



Great Oaks Animal Science and Management Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program.

Additional Information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Animal Science

Applied Mathematics-3	Graphic Literacy -4
Workplace Documents-3	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program

Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
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Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	Medium
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	Medium
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Standing, stooping, bending, restraining/holding animals, and lifting animals/cages weighing more than 20 pounds	High
Safety Understanding	Able to comprehend hazards of working with animals, diseases, blood/animal fluids, tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	Medium
Ability to work toward work including tasks of minimal interest	Medium
Ability to stick to assigned task to a positive/expected conclusion	Medium
Ability to follow and retain:	
Multistep oral instructions	Medium
Written instructions/technical manuals - multistep	Medium
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (blades, clippers, grooming clippers, muzzles, x-rays, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium
Ability to discriminate between objects of similar:	

Size	Medium
Shape	Medium
Color	Medium
Spatial Relationship	Medium
Dexterity-Fine finger/motor	High
Ability to organize work process/follow defined procedures	Medium
Coordination (eye-hand)	High
Able to sequence events or follow a sequence as necessary	Medium
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting, recording, comparing, calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	

Additional Abilities Required

Strong memorization skills	Handle chemical and animal smells and contacts
Consideration and understanding of allergies such as pet/animal/hay	Handling excrement, getting dirty, urine, and other conditions associated with working with animals
Handling unfamiliar, dangerous, large and small animals	

Knowledge Required in Animal Science

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Biology	Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Animal Science Activities

Hold or restrain animals during veterinary procedures.	Clean and maintain kennels, animal holding areas, examination or operating rooms, or animal loading or unloading facilities to control the spread of disease.
Fill medication prescriptions.	Groom, trim, or clip animals' coats.
Administer anesthetics during surgery and monitor the effects on animals.	Assist veterinarians in examining animals to determine the nature of illnesses or injuries.
Monitor animals recovering from surgery and notify veterinarians of any unusual changes or symptoms.	Examine animals to detect behavioral changes or clinical symptoms that could indicate illness or injury.
Clean, maintain, and sterilize instruments or equipment.	Dust, spray, or bathe animals to control insect pests.
Administer medication, immunizations, or blood plasma to animals as prescribed by veterinarians.	Educate or advise clients on animal health care, nutrition, or behavior problems.
Collect laboratory specimens, such as blood, urine, or feces for testing.	Prepare surgical equipment and pass instruments or materials to veterinarians during surgical procedures.
Prepare feed for animals according to specific instructions, such as diet lists or schedules.	Provide emergency first aid to sick or injured animals.
Perform routine laboratory tests or diagnostic tests, such as taking or developing x-rays.	Exercise animals or provide them with companionship.
Prepare examination or treatment rooms by stocking them with appropriate supplies.	Perform enemas, catheterizations, ear flushes, intravenous feedings, or gavages.
Provide assistance with euthanasia of animals or disposal of corpses.	Record information relating to animal genealogy, feeding schedules, appearance, behavior, or breeding.
Perform office reception duties, such as scheduling appointments or helping customers.	Perform hygiene-related duties, such as clipping animals' claws or cleaning and polishing teeth.
Perform accounting duties, such as bookkeeping, billing customers for services, or maintaining inventories.	Write reports, maintain research information, or perform clerical duties.
Sell pet food or supplies to customers.	

Technology

Word Processing Software	Office Suite Software
Medical Software	Label Making Software
Calendar and Scheduling Software	

Available Certifications

OHSA 10-hour for Agriculture (1 Point)	CPR/First Aid Certification (1 Point)
Industrial Fork Lift Training (1 Point)	Pet First Aid & Disaster Response Certification
Pet Industry Joint Advisory Council (PIJAC) Certified Avian Specialist	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Clark State Community College (Agriculture Business, up to 6 credit hours possible) • Southern State Community College (Agriculture Production, up to 4 credit hours possible) • Wilmington college (agriculture, 2 hours possible)
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your Career-Technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. For more information, go to www.transfercredit.ohio.gov

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Veterinary Assistant	Groomer/Bather/Brusher
Laboratory Animal Caretakers	Kennel Operator
Pet Shop Employee	Zoo Animal Caretaker
Pet Stylist	Veterinarian



