



WHITE PINES COLLEGIATE & VOCATIONAL SCHOOL

Specialist High Skills Major **PROGRAMS**





The Specialist High Skills Major (SHSM) program gives students an opportunity to specialize, gain qualifications, and plan a career pathway in various areas of the sector while still in high school. The SHSM Program has a number of required components, designed to give students a “leg-up” to pursue post-secondary opportunities in each of the identified sectors, valuing apprenticeship, college, community, university and the workplace.

Specialist High Skills Major **PROGRAMS**

FIVE MAIN COMPONENTS:

1. BUNDLED CREDITS
2. CERTIFICATIONS
3. EXPERIENTIAL LEARNING
4. REACH AHEAD EXPERIENCES
5. SECTOR-PARTNERED CONTEXTUALIZED EXPERIENCE



ARTS & CULTURE



AVIATION & AEROSPACE



CONSTRUCTION



ENVIRONMENT



**INFORMATION and
COMMUNICATIONS TECHNOLOGY**

ARTS & CULTURE

Specialist High Skills Major



POST-SECONDARY PATHWAYS:

The **ARTS & CULTURE** sector offers students opportunities to get inspired and use their unique skills and abilities in careers in visual arts, drama and performance, technical theatre, dance, media and many other creative areas.

APPRENTICESHIP

- Entertainment Industry Power Technician
- Gem Setter/Goldsmith
- Native Clothing and Crafts Artisan
- Painter and Decorator

UNIVERSITY

- Author or Writer
- Conductor, Composer, or Arranger
- Conservator or Curator
- Dancer
- Producer, Director, Choreographer



BUNDLED CREDITS FOR ALL DESTINATIONS:

- 4 Arts and Culture Major Credits (Grade 11 and/or Grade 12)
- 1 English Credit
- 1 Business or Canadian and World Studies Credit
- 2 Cooperative Education Credits

COLLEGE

- | | |
|--|-----------------------------------|
| • Actor or Comedian | • Broadcast Technician |
| • Animator – Graphic Design and Illustration | • Film or Video Camera Operator |
| • Announcer and other Broadcasters | • Graphic Designer or Illustrator |
| • Apparel Production Supervisor | • Interior Designer |
| | • Photographer |

WORKPLACE

- Camera, Platemaking, or other Pre-Press Operations
- Desktop Publishing Operator
- Entertainer
- Graphic Artist or Illustrator
- Musician or Singer

OTHER REQUIREMENTS:

- ✓ Experiential Learning and Career Exploration Activities
- ✓ Reach Ahead Experiences
- ✓ Sector-Partnered Contextualized Experience in Innovation, Creativity and Entrepreneurship, Mathematical Literacy or Coding

Go to Guidance/Student Services
for more information

CERTIFICATIONS

3-Compulsory:

- CPR Level C + AED
- Standard First Aid
- WHMIS

3-Elective:

- Advanced Training in a Technique
- Curatorial Techniques
- Customer Service
- Event Coordination
- Musical Instrument Repair
- Portfolio Development



AVIATION & AEROSPACE

Specialist High Skills Major



POST-SECONDARY PATHWAYS:

APPRENTICESHIP

- Aircraft Instrument, Electrical, and Avionics Mechanic, Technician, and Inspector
- Aircraft Sheet Metal Technician
- Aircraft Mechanic and Aircraft Inspector
- Aircraft Welder
- Aviation Machinist

UNIVERSITY

- Aerospace Engineer
- Avionics Engineer
- Industrial and Manufacturing Engineer
- Mechanical Engineer

The Aviation & Aerospace SHSM enables students to navigate the ever-changing nature of aviation and aerospace, the complexity of supply chain dynamics, and the accelerated pace of change in the aerospace sector.

The Aviation & Aerospace program is a semester long experience, in which students earn 4 credits and industry recognized certifications while working at the Canadian Bushplane Heritage Centre location. This is a hands-on learning opportunity that can jumpstart a career in aviation and aerospace. Students complete the Transportation Technology: Light Aircraft course, are engaged in a cooperative education placement and also participate in the Sault College Dual Credit Program.

