

# CONSTRUCTION



## Welcome to SPECIALIST HIGH SKILLS MAJORS (SHSM)

### What are SPECIALIST HIGH SKILLS MAJORS (SHSM)?

The **SHSM** is a specialized, ministry-approved program that allows students to focus their learning on a specific economic sector while meeting the requirements of the Ontario Secondary School Diploma (OSSD).

SHSMs assist students in their transition from secondary school to apprenticeship training, college, university, or the workplace.

These programs enable students to gain sector-specific skills and knowledge in engaging, career-related learning environments, and to prepare in a focused way for graduation and postsecondary education, training, or employment.



## 6 KEY BENEFITS for STUDENTS



- 1 Customize their secondary school education to suit their interests and talents;
- 2 Develop specialized knowledge and skills that are valued by the sector and postsecondary education institutions;
- 3 Earn credits that are recognized by the sector and postsecondary education institutions;
- 4 Gain sector-specific and career-relevant certification and training;
- 5 Develop essential skills and work habits that are valued by the sector;
- 6 Identify, explore, and refine their career goals and make informed decisions about their postsecondary destination.

### HOW DO I ENROLL?



- Contact lead SHSM teacher in your school, preferably in Grade 10
- During course selection in Grade 10
- Contact the Guidance Department in your school

**SHSM** **Student Success**  
GRADES 7-12  
SPECIALIST HIGH SKILLS MAJOR

## COMPONENTS of an SHSM

### 1. BUNDLED CREDITS

Eight to ten Grade 11 and Grade 12 credits focused in the area of the skilled career, including cooperative education credits



### 2. CERTIFICATION AND TRAINING

Sector-recognized certifications and specialized training courses



### 3. EXPERIENTIAL LEARNING & CAREER EXPLORATION ACTIVITIES

Experiential activities within the sector and career field



### 4. REACH AHEAD EXPERIENCES

Learning experiences connected with the student's postsecondary plans, including apprenticeship, college, university or workplace

### 5. SECTOR PARTNERED CONTEXTUALIZED EXPERIENCE

The offerings within this component include, Innovation Creativity and Entrepreneurship (ICE) training, sector-delivered contextualized coding, sector-delivered contextualized mathematical literacy

**All SHSMs are offered in all four pathways: apprenticeship training, college, university, and workplace.**

### What do GRADUATES RECEIVE?

Students who complete the requirements for the OSSD (Ontario Secondary School Diploma) and for the SHSM will receive an OSSD with an embossed SHSM seal on it. Credits earned towards the SHSM are indicated on the Provincial Report Card, and completion of the SHSM is recorded on the Ontario Student Transcript (OST).

# REQUIRED COMPONENTS FOR THE SHSM–CONSTRUCTION

The SHSM–Construction has the following **FIVE** required components:



## 1 A BUNDLE OF NINE (9) GRADE 11 AND GRADE 12 CREDITS

- **FOUR construction major credits** (that lead to apprenticeship training, college, university or workplace)
- **THREE other required credits** (one English, one Mathematics, one science or business studies)
- **TWO cooperative education credits**

## 2 SEVEN (7) SECTOR-RECOGNIZED CERTIFICATIONS AND/OR TRAINING COURSES/PROGRAMS FIVE (5) COMPULSORY

- **Cardiopulmonary Resuscitation (CPR) Level C**  
– includes automated external defibrillation (AED)
- **Health and Safety – Basic**
- **Working at Heights**
- **Standard First Aid**
- **Workplace Hazardous Materials Information System (WHMIS)**  
– generic (i.e., not site-specific) instruction

## TWO (2) ELECTIVES FROM THE LIST BELOW

- |                                                                                           |                                                                               |                                                                                                                            |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> basic electrical safety                                          | <input type="checkbox"/> energy efficiency training (e.g., Energy Star, LEED) | <input type="checkbox"/> portfolio development                                                                             |
| <input type="checkbox"/> Canadian Welding Bureau (CWB) – flat                             | <input type="checkbox"/> fall protection                                      | <input type="checkbox"/> powder-actuated tools                                                                             |
| <input type="checkbox"/> chainsaw safety                                                  | <input type="checkbox"/> fire safety and fire extinguisher use                | <input type="checkbox"/> project management                                                                                |
| <input type="checkbox"/> computer-aided design and computer-aided manufacturing (CAD/CAM) | <input type="checkbox"/> hoisting and rigging                                 | <input type="checkbox"/> propane in construction                                                                           |
| <input type="checkbox"/> confined space awareness                                         | <input type="checkbox"/> insulated concrete forming                           | <input type="checkbox"/> scaffold safety                                                                                   |
| <input type="checkbox"/> customer service                                                 | <input type="checkbox"/> land surveying basics                                | <input type="checkbox"/> sector-specific vehicle operation and safety                                                      |
| <input type="checkbox"/> elevated work platforms                                          | <input type="checkbox"/> leadership skills                                    | <input type="checkbox"/> specialized skills training program/competition (e.g., Skills Canada provincial level, WoodLINKS) |
|                                                                                           | <input type="checkbox"/> lockout/tagging                                      |                                                                                                                            |
|                                                                                           | <input type="checkbox"/> ozone-depletion prevention                           |                                                                                                                            |

## 3 EXPERIENTIAL LEARNING AND CAREER EXPLORATION ACTIVITIES

Opportunities relevant to the sector might include the following:

- |                                                                                                                                    |                                                                                                                             |                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| • One-on-one observation of a cooperative education student at a placement in the construction sector (an example of job twinning) | • A one- or two-week work experience with an individual employed in the construction sector (an example of work experience) | • A tour of a municipal planning department                                          |
| • A day-long observation of a skilled tradesperson in the construction sector (an example of job shadowing)                        | • Participation in a local, provincial, or national Skills Canada competition                                               | • Attendance at a construction sector trade show, conference, or job fair            |
|                                                                                                                                    |                                                                                                                             | • A volunteer experience with a non-profit organization such as Habitat for Humanity |

## 4

### REACH AHEAD EXPERIENCES

Students are provided one or more reach ahead experiences – opportunities to take the next steps along their chosen pathway – as shown in the following examples:

- **Apprenticeship:** visiting an approved apprenticeship delivery agent in the sector
- **College:** interviewing a college student enrolled in a sector-specific program
- **University:** observing a university class in a sector-related program
- **Workplace:** interviewing an employee in the sector

## 5

### SPCE – SECTOR-PARTNERED CONTEXTUALIZED EXPERIENCE

Provides schools with the flexibility to adjust their programming to local capacity and opportunities, and align with the interests and needs of students.

### OCCUPATIONS IN THE CONSTRUCTION SECTOR

- |                                         |                                                                |
|-----------------------------------------|----------------------------------------------------------------|
| • <b>Sheet Metal Worker</b>             | • <b>Electrical Engineering Technician</b>                     |
| • <b>Concrete Finisher</b>              | • <b>Refrigeration &amp; Air Conditioning Systems Mechanic</b> |
| • <b>General Carpenter</b>              | • <b>Architectural Technician</b>                              |
| • <b>Brick &amp; Stone Mason</b>        | • <b>Electrical Engineering</b>                                |
| • <b>Plumber</b>                        | • <b>Civil Engineering</b>                                     |
| • <b>Building Inspection Technician</b> | • <b>Construction &amp; Maintenance Electrician</b>            |
| • <b>Welding Techniques</b>             |                                                                |
| • <b>Mechanical Engineering</b>         |                                                                |
| • <b>Construction Millwright</b>        |                                                                |

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