Great Oaks Automotive Refinishing and Collision Repair Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Automotive Refinishing and Collision Repair

Applied Mathematics-4	Graphic Literacy-5
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Auditory Acuity	The ability to detect differences in pitch/sound	Medium
Oral Communication	The ability to express/explain ideas	High
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	High
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	The ability to lift 50 pounds or more	High
Eye-Hand Coordination and Dexterity	The ability to use tools to ensure work is completed	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	High
Ability to stick to assigned task to a positive/expected conclusion	High
Ability to work accurately, recheck and correct work to industry standards	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	High
Visual models or demonstrated instructions	High
Ability to use tools of trade (trim or molding tools, sheers, pullers, pneumatic hammer, metal cutters, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High

Ability to discriminate between objects of similar:	
Size	High
Shape	High
Color	High
Spatial Relationship	High
Dexterity-Fine and gross finger/motor	High
Ability to organize work process/follow defined procedures	High
Able to sequence events or follow a sequence as necessary	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Measurement

Additional Abilities/Skills Required

Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Information Ordering	The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Repairing	Repairing machines or systems using the needed tools.
Complex Problem Solving	Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Knowledge Required in Automotive Refinishing and Collision Repair

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.

English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
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Automotive Refinishing and Collision Repair Activities

Follow supervisors' instructions as to which parts to restore or replace and how much time the job should take.	Review damage reports, prepare or review repair cost estimates, and plan work to be performed.
Inspect repaired vehicles for proper functioning, completion of work, dimensional accuracy, and overall appearance of paint job, and test drive vehicles to ensure proper alignment and handling.	Sand body areas to be painted and cover bumpers, windows, and trim with masking tape or paper to protect them from the paint.
Fit and weld replacement parts into place, using wrenches and welding equipment, and grind down welds to smooth them, using power grinders and other tools.	Prime and paint repaired surfaces, using paint spray guns and motorized sanders.
Remove damaged sections of vehicles using metal-cutting guns, air grinders and wrenches, and install replacement parts using wrenches or welding equipment.	Chain or clamp frames and sections to alignment machines that use hydraulic pressure to align damaged components.
Fill small dents that cannot be worked out with plastic or solder.	File, grind, sand, and smooth filled or repaired surfaces, using power tools and hand tools.
Remove upholstery, accessories, electrical window-and-seat-operating equipment, and trim to gain access to vehicle bodies and fenders.	Position dolly blocks against surfaces of dented areas and beat opposite surfaces to remove dents, using hammers.
Mix polyester resins and hardeners to be used in restoring damaged areas.	Adjust or align headlights, wheels, and brake systems.
Read specifications or confer with customers to determine the desired custom modifications for altering the appearance of vehicles.	Cut and tape plastic separating film to outside repair areas to avoid damaging surrounding surfaces during repair procedure and remove tape and wash surfaces after repairs are complete.
Remove small pits and dimples in body metal, using pick hammers and punches.	Fit and secure windows, vinyl roofs, and metal trim to vehicle bodies, using caulking guns, adhesive brushes, and mallets.
Measure and mark vinyl material and cut material to size for roof installation, using rules, straightedges, and hand shears.	Remove damaged panels, and identify the family and properties of the plastic used on a vehicle.

Replace damaged glass on vehicles.	Soak fiberglass matting in resin mixtures and apply layers of matting over repair areas to specified thicknesses.
Clean work areas, using air hoses, to remove damaged material and discarded fiberglass strips used in repair procedures.	Apply heat to plastic panels, using hot-air welding guns or immersion in hot water, and press the softened panels back into shape by hand.
Cut openings in vehicle bodies for the installation of customized windows, using templates and power shears or chisels.	

