

Construction

There are many career opportunities in the Construction sector that require workers who are creative problem-solvers, pay close attention to detail and have a strong work ethic. Students who pursue a career in construction can expect to work on projects on many different job sites such as hospitals, houses, plants, roads and schools. Career opportunities in the construction include **brick and stone mason, architect, carpenter, structural engineer, plumber, roofer, demolition worker, construction manager, painter, home inspector and many more.**

The Specialist High Skills Major (SHSM) program in Construction provides students with focused education in sector relevant courses, experiential learning opportunities, reach-ahead experiences and valuable training and certifications. Through their participation in the SHSM Construction program, students gain the knowledge and skills required to pursue many different post-secondary opportunities that will lead to a fulfilling career in the Construction sector.

Course Package

Each SHSM program offers students a bundle of 8-10 regular Ontario Secondary school courses that been selected as the most relevant courses to take to prepare students for a career in that sector. *As students work towards their OSSD, they are focusing their education and learning relevant skills through sector-recognized certification and training programs and experiences for a multitude of post-secondary programs* in the Construction sector.

The bundle includes:

- **4 major credits** in Construction in grade 11 and 12.
- **Supporting Credits**, which include Contextualized Learning Activities (CLAs).
 - ❖ 1 Grade 11 English credit (and a grade 12 English credit for students in the workplace pathway)
 - ❖ 1 Grade 11 and 1 grade 12 Math credit (grade 11 only for students in the workplace pathway)
 - ❖ 1 grade 11 or 12 credit in Science or Business studies
 - ❖ 2 Cooperative Education credits to experience a career in the Construction sector

Approved Major Credits (Minimum of 4):

- ✓ Construction Technology (TCJ 3C/4E/4C)
- ✓ Technological Design (TDJ 3O/3M, 4O/4M)
- ✓ Exploring Computer Technology (TEJ 3M/4M)
- ✓ Manufacturing Technology (TMJ 3E/3M, 4E/4M)
- ✓ Transportation Technology (TTJ 3C/3E/4C/4E)
- ✓ World Issues: A Geographical Analysis (CGW 4C/4U)
- ✓ Physics (SPH 3U, SPH 4C/4U)
- ✓ Web Design (IDC 3O/4O)
- ✓ Sports and Entertainment Marketing (IDC 4UB)
- ✓ Money Management-Introduction to Financial Planning (IDC 4UF)
- ✓ Visual Arts (AVI 3M/4M)

Approved Supporting Credits:

- ✓ English (ENG 3E/3C/3U, ENG 4E/4C/4U)
- ✓ Mathematics for Work (MEL 3E/4E)
- ✓ Foundations for College Mathematics (MBF 3C/4C)
- ✓ Mathematics for College Technology (MCT 4C)
- ✓ Functions and Applications (MCF 3M)
- ✓ Functions and Relations (MCR 3U)
- ✓ Advanced Functions (MHF 4U)
- ✓ Calculus and Vectors (MCV 4U)
- ✓ Mathematics of Data Management (MDM 4U)
- ✓ Biology (SBI 3C/3U, SBI 4U)
- ✓ Chemistry (SCH 3U, SCH 4C/4U)
- ✓ Physics (SPH 3U, SPH 4C/4U)
- ✓ Entrepreneurship the Venture (BDI 3C)

Approved Supporting Credits Continued:

- ✓ Entrepreneurship-The Enterprising Venture (BDP 30)
- ✓ Financial Accounting (BAF 3M)
- ✓ Marketing: Goods, Services, Events (BMI 3C)
- ✓ Financial Accounting Principles (BAT 4M)
- ✓ International Business (BBB 4M)
- ✓ Entrepreneurship Studies-Venture Panning in an Electronic Age (BDV 4C)
- ✓ Business Leadership Management Fundamentals (BOH 4M)
- ✓ Sports and Entertainment Marketing (IDC 4UB)
- ✓ Money Management-Introduction to Financial Planning (IDC 4UF)
- ✓ Literacy Course (OLC 4O)
- ✓ Learning Strategies (GLS 4O/GLE 4O)
- ✓ Cooperative Education

Construction Requirement Checklist by Pathway

Credits	Apprenticeship Pathway Grades 11- 12	College Pathway Grades 11-12	University Pathway Grades 11-12	Workplace Pathway Grades 11-12
Major Credit One credit may be substituted with a cooperative education credit (additional to the 2 required co-op credits)	4 Including at least one Gr.11 and one Gr.12 credit	4 Including at least one Gr.11 and one Gr.12 credit	4 Including at least one Gr.11 and one Gr.12 credit	4 Including at least one Gr.11 and one Gr.12 credit
English including a CLA	1	1	1	2 One credit must be in grade 12
Mathematics including a CLA	2 One credit must be in grade 12	2 One credit must be in grade 12	2 One credit must be in grade 12	1
Business Studies or Science including a CLA	1	1	1	1
Cooperative Education	2	2	2	2
Total Number of Credits	10	10	10	10

*Additional Co-op credits can substitute for a Major and/or Other credit.

Sector-recognized Certifications/Training Courses/Programs

Five Compulsory				
CPR	Health and Safety - basic	Standard First Aid	Working at Heights	Workplace Hazardous Materials Information Systems (WHMIS) - generic
Two Electives from the list below				
Canadian Welding Bureau (CWB) - flat	Basic Electrical Safety	Computer-aided Design and Computer-aided Manufacturing (CAD/CAM)	Customer Service	
Chainsaw Safety	Confined Space Awareness	Hoisting and Rigging	Fall Protection	
Energy Efficiency Training (i.e. Energy Star, LEED)	Fire Safety and Fire Extinguisher use	Insulated Concrete Forming	Innovation, Creativity and Entrepreneurship (ICE)	
Land Surveying Basics	Leadership Skills	Lockout/tagging	Power-actuated Tools	
Ozone-depletion Prevention	Propane in Construction	Portfolio Development	Project Management	
Sector-specific Regulations and Legislation	Sector-specific Vehicle Operation Safety	Specialized Skills Training Program/Competition (i.e. Skills Canada Provincial level)	Suspended Access Equipment	
Specialized Skills Training Program/Competition	Traffic Control	Trenching Safety		

*Many Certifications and Training are completed within regular school course curriculum.