Core industries in this sector include:

- maintenance, repair, and overhaul services for aircraft, engines, avionics, systems, and equipment
- design and manufacturing of commercial aircraft, engines, systems, avionics, equipment, and components
- flight operations (e.g., pilot training, airport services, air traffic control, and space and equipment handling)

BUNDLED CREDITS FOR ALL DESTINATIONS:

- 4 Aviation & Aerospace Major Credits (Grade 11 and/or Grade 12)
- 1 English Credit
- 1 Math Credit
- 1 Canadian and World Studies or Business or Science Credit
- 2 Cooperative Education Credits

COLLEGE

- Aircraft Instruments, Electrical & Avionics Mechanics, Technicians and Inspectors
- Air Pilot, Flight Engineer, and Flying Instructor
- Air Traffic Controller
- Electronic Service Technician • Meteorological Technician
- Metal Fabricator Fitter • Non-destructive Tester & Inspector

WORKPLACE

- Air Traffic Controller
- Air Transport Ramp Attendant
- Aircraft Assembler and Aircraft Assembly Inspector
- Airline Sales and Service Agent
- Material Handler

OTHER REQUIREMENTS:

- ✓ Experiential Learning and Career Exploration Activities
- ✓ Reach Ahead Experiences
- ✓ Sector-Partnered Contextualized Experience in Innovation, Creativity and Entrepreneurship, Mathematical Literacy or Coding

**Go to Guidance/Student Services
for more information**

CERTIFICATIONS

3-Compulsory:

- CPR Level C + AED
- Standard First Aid
- WHMIS

4-Elective:

- Working at Heights
- Confined Space Awareness
- Fall Protection
- Health & Safety—Basic
- Propane Safety
- Compass/Map/Global Positioning System (GPS)



CONSTRUCTION

Specialist High Skills Major



The CONSTRUCTION industry is diverse and offers the opportunity to participate in all kinds of projects such as office buildings, plants, schools, roads, hydroelectric dams, hospitals, churches, houses and tunnels. Large or small, the projects are managed, budgeted for, planned and built carefully and capably by people with the ingenuity, skill and education to create. The House Building Project is a semester long experience, in which students earn 4 credits and industry recognized certifications while working on a construction site. This is a hands-on learning opportunity that can jumpstart a career in carpentry.

Students have the opportunity to:

- Become registered as an apprentice through OYAP (Ontario Youth Apprenticeship Program)
- Learn a variety of construction fundamentals including:
 - General Carpentry
 - Insulating
 - Siding & Exterior Finishing
 - Drywall Lathing Application
 - Roofing
- Build strong relationships with prospective employers in the construction field

POST-SECONDARY PATHWAYS:

APPRENTICESHIP

- Brick and Stone Mason
- Carpenter
- Construction Millwright
- Electrician
- Heating and Air Conditioning Contractor
- Painter and Decorator
- Plumber
- Roofer

UNIVERSITY

- Architect
- Electrical Engineer
- Mechanical Engineer
- Structural Engineer

BUNDLED CREDITS FOR ALL DESTINATIONS:

- 4 Construction Major Credits (Grade 11 and/or Grade 12)
- 1 English Credit
- 2 Math Credits
- 1 Business or Science Credit
- 2 Cooperative Education Credits

COLLEGE

- Architectural Design Technician/Technologist
- Civil Engineering Technologist
- Construction Estimator
- Contractor and Supervisor - Electrical Trades & Telecommunications
- Home Inspector
- Interior Designer

WORKPLACE

- Concrete Finisher
- Construction Trades Labourer
- Demolition Worker
- Home Renovator

OTHER REQUIREMENTS:

- ✓ Experiential Learning and Career Exploration Activities
- ✓ Reach Ahead Experiences
- ✓ Sector-Partnered Contextualized Experience in Innovation, Creativity and Entrepreneurship, Mathematical Literacy or Coding

**Go to Guidance/Student Services
for more information**

CERTIFICATIONS

5-Compulsory:

- CPR Level C + AED
- Standard First Aid
- Health & Safety—basic
- Working at Heights
- WHMIS

3-Elective:

- Basic Electrical Safety
- Canadian Welding Bureau (CWB)
- Fall Protection
- Sector-Specific Vehicle Operation



ENVIRONMENT

Specialist High Skills Major



The ENVIRONMENT is an emerging sector in our world as we continue to expect a clean and safe environment to live in that is essential for our health and quality of life. As such, the government and other organizations have launched various programs to protect our air, water and land resources. The environment sector offers career opportunities in conservation, research, recreation, innovation and more to students who are interested in this field.



