

CONSTRUCTION INDUSTRY TRAINING

EDMONDS COMMUNITY COLLEGE

Thank you for your interest in the Construction Industry Training (CIT) program. The information provided below will help you answer questions about whether or not this program is right for you.

GENERAL INFORMATION:

- **Program entry:** Fall and Spring quarters only
- **Website:** <http://edcc.edu/cit>
- Intended for students seeking entry-level construction jobs or pre-apprenticeship training
- Learn fundamentals of the construction industry, hands-on skills
- Earn OSHA 10-hour/CPR/First Aid & Flagging certifications
- Learn new innovative green building techniques
- Earn the CIT Certificate in just three quarters by attending two classes in the evening each week and two Saturday classes.
- Prior experience is not required.
- Good option for Tech Prep, Running Start, ABE/ESL/I-BEST/GED/EdCAP students.
- Ideal for construction company employees and others who seek to expand their knowledge.
- I-BEST supported program provides additional training in both math & English skills for students ready to start but unable to meet prerequisites.
- **Contact Numbers:**
 - **425.640.1908** – CIT Program
 - **425.640.1827**
 - Randy Sibley/ rsibley@edcc.edu / Lead Instructor
 - Josh O'Neil/josh.oneil@edcc.edu/Instructor
 - **425.640.1604** - Business Division, Snohomish Hall, Rm 260
 - **425.640.1628** – Barbara Gail Whalen/ barbara.whalen@edcc.edu/ I-BEST & Basic Skills Student Support

STUDENTS

The CIT program is designed to serve a diverse population of students with a wide range of prior experience and backgrounds. Students may have had no work experience or may have worked for years in a variety of different fields. Some students are high school graduates, some have previous college level course work, and some may not have earned their high school diplomas or a GED. Whatever the work background and education level, students share an interest in learning about the construction industry in a hands-on setting with the goal of applying new skills in the work place. Many of our students have found that, to their surprise, they can work successfully at college level and also be “good at math”

FACULTY

CIT Faculty are successful professionals who have demonstrated their knowledge and skill in the construction industry. They have a commitment to meeting the instructional needs of a diverse population of students. Lead instructor, Randy Sibley, is a construction business owner, certified career and technical education instructor and OSHA-hour Safety trainer and committed green builder. Josh O'Neil is a construction business owner and OSHA-10 hour Safety trainer, energy auditor.

CURRICULUM

CIT courses offer a construction curriculum in conjunction with hands-on tool experience and techniques common to construction projects large and small.

CIT courses are skills based on and geared to current industry standards including new green and sustainable building practices. Skill sets, competencies, and program content are refined and updated under the guidance of Construction Industry Training Advisory Committee. The Committee is made up of members representing construction employers, apprenticeship programs and construction educators.

COURSE DESCRIPTIONS: Program entry: Fall and Spring quarters

Please see the current EDCC Class Schedule for times, dates and room locations <http://cit.edcc.edu> . Classes can fill quickly so students are encouraged to register early. Though it is not required, it is highly recommended that students are physically fit, have a driver's license and have either a high school diploma or GED(or enroll in I-BEST), a baseline requirement for many jobs in the construction field. Edmonds Community College offers pre-college courses for students who may need assistance in meeting these recommendations. For information regarding pre-college classes call 425.640.1593.

The CIT program follows the typical sequence of activities necessary to complete a residential construction project. Throughout the program, students participate in hands-on exercises with common construction tools and materials. Safe work practices are stressed. Tools, materials, building code and procedural issues associated with specific trades will be covered.

CIT 103 and 104 are pre-requisites for ALL of the other CIT courses.

❖ **CIT 103 Core Construction Skills I (4 credits)**

Overview of the construction industry, its organization, employment opportunities, and green building practices. Hands-on experience with blueprint reading, measuring, layout, and hand and power tools. OSHA 10-hour safety training. Optional field trips to construction sites.

Prerequisite: Placement in MATH 060 and BRDGE 093 or EAP 100. Concurrent enrollment in CIT 104. Permit code required; contact 425.640.1827 or cit@edcc.edu. Recommend physical fitness.

Prerequisites may be waived with concurrent enrollment in I-BEST. See note below for alternative ways to meet prerequisites.

