

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).

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

ENERGY



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.



REQUIRED COMPONENTS FOR THE SHSM–ENERGY

The SHSM–Energy has the following FIVE required components:



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

- **FOUR energy 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 SIX (6) SECTOR-RECOGNIZED CERTIFICATIONS AND/OR TRAINING COURSES/PROGRAMS

THREE (3) COMPULSORY

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

THREE (3) ELECTIVES FROM THE LIST BELOW

- | | | |
|---|--|---|
| <input type="checkbox"/> alternative energy | <input type="checkbox"/> fall protection | <input type="checkbox"/> ozone-depletion prevention |
| <input type="checkbox"/> basic electrical safety | <input type="checkbox"/> fire safety and fire extinguisher use | <input type="checkbox"/> pipeline construction safety |
| <input type="checkbox"/> compass/map/global positioning system (GPS) | <input type="checkbox"/> geographic information system (GIS) | <input type="checkbox"/> portfolio development |
| <input type="checkbox"/> computer-aided design and computer-aided manufacturing (CAD/CAM) | <input type="checkbox"/> hazardous materials | <input type="checkbox"/> project management |
| <input type="checkbox"/> confined space awareness | <input type="checkbox"/> health and safety – basic | <input type="checkbox"/> radiation safety |
| <input type="checkbox"/> customer service | <input type="checkbox"/> hoisting and rigging | <input type="checkbox"/> renewable energy |
| <input type="checkbox"/> elevated work platforms | <input type="checkbox"/> ladder safety training | <input type="checkbox"/> sector-specific vehicle operation and safety |
| <input type="checkbox"/> energy efficiency | <input type="checkbox"/> leadership skills | <input type="checkbox"/> trenching safety |
| <input type="checkbox"/> ergonomics | <input type="checkbox"/> lockout/tagging | <input type="checkbox"/> watershed management |
| | | <input type="checkbox"/> working at heights |

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 energy sector (an example of job twinning)
- A day-long observation of an energy sector worker (an example of job shadowing)
- A one- or two-week work experience with a member of an industry association or a professional in the energy sector (an example of work experience)
- Attendance at an energy sector trade show, a conference, a symposium, or a job fair
- A tour of an energy-efficient building to explore passive-solar design and green building materials
- Participation in a local, provincial, or national contest or competition with a focus on energy
- A tour of a wind farm or generating station
- Volunteering with a non-profit organization focused on energy conservation

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 ENERGY SECTOR

- | | |
|--|---|
| • Power System Electrician | • Electrical Power Line & Cable Worker |
| • Gas Fitter | • Glazier |
| • Mechanical Engineer | • Chemical Engineer |
| • Arborist | • Climatologist |
| • Construction Millwright & Industrial Mechanic | • Utilities Manager |
| • Land Surveyor | • Physicist |
| • Electrical Mechanic | • Architects |
| | • Engineering Manager |