" Program?
New England Institute of Technology is the proud recipient of a grant from the Feinstein Foundation. To satisfy the terms of the grant, the College has developed a one-credit community enrichment course which includes hands-on community enrichment projects. The course can be taken for a few hours per quarter, spread over several quarters. Students who are already engaged in community enrichment on their own may be able to count that service towards course credit.

11. How many credits do I need to acquire my Financial Aid?
In order to be eligible for the maximum financial aid award, you need to maintain at least 12 credits per academic quarter.

12. What does my program cost?
The cost of your program will be as outlined in your enrollment agreement, along with your cost for books and other course materials. Students who decide to take more quarters than the enrollment agreement describes to complete the technical courses in their curriculum will be subject to additional fees and possible additional tuition costs. Students who elect to take the technical portion of the degree requirements at a rate faster than the rate prescribed in the curriculum and the enrollment agreement will be assessed additional tuition.

Students who require prerequisite courses will incur additional tuition and fees above those outlined in their enrollment agreement.

If a student elects to take a course(s) outside of the prescribed curriculum, additional tuition and fees will be assessed.

Remember, students who withdraw and re-enter, one time only, pay the tuition rate that was in effect for them at the time of their last day of attendance for up to one year from their last day of attendance. Second re-entrees and beyond pay the tuition rate in effect at the time they re-enter. The most economical way for you to complete your college degree is to begin your program now and continue your studies straight through for the six quarters necessary to complete your degree requirements.

13. What kind of employment assistance does NEIT offer?
The Career Services Office assists NEIT students and graduates in all aspects of the job search, including resume writing, interviewing skills, and developing a job search strategy. Upon completion of their programs, graduates may submit a resume to the Career Services Office to be circulated to employers for employment opportunities in their fields. Employers regularly contact us about our graduates. In addition, our Career Services Office contacts employers to develop job leads. A strong relationship with employers exists as a result of our training students to meet the needs of industry for over fifty years. No school can, and NEIT does not, guarantee to its graduates employment or a specific starting salary to its graduates.

14. Where will job opportunities exist?
Graduates have obtained employment in the local area. However, one of the most exciting aspects of this program is the ability to look nationally for employment opportunities.

15. Are there any additional costs/activities associated with this program?
New England Tech supplies all portable power, and power tools and most material. Students are given a hand tool list (spreading purchase over three terms), for tools that they are required to provide. These tools will form the basics of the tools they will eventually be required to have in the trade. Purchased at retail, the tools value at approximately $300.00. The tools do not have to be new as long as they are safe and functional. Material for all required projects is provided. If a student wants to build a required or final project using material not stocked in the department, they may purchase that material individually.

16. What kind of jobs will I be qualified to look for?
Generally, you will be prepared for entry-level positions in carpentry and cabinetmaking. However the real value of your degree and training will be evidenced after you have been employed in your field for a period of time. The technical knowledge gained at school coupled with the practical knowledge gained on the job will allow graduates to stand above those without the technical training.

In addition to the trades one will be prepared for, opportunities exist in sales, adjusting, appraising, inspecting, estimating, and project management. Competition for jobs will be keen and requirements will increasingly emphasize an applicant's training and education. The job best suited to you will depend upon your individual strengths and interests.

17. Is there any state or federal licensing required in my field?
No license is required in Rhode Island, although Rhode Island does require contractor registration. Some states do require licensing. You should check with the state in which you plan to work. Rhode Island does require contractor registration. Frequently, appropriate state boards are listed in the phone book's blue pages under "licensing."

The NEIT Construction/Cabinetmaking program will provide a solid foundation of knowledge about the field. Because requirements vary from state to state, some additional preparation beyond the NEIT Construction/Cabinetmaking associate degree may be necessary to prepare for the license exam of the state in which you plan to work.

18. Do I have to find my own internship position if I choose either the Construction or Cabinetmaking concentrations?
Yes, students are responsible for finding their own internship positions subject to department chair approval. Any established construction or cabinetmaking company will usually qualify as long as it agrees to the program's internship agreement.

Technical Standards

These technical standards set forth by the Building Construction/Cabinetmaking Department, establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills and competencies to enter this field. The successful student must possess the following skills and abilities or be able to demonstrate that they can complete the requirements of the program with or without reasonable accommodation, using some other combination of skills and abilities.

Cognitive Ability

- Good reasoning and critical thinking skills.
- Ability to exercise independent judgment.
- Ability to use abstractions in specific concrete situations.
- Ability to understand spatial relationships.
- Possession of basic math skills through addition, subtraction, multiplication and division of whole numbers and fractions.

Communications Skills

- Ability to read technical manuals, installation instruction, technical service bulletins, and blueprints.

Adaptive Ability

- Ability to maintain emotional stability and the maturity necessary to interact with other members of the faculty and students in a responsible manner.
- Ability to exercise judgment in changing situations or conditions.

Physical Ability

- Ability to perform tasks requiring bending, stooping, squatting, kneeling, lying, climbing and walking.
- Ability to lift, lower, push, and pull using both arms and legs.
- Ability to grasp, lift, maneuver and carry tools and equipment weighing up to fifty (50) pounds 50 - 500 feet from truck to work area.
- Ability to climb stairs and ladders to 25 feet.
- Agility and strength sufficient to allow bodily maneuvering in small spaces..
- Sufficient strength and agility to grasp and maintain tension for long periods of time.
- Ability to wear and tolerate ear plugs, safety glasses and other protective equipment.
- Ability to perform learned skills, independently, with accuracy and completeness within reasonable time frames in accordance with procedures.
- An ability to lift, lower, push, and pull using both arms and legs.

Manual Ability

- Ability to manipulate saws, screwdrivers, and other tools.
- Sufficient motor function and sensory abilities to participate effectively in the classroom laboratory.
- Sufficient manual dexterity and motor coordination to coordinate hands, eyes and fingers in the operation of tools and other equipment.

Sensory Ability

Visual

- Acute enough to read plans, printed materials, measuring devices.
- Acute enough to operate tools and equipment safely.
- Acute enough to maneuver in the lab and on jobsites safely.
- Acute enough to read small numbers on precision measuring instruments.

Auditory

- Acute enough to hear and understand words spoken by others in an environment with a high level of noise in the background (such as, but not limited to: saws, planers, drills, radios etc.)

- Acute enough to detect abnormal sounds in equipment operation as a result of malfunction or improper use.

Degree Progress Checklist

Building Construction and Cabinetmaking - AS/BCM

Degree Progress Checklists

- For students entering October 2024 or later
- For students entering April 2021 to September 2024
- For students entering October 2018 to March 2021