

2012 OTSC CONTEST DESCRIPTIONS

OTSC Contest	Contest Description
2D Character Animation	Teams of two (2) are given a theme, provided a soundtrack, and are then challenged to tell a story. The contest will focus on the competitors' abilities to tell their story on paper through storyboarding. They will then bring their story to life by creating and animating the depicted scenes.
3D Character Animation	Using a fully realized 3D animated character capable of expressing emotion, the teams must create a short movie. Competitors then share their animation, storyboard and model sheets to a panel of judges during a final formal presentation.
Aesthetics	Using real life volunteers, the aesthetics competitors are judged on their ability to provide facial treatments, foot care, hand care, hair removal and make-up application to industry standards.
Aircraft Maintenance	Competitors will perform basic aircraft maintenance procedures. This will include: structural repairs, aircraft and engine maintenance and inspections, weight and balance computations and the Canadian Aviation Regulations.
Architectural Technology and Design	Using Computer Aided Drafting (CAD) software, competitors must showcase their design and drawing skills. The designs/drawings are judged on three broad categories: architecture, engineering and construction.
Auto Collision Repair	Competitors will be judged on their abilities in auto body repair. The contest will include: welding, measurement, the repair of a rocker panel, bumper repair, and vehicle preparation. A written exam will also be administered.
Auto Painting	Competitors will be assessed in auto body preparations and painting techniques. Activities will include dent repair, priming and refinishing. A theoretical exam will also be administered.
Auto Service Technology	Competitors will be challenged with real life automotive repair situations. Engines are assigned and participants may have to assess brakes/steering/suspension, electrical, body functions/vehicle performance, engine systems and fabrication.
Automation & Control <i>(formerly Industrial Wiring)</i>	Students are tested on their abilities and skills in wiring motor controls and developing a programmable logic controller program to operate devices and equipment, according to given specifications.
Baking	The Baking contest judges competitors based on their competence and professionalism. Secondary participants must bake: yeast/bread rolls, a decorative cake, choux pastries and lemon meringue pie. Post-secondary competitors will showcase their professionalism in commercial baking by baking a mousse cake, miniature French pastries, a sponge cake and a chocolate box. Competitors must come prepared with their own recipes.
Brick Masonry	Using a set of drawings, competitors must complete a masonry project. Projects may include, construction of brick walls or surfaces and decorative brickwork. Competitors will be judged on their abilities in brick laying, block laying, setting out and drawing.

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Cabinetmaking	Students will be judged on their woodworking/cabinetmaking skills. The challenge will include the creation of a piece of furniture or cabinet by hand. Competitors will be graded on accuracy, fit and finish, and a written test.
Carpentry - Individual	The competitors will be evaluated on their carpentry skills required for residential construction. Competitors may be asked to interpret detailed drawings as they safely and accurately measure, layout and assemble framing systems such as floors walls and roofs. Competitors should be familiar with both Western Platform Framing and aspects of Post and Beam Construction along with the installation of wall openings, sheathing, decks, stairs and trim.
Carpentry - Team	In teams of two (2), students will be graded on their practical abilities pertaining to carpentry. Teams will be given a project (eg. toy box) and assessed on general practices, blueprint reading, design/layout, construction and assembly of project.
Computer Aided Manufacturing	Participants receive a detailed drawing of a part that must be programmed for a vertical spindle milling machine. Utilizing CAM software, competitors must program the part using 2D geometry construction methods. Competitors must consider feeds, speeds, cutters, drills, face milling and finishes.
Culinary Arts	To evaluate through competition, the professional culinary skill and talent of the next generation of Chefs by having them cook and display hot and cold dishes in accordance with established trade rules. Presenting an exciting view into Culinary Arts and to showcase new culinary trends to the visiting public.
Electrical Wiring	Competitors will be expected to complete specific tasks from written instructions and provided electrical schematic diagrams. Tasks will relate to electrical wiring in the industrial, commercial and institutional fields.
Electronics	The Electronics contest tests competitors on the current, state-of-the-art, electronic industry standards. Participants may be asked to: interpret schematic diagrams, identify electrical components and construct/troubleshoot circuits.
Fashion Design	Students are to demonstrate their Fashion Design skills through illustration, apparel drafting, clothing construction and communication.
Floristry	Competitors will create a floral symmetrical arrangement, a centre piece, a vase arrangement, a spiral hand tied bouquet and a cascade bridal bouquet. Competitors must present their arrangements using proper botanical or common names.
Geographic Information Systems	The GIS competitors are asked to: generate a digital map from a digital image, add data in a digital map, use GIS as a tool to compare, contrast and analyze geographic data, and produce a series of maps showing the results of the analysis. Working in teams of two, the competitors must present their GIS solutions to solve a real-life problem to a judging panel.
Graphic Design - Presentation	In advance of the actual competition date, the competitors must create a theme and visual concept promoting the Ontario Technological Skills Competition geared to an audience of youth aged 14-21. Three promotional pieces are required: a poster, a brochure and a choice of t-shirt, button or web home page which will be formally presented to a panel of judges on the date of the contest.