Technology

Inventory Management Software	Analytical or Scientific Software
Data Base User Interface and Query Software	Accounting Software
Calendar and Scheduling Software	

Available Certifications

I-Car Collision Repair (12 Points)	CPR/First Aid Certification (1 Point)
I-Car Pro Level 1 Refinishing Technician (12 points)	ASE B2 Collision Repair (12 Points)
ECSI (Emergency Care and Safety Institute)	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit Header	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> Gateway Community and Technical College (Automotive Technology, up to 8 credit hours possible) Owens Community College (Automotive Technology, up to 7 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Painter's Assistant	Estimator
Auto Body Assistant	Automotive Welding and Frame Repair Technician
Painter	Body Shop Owner
Collision Repair Technician	



Great Oaks Automotive Service Technician Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Automotive Service Technician

Applied Mathematics-3	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program

Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
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Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Auditory Acuity	The ability to detect differences in pitch/sound	High
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	The ability to lift 50 pounds or more, bending, stooping	High
Eye-Hand-Arm Coordination and Dexterity	The ability to use tools to ensure work is completed	High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	Medium
Ability to stick to assigned task to a positive/expected conclusion	Medium
Ability to work accurately, recheck and correct work to industry standards	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	High
Visual models or demonstrated instructions	High
Ability to use tools of trade (voltage or current meters, specialty wrenches, pullers, pneumatic vacuum equipment, brake repair kits, etc.)	High

Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color	Medium
Spatial Relationship	Medium
Dexterity-Fine and gross finger/motor	High
Ability to organize work process/follow defined procedures	Medium
Able to sequence events or follow a sequence as necessary	Medium
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting, recording, comparing, calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Measurement
Proficient in algebra	

Additional Abilities/Skills Required

Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
Tech Prep Requirements	Attendance requirement of 95%; minimum Grade of C in algebra; 2.0 overall grade point average or higher
Work Preferences	Detail oriented, computer savvy, dirty/greasy, inside work with crawling, bending, and stooping

Knowledge Required in Automotive Service Technician

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
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Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Automotive Service Technician Activities

Inspect vehicles for damage and record findings so that necessary repairs can be made.	Estimate costs of vehicle repair.
Troubleshoot fuel, ignition, and emissions control systems, using electronic testing equipment.	Repair, overhaul, or adjust automobile brake systems.
Test electronic computer components in automobiles to ensure proper operation.	Repair or replace defective ball joint suspensions, brake shoes, or wheel bearings.
Align wheels, axles, frames, torsion bars, and steering mechanisms of automobiles, using special alignment equipment and wheel-balancing machines.	Tune automobile engines to ensure proper and efficient functioning.
Repair, replace, or adjust defective fuel injectors, carburetor parts, and gasoline filters.	Rebuild, repair, or test automotive fuel injection units.
Change spark plugs, fuel filters, air filters, and batteries in hybrid electric vehicles.	Conduct visual inspections of compressed natural gas fuel systems to identify cracks, gouges, abrasions, discoloration, broken fibers, loose brackets, damaged gaskets, or other problems.
Diagnose and replace or repair engine management systems or related sensors for flexible fuel vehicles (FFVs) with ignition timing, fuel rate, alcohol concentration, or air-to-fuel ratio malfunctions.	Replace hydraulically assisted systems with electric-powered systems, such as power steering pumps or air conditioning compressors, to improve fuel economy.
Service or repair butane gas, ethanol, methane, or other alternative or biofuel systems.	Install or repair air conditioners and service components, such as compressors, condensers, and controls.
Service internal combustion engine systems for hybrid electric vehicles.	Install, adjust, or repair hydraulic or electromagnetic automatic lift mechanisms used to raise and lower automobile windows, seats, and tops.

Diagnose and repair regenerative braking systems or hydraulic systems in hybrid vehicles.	Repair or rebuild clutch systems.
Repair or replace automobile leaf springs.	Replace defective mufflers and tailpipes.
Service biodiesel fuel tanks for algae or sludge accumulation by cleaning, changing filters, or adding algaecides.	Diagnose, troubleshoot, repair & install the following: brakes, electrical/electronics, engine repair, steering & suspension, engine performance.

