Course Requirements

INTENSIVE ENTRY CONSTRUCTION CERTIFICATE OF COMPLETION

| Course # | <u>Course Title</u> | Credits |
|----------|--|---------|
| COL 101 | College Success | 2 |
| JSTI 109 | Safety, Tool and Equipment Certification | 6 |
| JSTI 168 | Trades Math I | 3 |
| JSTI 175 | Communication for Trades | 2 |
| JSTI 101 | Core Construction Skills | 6 |
| JSTI 111 | Structural Trades | 3 |
| JSTI 117 | Electrical and Mechanical Trades | 3 |
| JSTI 194 | Cooperative Work Experience/Internship | 3 |
| Total | | 28 |



Course Descriptions

COL 101 College Success

College Success 101 prepares students for their academic success in the college setting. Topics will include study skills, time management, financial literacy, information literacy, résumé and job skills, basic computer skills, cultural competency, privilege and power, applying rubrics to your work, navigating support services and creating dispositions for student success.

JSTI 101 Core Construction Skills

Students learn core construction skills such as construction print reading, measurements and layout. Ergonomic hazards of construction are identified, and participants demonstrate preventative measures. Participants identify construction materials, apply industry terminology, and identify and safely operate hand and power tools related to the construction trades. Students learn electrical load counts for safe use of power tools. Participants demonstrate standard hand signals for cranes, use rigging equipment, wear personal protective equipment, and demonstrate proper use and handling of ladders.

JSTI 109 Safety, Tool and Equipment Certification

Participants receive training in traffic control (flagging) and powder-actuated tools. Students can receive certification in each of these areas. Students earn forklift, boom lift and scissor lift certifications. Students earn the Industrial First Aid/CPR & AED certification, which includes general principles of first aid, medical emergencies, injury emergencies, environmental emergencies, blood borne pathogens and safety precautions. This course includes OSHA 10 certifications. Upon completion of written exam and skills evaluation AHA card issued. The Industrial First Aid/CPR & AED certification is approved by OSHA, WISHA (Labor and Industries). Students complete 40 hours of scaffold erection training.

VOCATIONAL TRAINING CENTER Structural Trades

This course emphasizes those building trades involved in the skeletal aspect of a structure. This includes electricians, ironworkers, rough and form carpenters, laborers, brick and cement masons, and piledrivers. Students work with tools, materials, and methods specific to each trade, developing skills and knowledge to include steel studs and wood framing. Students are introduced to sustainable building practices. Students operate such equipment as air compressor and guide projects as a team.

JSTI 117 Electrical and Mechanical Trades

This course covers building trades involved in the interior of a structure such as electrical, plumbing, and sheet metal work. Students learn basic electrical theory, use Ohm's Law and

build simple circuits. Students also learn basic plumbing applications, soldering, and how to work with sheet metal. Safe and correct use of tools is emphasized throughout.

JSTI 168 Trades Math I

This course is taught with a vocational emphasis to develop and deepen students' conceptual understanding of mathematics and to develop proficiency in problem-solving with whole numbers, fractions, decimals, and percents. Students are introduced to Ohm's Law and basic electrical math principles. Students study ratio and proportion, geometry, and basic algebra as applied to the construction trades.

JSTI 175 Communication for Trades

Introduction to the communication skills needed in the construction, maintenance, and manufacturing trades.

JSTI 194 Cooperative Work Experience / Internship

This is an instructor-approved, paid or unpaid work experience related to the student's program of study, and includes a trades rotation with partner apprenticeships.

Attachment B: South Seattle Class Crosswalk

