

Information & Communication Technologies

SPECIALIST HIGH SKILLS MAJOR (SHSM)

What is the Information and Communications Technology SHSM?

The Information and Communications Technology major focuses on communication and computer systems, as well as software and digital media areas. Students gain valuable skills and work experience that will help them explore career options in their preferred sector.

Why Get Involved?

- Explore Communications careers through work placements
- Networking with local ICT businesses
- Attend a conference, symposium, or job fair
- Touring of local Colleges and Universities
- Graduate with a SHSM seal of designation on your secondary school diploma
- Earn a Specialist High Skills Major designation on OSSD transcript
- Gain valuable industry specific work experience and knowledge

Skillset

The SHSM-Information and Communications Technology program will help students develop:

- A strong foundation to learn in the Communications industry
- Computer hardware, photography, and software skills
- Personal management skills
- Teamwork skills
- Communication skills
- Leadership skills
- Self-confidence

Are you looking for a competitive edge to get a job or to enrol in a college or university program in this field?

Do you enjoy getting out of the classroom and experiencing first-hand what you just learned about?

If you answered “Yes” to any of the above questions, read on . . .

What are the advantages of earning a SHSM in Information and Communication Technologies?

The SHSM–Information and Communications Technology has the following five required components:

1. A bundle of nine Grade 11 and Grade 12 credits

These credits make up the bundle:

- **4 information and communications technology major credits** that provide sector-specific knowledge and skills. The four courses must include at least one Grade 11 and one Grade 12 credit
- **3 other required credits** from the Ontario curriculum.
 - one in English; ¹
 - one in mathematics; and
 - one in the arts or business studies or science
- **2 co-operative education credits** that provide authentic learning experiences in a workplace setting, enabling students to refine, extend, apply, and practise knowledge and skills outlined in the cooperative education curriculum as well as sector-specific knowledge and skills.

Credits	Apprenticeship Training Grades 11–12	College Grades 11–12	University Grades 11–12	Workplace Grades 11–12
Major Credits <i>One credit may be substituted with a cooperative education credit (additional to the 2 required co-op credits)</i>	4 AWD3M/AWD4M ICS3C/ICS4C TEJ3M/TEJ4M TGV3M/TGJ4M	4 AWD3M/AWD4M ICS3C/ICS4C TEJ3M/TEJ4M TGV3M/TGJ4M	4 AWD3M/AWD4M ICS3U/ICS4U TEJ3M/TEJ4M TGV3M/TGJ4M	4 AWD3M/AWD4M ICS3C/ICS4C TEJ3M/TEJ4M /TGV3M/TGJ4M
English	1 NBE3E/3C/3U	1 NBE3C/3U	1 NBE3U	1 NBE3E
Mathematics	1 MEL3E/MBF3C/MFC3M/MCR3U	1 MBF3C/MFC3M	1 MFC3M/MCR3U	1 MEL3E
The Arts or Business Studies or Science <i>May be substituted with 1 cooperative education credit (additional to the 2 required co-op credits)</i>	1	1	1	1
Cooperative Education	2	2	2	2
Total number of credits	9	9	9	9

2. Sector-recognized Certification and Training

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			
advanced training in a technique (e.g., website design, coding, digital lighting, search engine optimization)	advanced training in a technology (309)	anti-oppression and allyship training	basic electrical safety
CISCO networking	computer hardware	counterfeit detection	customer service
electronics – basic	elevated work platforms	ergonomics	fall protection
first aid/CPR/AED awareness	health and safety – basic	infection control	intellectual property
interfacing equipment	Internet security	ladder safety training	leadership skills
lighting and sound equipment maintenance	lockout/tagging	network cabling	network configuration
portfolio development	project management	recording equipment	sector-specific software 1
sector-specific software 2	specialized skills training program/competition	technical support	Working at Heights

3. Experiential learning and career exploration activities

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

- attendance at a sector or trade show, a conference, a symposium, or a job fair
- a tour of a local television/film studio or network monitoring centre

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. Sector-partnered experiences (SPEs)

Students engage with a sector partner and apply skills to gain insight into the relationship between this sector and ICE (innovation, creativity, and entrepreneurship), coding, and/or mathematical literacy.