❖ **CIT 104 Core Construction Skills II (3 credits)**

Foundation layout techniques using a laser level to shoot grades. Set up typical concrete forms for residential footings and foundation. Construction vocabulary, introduction to both green/sustainable and typical materials, fasteners and supplies. Job site recycling.

Prerequisite: Concurrent enrollment in CIT 103.

❖ **CIT 105 Structural Trades (4 credits)**

Basics of residential framing, justified framing (energy efficient), layout techniques, structural functions and practical aspects of the residential building skeleton. Layout stairs and rafters. Use power tools to frame floors, walls, and window and door openings.

Prerequisite: CIT 103 and 104 **OR** OSHA 10-hour card and instructor's permission

❖ **CIT 106 Electrical and Mechanical Trades (3 credits)**

Emphasis on the electrical and plumbing trades. Introduction to electrical theory, Ohm's Law, building simple circuits and basic plumbing applications. Building science applications for ventilation, air and moisture control.

Prerequisite: CIT 103 and 104 **OR** OSHA 10-hour card and instructor's permission

❖ **CIT 109 Finishes (7 credits)**

Skills and methods used in the finish stage of residential construction including insulation, drywall, painting, finish carpentry, tiling, roofing and siding. Job site recycling, reusing materials, salvage, advanced air sealing and insulation techniques.

Prerequisite: CIT 103, 104, 105 & 106 **OR** OSHA 10-hour card and instructors permission

❖ **CIT 120 Flagging (.5 credit)**

Hands-on seminar preparing for employment as a flagger in the construction and utilities industries. Flaggers control traffic through and around work sites. Three-year certification.
Note: must be 18 years of age to register.

❖ **CIT 198 Work Experience (2 credits)**

Career exploration, research and work experience. Develop a portfolio, career resources. Sixty hours (2 credits) required for the CIT Certificate.

Prerequisites: CIT 103, 104 and either 105, 106 or 109. Instructor's permission is required. Registration permitted first seven weeks as space is available.

❖ **CIT 155 Special Topics (1 – 5 credits)**

Courses provide instruction on topics related to the construction industry trades.

- **Green Building Decisions (3 credits)**

Learn to navigate the maze of choices about constructing greener buildings. We will work up a list of underlying green principles, set up a decision matrix and then assess both specific and entire building choices. Examine rating systems like LEEDS and Built Green.

- **Energy Efficiency Technician (2 credits)**

Introduction to building science with emphasis on the energy envelope. Become familiar with typical energy auditor's tools: blower door, infrared camera and CO analyzer to measure and evaluate a building's energy performance.

- **Subs & Contractor's '101'**

Learn the steps necessary to become a successful contractor: incorporation, Lnl registration, bonding, insurance, banking, bookkeeping, employees, clients, safety, taxes, site controls, planning and permitting.

Note: Prerequisites for the CIT Program

- **English:**

- Completion of Bridge 90 or EAP 98 with a C grade or higher
- Placement in Bridge 93 or EAP 100 on Accuplacer
- Official high school transcript showing completion of English through the 10th grade with C or higher within the past 5 years
- GED in Social Studies, Science or Language Arts-Reading score > 500.
- CASAS English score > 245
- Exception: students who do not meet the English requirement but have CASAS English scores between 220-245 must enroll in CIT I-Best concurrently with CIT 103/104 . These students will still need to meet one of the above requirements in order to graduate.

- **Math:**

- Completion of Math 040 with a C grade or higher
- Placement in Math 060 on Accuplacer
- Official high school transcript showing completion of high school math through the 10th grade with a C or higher within the past 5 years
- GED Math score > 500.
- CASAS Math score > 245
- Exception: students who do not meet the math requirement but have CASAS Math scores between 217-245 must enroll in CIT I-Best concurrently with CIT 103/104. These students will still need to meet one of the above requirements in order to graduate.