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Graphic Design – Studio Production (formerly Desktop Publishing)	Students will be challenged in various aspects of Studio Production. This may include practical skills in such applications as Adobe InDesign, Corel Paint or Macromedia Freehands. Project planning, knowledge of design basics, and technical competence is a must.
Hairstyling	The competitors must demonstrate their technical and creative skills by creating three different fashion-conscious looks during the hairstyling contest. These looks include a men's cut and style, women's trendy salon cut and style and ladies elegant evening hairstyle.
Heating System Technician	Competitors must demonstrate through practical and theoretical application their skills in heating system fundamentals. This may apply to electricity, pressure, mechanics and combustion of gas heating systems, with special attention given to Health and Safety regulations. Requires knowledge of controls, tools and testers used in the industry.
Heavy Equipment Service	This contest will assess competitors' skills in correctly inspecting, repairing and adjusting detached and/or mounted heavy duty equipment (i.e. tractor) components.
Home & Team Building	Students will demonstrate their skills and talent in construction technology. Over two days of competition, teams of four (4) will be evaluated on their abilities in carpentry, electrical and plumbing.
Industrial Mechanic Millwright	This contest will test the skills and knowledge of each competitor in the areas of hydraulics, pneumatics, metal layout, machining and fabrication as well as the assembly and alignment of mechanical power transmissions and components.
IT - Office Software Applications	IT - Office Software Application evaluates participants' understanding and ability in document processing, spreadsheets, presentation, database software, as well as the integration between these applications.
IT Network Systems Administration	The IT Network Systems Administration contest assesses competitors in the skills required to setup and run a network suitable for a small to medium-sized business. Competitors are required to demonstrate their ability to manage and configure Windows and Linux servers, and build a network using Cisco networking hardware.
Job Interview	Competitors will apply to a job by submitting a targeted resume and cover letter. They will then be interviewed for the position with questions about their skills, knowledge, education and experience.
Job Skill Demonstration	Competitors will demonstrate and explain an entry level skill of their occupational expertise. The skill presented must reflect a contest area that is a component of the Canadian Skills Competition. Each competitor has up to 30 minutes for the demonstration.
Landscape Design	Using Computer Aided Drafting (CAD) software, competitors must showcase their landscape design and drawing skills. The designs/drawings are judged on creativity, meeting the client's (and the site's) requirements and plant selection.

