

Ottawa Technical Secondary School

Construction and Woodworking

This OTSS program provides learners with the opportunity to use the design process to build meaningful projects. Learners will gain insight into the processes necessary to create in-house carpentry products, repair residential, commercial and industrial buildings, all following local building codes. Students will work with various construction materials, including wood, concrete, fasteners, and engineered products, and use a wide array of hand and power tools.

Areas of Focus:

- Learn to use hand tools, power tools, CnC digital equipment, and other specialty equipment used by carpenters.
- Gain familiarity working with carpentry building materials like lumber, panel products, concrete, roofing, fasteners, and hardware.
- Learn to build numerous projects, including sheds, picnic tables, stairs, and framing for floors, walls, and roofs.



[OTSS Construction Program Promotion Video](#)

Design Technology

In this new OTSS program, learners will learn the design technologies that are literally changing our communities and world. Hands-on activities using CnC, 3D Printers and Laser Cutters, Mig Welders, Table Saws, Planners, etc. will engage you as you apply the process of design (Ideate, Prototype, Test, Define, and Empathize)

Learners will discover how technological design is influenced by environmental, social, financial, and material requirements and will create electronic and working drawings to communicate solutions for design problems. In this process, students will collaborate with other OTSS programs, contribute to the authentic school and community projects, and express their understanding of project initiatives while considering societal and environmental issues.

Areas of Focus:

- Hands-on application of the design process
- Assess test models and prototypes
- Manipulate a variety of tools, materials, and equipment in the completion of projects
- Apply design technology-specific math skills to find solutions while building products
- Explore the interconnection between design technology and other broad-based technologies
- Demonstrate safe working practices while creating products

