









Experiential learning, reach ahead activities, certification and more... at **NO COST** to you.





## Build a world of opportunities!

### About the Specialist High Skills Major (SHSM)

The Specialist High Skills Major (SHSM) is a specialized program approved by the Ministry of Education 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 prepare in a focused way for graduation and postsecondary education, training or employment.

#### **Profile - Construction**

According to the Ontario Construction Secretariat, the construction industry is one of Ontario's largest employers. The Construction Sector Council has created a province-by-province, trade-by-trade labour market forecast for the next nine years. In Ontario, it is estimated that 60,000 workers will be required to replace those retiring, who will take essential technical, supervisory and management skills with them. Furthermore, an additional 75,000 workers will be needed to fill positions related to new construction between 2009 and 2017.<sup>1</sup>

There are four categories of work in the construction industry. Each requires the use of different equipment and workers with a variety of skills. Depending on the career chosen, a graduate could work in any or all of these categories:

- new home building and renovation, including building, remodelling or renovating houses and apartment buildings
- heavy industrial construction, including building industrial facilities such as cement, automotive, chemical or power plants, refineries and oil-sands installations
- institutional and commercial construction, including building commercial and institutional buildings and structures such as stadiums, schools, hospitals, grain elevators and swimming pools
- civil engineering construction, including engineering projects such as highways, dams, water and sewer lines, power and communication lines, and bridges.

For more information, news articles and where this program is being offered, visit SHSM.rainbowschools.ca

#### Required Components for the SHSM – Construction

The SHSM – Construction has the following five required components:

#### 1. A bundle of ten Grade 11 and Grade 12 credits.

These credits make up the bundle:

- Four construction major credits that provide sector-specific knowledge and skills
- Four other required credits from the Ontario curriculum, in English, mathematics and science or business studies, in which some expectations are met through learning activities contextualized to the construction sector
- Two co-operative education credits that provide authentic learning experiences in a workplace setting, enabling students to refine, extend, apply and practise sector-specific knowledge and skills

**Exception:** If a student obtains a four (4) credit co-op, they may choose to use one additional co-operative education credit to substitute for one "major credit" and/or one "other required credit" (not from the Math or English categories).

Required Credits	Construction Major	English*	Mathematics*	Business Studies or Science*	Co-operative Education
Grade 11	2		1	1	2
Grade 12	2	1	1	'	
Number of credits (Total = 10)	4	1	2	1	2

<sup>\*</sup> Includes content delivered in the sector's context.

There are NO extra credits required to complete this program.

All required credits may be obtained within the 30 required credits for the Ontario Secondary School Diploma (OSSD).



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#### 2. Seven sector-recognized certifications and/or training courses/programs

The SHSM in construction requires students to complete seven sector-recognized certifications and/ or training courses/programs. Of these, five are compulsory and the remaining two are electives that must be chosen from the list in the following table. Note that items in the list that are capitalized are the proper names of specific certifications or training courses/programs that are appropriate for the SHSM. Items that are lowercased are names of the areas or categories within which specific certifications or training courses/programs should be selected by the school or board.

The requirements are summarized in the table below.

Five compulsory:					
Cardiopulmonary Resuscitation (CPR) Level A	fall protection	generic (i.e. not site specific) instruction about the Workplace Hazardous Materials Information System (WHMIS)	health and safety – basic	Standard First Aid	

Two electives from the list below:					
chainsaw safety	confined space awareness	electrical safety	elevated work platforms		
energy efficiency training	hoisting and rigging	insulated concrete forming	lift truck safety		
personal protective equipment – construction	powder-actuated tools	propane in construction	scaffold safety		
suspended access equipment	traffic control	trenching safety			

#### 3. Experiential learning and career exploration activities

Experiential learning and career exploration opportunities relevant to the sector might include:

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

**Experiential** learning activities are at NO COST.

(Exceptions may apply to out of town trips.)

#### 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

#### Reach ahead activities are at NO COST.

(Exceptions may apply to out of town trips.)

#### 5. Essential Skills and work habits and the OSP

Students will develop Essential Skills and work habits required in the sector and document them using the Ontario Skills Passport (OSP), a component of the SHSM.