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Landscape Gardening	Competitors, in teams of two (2), will be tested by building a garden based on a common set of criteria and drawings. Components of this may include, creating wall(s) from precast paving units, laying paving stones, plant selection and placement of landscape rocks.
Mechanical CAD	The Mechanical Computer Aided Drafting contest evaluates a contestant's knowledge of mechanical design and drafting standards by applying CAD software to solve typical mechanical engineering problems.
Mechatronics	Using the supplied components, mechatronics competitors must design, build and program a machine capable of accomplishing a specific manufacturing process. Competitors work in teams of two.
Photography	The Photography contest will evaluate students' skills in digital photography. Competitors will be graded on their photographic eye, digital capture, digital production, digital output and professionalism.
Plumbing	The Plumbing contest will assess the competitor's knowledge of the plumbing system with a focus on accuracy of installation, quality of workmanship and gas and water pressure testing.
Precision Machining	Competitors will be given drawings for a mill piece and a lathe piece. They will have a set amount of time to machine the part to completion. A theory test will also be involved for the secondary level contest.
Prepared Speech	The Prepared Speech contest allows competitors to demonstrate their ability to clearly and effectively prepare and present on a pre-established theme. Speeches are 5 to 7 minutes in length. Competitors are evaluated on content, ability to convey their message and overall delivery.
Refrigeration	Competitors will be required to troubleshoot a simple refrigeration and/or air conditioning system. Knowledge of HVACR industry regulations and the basics of refrigeration is a necessity.
Restaurant Service	Restaurant Service competitors are tested on: table dressing (including flower arranging and napkin folding) seating and serving real guests, taking orders, preparing cocktails, wine identification and clearing and cleaning. Health and safety compliance is also tested.
Robotics	Prior to the official contest, teams of competitors design and fabricate a robot. The robot must be capable of competing with other student-made robots to move objects to a 'goal'. Competitors require drafting, mechanics, electronics, metalwork, woodwork and communications skills.
Sheet Metal Work	Competitors will use a mixture of basic hand techniques and intermediate level skills to form and fabricate seams, edges and locks in order to complete a project typical in sheet metal shops.
Small Powered Equipment	The contest is intended to test the skill and knowledge of competitors in the air and liquid cooled engine field. Students will be assessed on their ability to assemble/disassemble engines, carburetor theory and adjustments, and measuring and identifying parts.

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Truck and Coach	This contest assesses competitors on seven truck components including brakes, electrical, fluid power, drive-train, engine, steering and suspension, and a written test based on the Ontario College Truck and Coach Curriculum.
TV & Video Production	Teams of two (2) competitors are required to produce a 2-3 minute informational/promotional video on a theme given at the beginning of the challenge. Competitors must use their time to plan, script, shoot and edit the final video, all in one day.
Virtual Robotics	The Virtual Robotics contest requires teams of two (2) to: design a robot using prescribed computer software, program the Virtual Robot and run a simulation of the robot in action, build a real model of the robot using the parts provided, and transfer the code to the robot and run the real model in a competition.
Web Site Development	The Internet Web Page Design contest gives competitors the opportunity to demonstrate their creativity and professionalism through the design of an informative website. Competitors will be tested on overall knowledge of web site design, technical and presentation skills.
Welding	The contest will evaluate student's abilities to safely work through all the tested welding processes, including layout, position, fit and tack welding. The interpretation and application of welding symbols will also be tested.
Workplace Safety	The Workplace Safety contest promotes health & safety by assessing the competitor in a hazard assessment, presentation & theory exam. Evaluation is on health and safety principles, ability to identify & assess workplace hazards and recommend corrective action. Through the presentation, the competitor demonstrates their ability to communicate information to others. This contest helps build literacy, vocabulary, research, written communication & presentation skills.

Related Contests prior to the OTSC

Related Contests	Contest Description
CNC Woodworking	Students will design and create projects using a Woodworking CNC Machine. Each affiliated School can send in 3 projects prior to the OTSC. The projects will be judged on creativity, machining as well as fit & finish. The awards ceremony for this contest will happen during the OTSC.
Pin and Medal Design	Using your graphic skills we are looking for creative designs for the official pin of the 2012 OTSC and the official medal given to top competitors.