**CONSTRUCTION INDUSTRY TRAINING
CERTIFICATE – 23 Credits**

- Developed by a diverse group of industry professionals, prepares individuals for entry-level construction trades jobs, apprenticeship opportunities or on-the-job training with wage progression with an emphasis on green building techniques.
- Offered to students who complete CIT 103/104, Flagging, CPR/First Aid, OSHA 10-hour safety requirements plus an additional 16 credits of CIT classes, work experience, English and Math prerequisites.
- **Flagging, CPR and First Aid:** students are required to take Flagging, CPR and First Aid courses or to show proof of current certification.
- **High School Diploma or GED:** Students are strongly encouraged to obtain their high school diploma or GED. The college offers classes designed to prepare students for the GED tests as well as high school completion courses. For information regarding pre-college classes call 425.640.1593.
- **Physical Fitness:** students will find that being physically fit is a requirement to satisfy some of the competencies of the CIT program (e.g. using and climbing a ladder, using a skill saw, setting up

concrete formwork, drywall installation). If students need more physical training, a wide array of courses is available through the EDCC Physical Education program.

- **Drivers License**: Students are strongly advised to obtain their drivers license.
- **Program Planning Sheet (759C)** listing the requirements for this Certificate is available online or through the Business Division in Snohomish Hall, Room 260, by calling 425.640.1604 or on the CIT program website: <http://cit.edcc.edu>.

CERTIFICATES of COMPLETION

These core courses have been organized to meet the immediate needs of those who want to learn the basics of the construction industry and to quickly gain skills and knowledge necessary to be competitive in obtaining an entry-level construction helper job.

A. Construction Industry “QUICK START” Certificate of Completion:

The “Quick Start” certificate of completion can be completed in 1 - quarter and covers approximately 77 hours of instruction. It is offered to students who complete the following:

- Meet Math and English proficiency requirements listed above
- CIT 103, Core Construction Skills I - 4 credits
- CIT 104, Core Construction Skills II - 3 credits
- CPR/First Aid - current card required
- Flagging – current card

B. Construction Industry “Work Ready” Certificate of Completion:

The “Work Ready” certificate of completion can be completed in 1-1/2 quarters and covers approximately 121 hours of instruction. It is offered to students who complete the following:

- Meet Math and English proficiency requirements listed above
- CIT 103, Core Construction Skills I - 4 credits
- CIT 104, Core Construction Skills II - 3 credits
- CIT 105, Structural Trades - 4 credits
- CPR/First Aid - current card required
- Flagging – current flagging card

C. Proposed Energy Auditor Technician Certificate of Complete:

The “Energy Auditor” certificate of completion can be completed in 1-1/2 quarters and covers approximately 111 hours of instruction. It is offered to students who complete the following:

- Meet Math and English proficiency requirements listed above
- CIT 103, Core Construction Skills I - 4 credits
- CIT 104, Core Construction Skills II - 3 credits
- CIT 155, Energy Auditor/Technician – 3 credits (proposed)
- CPR/First Aid - current card required

ADVISING:

Students who intend to pursue a certificate should make an advising appointment before registering:

- Gail Dunovan, EDCC Advisor, Gail.Dunovan@edcc.edu, 425.640.1925
- Randy Sibley, CIT Lead Instructor, rsibley@edcc.edu, 425.640.1827

TUITION AND FEES:

Fall 2009: See the Class Schedule for current tuition and fees or <http://tuition.edcc.edu>.

Students will be responsible for tuition and additional fees for assessment, technology, student union and supplies.

FINANCIAL AID:

Information is available at <http://finaid.edcc.edu>, by calling 425.640.1457 or stop by Student Financial Services, first floor, Lynnwood Hall.

A limited number of scholarships are available for CIT 103/104. Call CIT, 425.640.1908, for more information.

BOOKS: See college website for current editions and prices

- **CIT 103/104/105/109:**

Required Textbooks:

1. "***Carpentry***" 4th edition by Leonard Koel, Publisher ATP 2004
ISBN 0-8269-0738-5

2. "***Carpentry Workbook***" 4th edition by Thomas Proctor, Publisher ATP 2004
ISBN 0-8269-0739-3

- **CIT 106**

Required Textbooks:

1. "***The Complete Guide to Home Plumbing***" 3rd edition, published by Black & Decker 2005, ISBN 1-58923-201-1

2. "***The Complete Guide to Home Wiring***" 3rd edition, published by Black & Decker 2005,
ISBN 1-58923-213-5