#### **Seven Key Benefits for Students**

#### Pursuing a SHSM enables students to:

- Customize their secondary school education to suit their interests and talents
- Develop specialized knowledge and skills that are valued by the sector and postsecondary education institutions
- Earn credits that are recognized by the sector and postsecondary education institutions
- 4 Gain sector-specific and career-relevant certification and training
- Develop Essential Skills and work habits that are valued by the sector, recorded using the tools in the Ontario Skills Passport (OSP)
- 6 Identify, explore and refine their career goals and make informed decisions about their postsecondary destination
- Remain flexible, with the option to shift between pathways should their goals and plans change



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#### **Exploration (Grades 9 and 10)**

In addition, students considering this SHSM can be encouraged to enroll in the following courses to become better informed about careers and postsecondary options in the sector:

- Exploring Technologies: This Grade 9 course is recommended for all students following SHSM pathways that have a technological education focus. The course provides students with opportunities to explore a variety of technologies, including construction technology, by engaging in activities related to them.
- Career Studies (compulsory) and Discovering the Workplace: Some of the expectations in these Grade 10 courses provide opportunities for students to explore occupations and other postsecondary options in the sector and to participate in experiential learning activities.
- Construction Technology: This course is recommended for any Grade 10 student who is considering enrolling in a SHSM Construction program.

#### **Occupations in the Construction Sector**

The following table provides examples of occupations in the construction sector, with corresponding National Occupation Classifications, sorted according to the type of postsecondary education or training the occupations would normally require.

#### **Apprenticeship Training**

- Brick and Stone Mason 7281
- Carpenter 7271
- Construction Millwright 7311
- Electrician 7241
- Heating and Air Conditioning Contractor 7313
- Painter and Decorator 7294
- Plumber 7251
- Roofer 7291

**Note:** Some of the names of occupations in this table may differ slightly from the names given in the National Occupation Classification system.

The names listed here reflect common usage by institutions and organizations in this sector in Ontario.

#### University

- Architect 2151
- Electrical Engineer 2133
- Mechanical Engineer 2132
- Structural Engineer 2131

#### College

- Architectural Design Technician/Technologist 2251
- Civil Engineering Technologist 2231
- Construction Estimator 2234
- Construction Manager 0711
- Construction Technologist 2231
- Contractor and Supervisor Electrical Trades and Telecommunications 7212
- Home Inspector 2264
- Interior Designer 5242
- Residential Home Builder or Renovator 0712

#### Workplace

- Carpenter Helper 7611
- Concrete Finisher 7282
- Construction Trades Helper and Labourer 7611
- Demolition Worker 7611
- Drywall Installer 7611
- Helper Construction Trades 7611
- Home Renovator 0712



# REGISTRATION FORM

### Specialist High Skills Major — Construction

**Personal Information:** *Please print neatly and provide the information below.* 

Legal Name:	<u> </u>		F* AN	AACT II LOO I	
	Surname		First Name	Middle Initial	
Current School:			Student ID #:		
Home Address:					
City/Town:			Postal Code:		
Home Telephone:	Cell:		E-Mail:		
Which pathway do you pla	an to pursue? (Plea	ase check one.)			
Apprenticeship Training	Workplace	College	University		
Are you currently enrolled	as an OYAP stude	ent? 🗖 Yes 📮 N	0		
Have you taken or are you	currently enrolle	d in any Dual Cr	edit courses?   Yes	lo	
If yes, please provide details: Co	urse Code	Course Nam	e		
	rrently enrolled: 🔲				
	*		provide date of completion:		
Student's Signature			Parent/Guardian Signature		
Print name (Student)			Print name (Parent/Gud	ardian)	
			Date		

Once you have completed the Registration Form, please submit it to the Guidance Department at your school for processing. A member of the SHSM team will be in contact with you shortly to set up your file and get you started on your journey to success.

In accordance with the Municipal Freedom of Information and Protection of Privacy Act, personal information is being collected under the authority of the Education Act and will be used to register students in a Specialist High Skills Major. For more information, please contact the Principal.

Congratulations on choosing an exciting future!

School Contact Information:

SHSM.rainbowschools.ca