POST-SECONDARY PATHWAYS:

APPRENTICESHIP

- Arborist

UNIVERSITY

- Air Quality Meteorologist
- Chemical Engineer
- Climatologist
- Environmental and Occupational Toxicologist
- Environmental Biologist
- Environmental Engineer
- Forestry Professional
- Geological Engineer
- Waste Diversion Consultant

BUNDLED CREDITS FOR ALL DESTINATIONS:

- 4 Environment Major Credits (Grade 11 and/or Grade 12)
- 2 English Credits
- 1 Math Credit
- 2 Cooperative Education Credits

COLLEGE

- Biological Technologist or Biological Technician
- Conservation Officer or Fishery Officer
- Environmental Technician
- Field Technician – Air Pollution
- Hatchery or Fisheries Technician
- Habitat Management Technician
- Soil Testing Technologist

WORKPLACE

- Canoeing, Fishing, Hunting Guide
- Landscaping and Grounds Maintenance Workers
- Outdoor Sport and Recreation Guide
- Outfitter
- Recycled Paper Handler
- Wastewater Treatment Plant Operator

OTHER REQUIREMENTS:

- ✓ Experiential Learning and Career Exploration Activities
- ✓ Reach Ahead Experiences
- ✓ Sector-Partnered Contextualized Experience in Innovation, Creativity and Entrepreneurship, Mathematical Literacy or Coding

**Go to Guidance/Student Services
for more information**

CERTIFICATIONS

4-Compulsory:

- CPR Level C + AED
- Standard First Aid
- WHMIS
- Compass/Map/GPS

3-Elective:

- Advanced Training in a Technique
- Chainsaw Safety
- Hike Ontario
- Leave No Trace
- Pleasure Craft Operator



INFORMATION and COMMUNICATIONS TECHNOLOGY Specialist High Skills Major

Students enrolled in the SHSM-Information and Communications Technology will be involved in today's rapid and exciting changes in technology and will contribute to new and emerging media and technologies in the years to come.

INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) is about processing information (which includes capturing, transmitting and displaying information) using electronic systems. ICT is increasingly becoming an essential part of many industries. There are requirements to save time and increase efficiency, advance technology and innovation, for electronic access to finances or online shopping, creativity, marketing, and communications. ICT includes both the hardware and information technology skills, as well as the creative, communications and graphic arts expertise.



POST-SECONDARY PATHWAYS:

APPRENTICESHIP

- Computer Network Technician
- Help Desk Technology Support Analyst
- Telecommunications Installation and Repair/
Network Cabling Specialist
- Telecommunications Line and Cable Worker

UNIVERSITY

- Computer Engineer
- Computer Programmer and Interactive Media Developer
- Information Systems Analyst
- Software Engineer and Designer
- Technical Sales Specialists

BUNDLED CREDITS FOR ALL DESTINATIONS:

- 4 Information and Communications Technology Major Credits (Grade 11 and/or Grade 12)
- 1 English Credit
- 1 Math Credit
- 1 Arts or Business or Science Credit
- 2 Cooperative Education Credits

COLLEGE

- Audio and Video Recording Technician
- Broadcast Technician
- Electrical and Electronics Engineering Technologist and Technician
- Electronic Service Technician
- Film and Video Camera Operator
- Graphic Designer, Illustrator, Animator
- Systems Testing Technician
- User Support Technician
- Web Designer and Developer

WORKPLACE

- Desktop Publishing Operator
- Residential and Commercial Installer and Servicer – Satellite Dish Installer
- Retail Salesperson and Sales Clerk
- Telecommunications Cable Installer Helper and Splicer Helper

OTHER REQUIREMENTS:

- ✓ Experiential Learning and Career Exploration Activities
- ✓ Reach Ahead Experiences
- ✓ Sector-Partnered Contextualized Experience in Innovation, Creativity and Entrepreneurship, Mathematical Literacy or Coding

**Go to Guidance/Student Services
for more information**

CERTIFICATIONS

3-Compulsory:

- CPR Level C + AED
- WHMIS
- Standard First Aid

3-Elective:

- CISCO Networking
- Customer Service
- Counterfeit Detection
- Interfacing Equipment
- Internet Security
- Network Configuration
- Technical Support
- Specialized Skills Training Program/Competition



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This education program helps students keep track of their education plans including their individual Pathways plan.

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WHITE PINES
C&VS

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for more information



ALGOMA DISTRICT
SCHOOL BOARD

SPECIALIST HIGH SKILLS MAJOR



Ontario.ca/SHSM

For additional information, please contact:
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