

Transportation

Transportation, whether it be air, road, rail, space, pipeline or water, are all essential and require skilled workers who can develop, manage, maintain and repair them. The Transportation SHSM program provides current training and education so that students are able to develop the essential, valuable skills that they need to pursue a career in the Transportation sector. Career opportunities in the Transportation sector include **air pilot, urban planner, auto body repairer, mechanic, quality control inspector, automotive engineer, automobile salesperson, aerospace engineer** and many more.

The Specialist High Skills Major (SHSM) program in Transportation 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 Transportation program, students gain the knowledge and skills required to pursue many different post-secondary opportunities that will lead to a fulfilling career in the Transportation 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 **Transportation** sector.*

The bundle includes:

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

Approved Major Credits (Minimum of 4):

- ✓ Transportation Technology (TTJ 3O/3C, 4E/4C)
- ✓ Construction Technology (TCJ 3E/3C, 4E/4C)
- ✓ Technological Design (TDJ 3O/3M, 4O/4M)
- ✓ Exploring Computer Technology (TEJ 3E/3M, 4E/4M)
- ✓ Manufacturing Technology (TMJ 3C/3M, 4C/4M)
- ✓ Introduction to Computer Science (ICS 3C/3U, 4C/4U)
- ✓ Entrepreneurship the Venture (BDI 3C)
- ✓ Physics (SPH 3U, SPH 4C/4U)

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)
- ✓ Financial Accounting (BAF 3M)

Approved Supporting Credits Continued:

- ✓ Entrepreneurship-The Enterprising Venture (BDP 3O)
- ✓ 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

Transportation 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	1
Mathematics including a CLA	1	1	1	1
Business Studies or Science including a CLA	1	1	1	1
Cooperative Education	2	2	2	2
Total Number of Credits	9	9	9	9

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

Sector-recognized Certifications/Training Courses/Programs

Four Compulsory			
CPR	Health and Safety - basic	Standard First Aid	Workplace Hazardous Materials Information System (WHIMS) – general
Three Electives from the list below			
Air brakes	Basic Electrical Safety	Computer-aided Design and Computer-aided Manufacturing (CAD/CAM)	Customer Service
Drive Clean	Environmental Spills	Ergonomics	Fall Protection
Filling Propane and Motor Fuel Tanks	Fire Safety and Fire Extinguisher use	Introduction to Logistics	Innovation, Creativity and Entrepreneurship (ICE)
Ladder Safety Training	Leadership Skills	Lockout/tagging	Original Equipment Manufacturer’s Training
Ozone-depletion Prevention	Pleasure Craft Operator	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)	Vehicle Lift Safety
Working at Heights			

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

