

# BUILDING TRADES TECHNOLOGY

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2009 – 2010

18 Months

Credits Required for Graduation: 72

Associate of Applied Science (A.A.S.) Degree

## Who's Cut Out for Building Trades Technology?

People who enjoy working with their hands and following a project from start to finish, who don't mind working in a variety of weather conditions, who aren't afraid of heights, and who exhibit physical dexterity will find satisfaction in a building trades career. The ability to get along with all types of people also is important. Workers in this field need to build relationships with contractors, co-workers, and clients. A background that includes courses in industrial arts, math, communications, English, and drafting would be helpful.

## Learn from the Ground Up

The Building Trades Technology program at Lake Area Technical Institute follows curriculum guidelines set forth by the Associated General Contractors of America. During the 18-month program, students gain optimal practical experience, in addition to their classroom instruction. In fact, students actually plan, draw, and build a home to a client's specifications and satisfaction. Students also learn the latest technology dealing with energy conservation and implement these concepts in the building projects.

## Adding On

Students may participate in the LATI chapter of the National Homebuilders Association and SkillsUSA-VICA to enhance their communications and public relations skills, as well as compete in regional skills contests.

Another optional, but popular, activity is the annual field trip to the National Home Builders Association Convention, for which students build various small projects to help raise funds.

## Climb the Ladder to Success

Carpentry provides a key service to society, meeting the demand for new housing and commercial buildings and for renovating and modernizing existing structures. Jobs are available in almost every locale, rural as well as urban. Primary sources of employment for LATI graduates include commercial contractors, maintenance shops, woodworking shops, sash and door companies, furniture manufacturers, repair shops, and home contractors. Many alumni have gone into business for themselves after a few years of practical experience.

## Recommended Background Courses

Although not required, the following courses would be beneficial to this course of study prior to attending Lake Area Technical Institute: Math, Vocational Building Trades, Communications, Drafting.

## COURSE DESCRIPTIONS

**AED 100 – Automated External Defibrillator (.5 credit)** To prepare individuals in the workplace to provide care for breathing emergencies, perform cardiopulmonary resuscitation (CPR), and use an automated external defibrillator (AED) for victims of sudden cardiac arrest.

**BTT 116 – Construction Technology I (3 credits)** Includes the safe and proper use of tools in various construction projects. The semester will conclude with the framing and enclosure of a residential building.

**BTT 117 – Construction Practicum I (11.5 credits)** A practical building application with required assignments made on building projects.

**BTT 125 – Cabinetry (3 credits)** Practical experience in the design and construction of cabinets for a residential structure.

**BTT 131 – Interior Finishing (2 credits)** Application of various skills required to complete the interior finish in a residential building project.

**BTT 147 – Construction Practicum II (4.5 credits)** A practical building application with required assignment.

**BTT 156 – Residential Drafting (2.5 credits)** Students receive training in the proper use of drafting equipment and do basic orthographic drawings.

**BTT 202 – Concrete Technology (4 credits)** This course covers site preparation for excavation, concrete footings, concrete flat work, floor construction, wall and roof construction on a municipal lot.

**BTT 209 – Construction Practicum III (11 credits)** After completing this unit, the student should be able to place, test and finish concrete slabs.

**BTT 220 – Construction Estimating (3 credits)** Upon completion of this unit, the student will be able to prepare a detailed bill of materials sheet for a residential building project.

**BTT 235 – Construction Practicum IV (10 credits)** After completing this unit, the student will have the practical experience to perform interior finish procedures to industry standards.

**BTT 252 – Advanced Construction Technology (2 credits)** Students will identify and install all interior finish products such as window trim, extension jams, baseboard, hand rails, hardware, etc.

■ **CIS 102 – Windows Applications for Technicians Applications (3 credits)** Using a Windows-based microcomputer and related software, you will gain an understanding and basic operational knowledge about the Windows XP operating system, Microsoft Office word processing, and spreadsheets, presentation software, and publishing software. You will demonstrate this knowledge by scoring at least 80% on assignments, related objective, and performance tests.

■ **Students who transfer in two credits in computer science will take CSC 101 – Computer Essentials for 1 credit.**

**To fulfill graduation requirements, students must select one course in each of the areas listed. Courses marked with an asterisk can be transferred directly to the university system under the terms of articulation agreements.**

#### **Behavioral Science**

PSYC 100 – Psychology of Human Relations  
PSYC 101 – General Psychology \*

#### **Communications**

COMM 101 – Contemporary Communication  
ENGL 101 – Composition \*  
SPCM 101 – Fundamentals of Speech \*

#### **Mathematics**

MATH 100 – Applied General Math  
MATH 101 – Intermediate Algebra  
MATH 102 – College Algebra \*

#### **Social Science**

ECON 105 – Leadership in the Global Workplace  
ECON 201 – Principles of Microeconomics I \*  
ECON 202 – Principles of Macroeconomics II \*  
SOC 100 – Introduction to Sociology \*