Technology

Project Management Software	Facilities Management Software
Information Retrieval or Search Software	Data Base Reporting Software
Analytical Scientific Software	

Available Certifications

ASE Student Certification (3 Points each) There are 4 Certifications available	ASE Maintenance & Light Repair Certification (12 Points)
CPR/First Aid Certification (1 Point)	ECSI (Emergency Care and Safety Institute)

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Gateway Community and Technical College (Automotive Technology, up to 10 credit hours possible) • Sinclair Community College (Automotive Technology, up to 5 credit hours possible) • Cincinnati State Technical and Community College up to 12 credit hours possible

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Automotive Technician	Diagnostician
Master Mechanic	Service Manager



Great Oaks Aviation Maintenance Technician Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Aviation Maintenance Technician

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-5	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing, bending, stooping, use of ladders, working inside and outside, and working on equipment or at high levels above the ground	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Safety Understanding	Able to comprehend hazards of working with tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High
Mechanical Aptitude and Reasoning Skills	Able to problem solve at high and complex levels with an understanding of mechanics	High

Worker Trait Skills		Rating
Ability to get along with others		High
Ability to work independently, without close supervision		High
Ability to work toward work including tasks of minimal interest		Medium
Ability to follow and retain:		
Multistep oral instructions		High

Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	High
Visual models or demonstrated instructions	High
Ability to use tools of trade both metric and standard (screwdrivers, punches or nail sets or drifts, metal cutters, lifts, integrated maintenance information systems, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size	High
Shape	Medium
Color	Medium
Spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Ability to recognize and apply sequential steps	Medium
Dexterity-fine finger	Medium
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High
Operation Monitoring: Watching gauges, dials, or other indicators to make sure machine is working properly	High
Equipment Maintenance: Performing routine maintenance on equipment and determining when and what kind of maintenance is needed	High
Repairing: Repairing machines or systems using the needed tools	High
Able to perform with noise, dirt, grease, and fumes	High
Detail oriented	High
Strong high school math and science skills	High
NO Modifications allowed on FAA Certification-Airframe Certifications Test	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Grade level: Text Readability 9.6	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Pre-Algebra and Geometry
Ratio, Algebra, Formulas, Square Roots	Geometry
Advanced Algebra	Grade Level 9+

Additional Abilities Required

Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
Information Ordering	The ability to arrange things or actions in a certain order or pattern according to a specific

	rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
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Knowledge Required in Aviation Maintenance Technician Field

Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Engineering and Technology	Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Technology

Inventory management software	Information retrieval or search software
Facilities management software	Data base user interface and query software
Analytical or scientific software	

Aviation Maintenance Technician Work Activities

Inspect completed work to certify that the maintenance meets standards.	Examine and inspect aircraft components, including landing gear, hydraulic systems, and deicers.
Conduct routine and special inspections as required by regulations.	Maintain repair logs, documenting all preventive and corrective aircraft maintenance.
Read and interpret maintenance manuals, service bulletins, and other specifications to determine the feasibility and method of repairing or replacing malfunctioning or damaged components.	Modify aircraft structures, space vehicles, systems, or components, following drawings, schematics, charts, engineering orders, and technical publications.
Inspect airframes for wear or other defects.	Measure parts for wear, using precision instruments.
Examine engines through specially designed openings while working from ladders or scaffolds, or use hoists or lifts to remove the entire engine from an aircraft.	Check for corrosion, distortion, and invisible cracks in the fuselage, wings, and tail, using x-ray and magnetic inspection equipment.
Maintain, repair, and rebuild aircraft structures, functional components, and parts such as wings and fuselage, rigging, hydraulic units, oxygen systems, fuel systems, electrical systems, gaskets, and seals.	Read and interpret pilots' descriptions of problems to diagnose causes.

Obtain fuel and oil samples, and check them for contamination.	Replace or repair worn, defective, or damaged components, using hand tools, gauges, and testing equipment.
Disassemble engines and inspect parts, such as turbine blades and cylinders, for corrosion, wear, warping, cracks, and leaks, using precision measuring instruments, x-rays, and magnetic inspection equipment.	Test operation of engines and other systems, using test equipment such as ignition analyzers, compression checkers, distributor timers, and ammeters.
Measure the tension of control cables.	Remove or install aircraft engines, using hoists or forklift trucks.
Spread plastic film over areas to be repaired to prevent damage to surrounding areas.	Assemble and install electrical, plumbing, mechanical, hydraulic, and structural components and accessories, using hand or power tools.
Locate and mark dimensions and reference lines on defective or replacement parts, using templates, scribes, compasses, and steel rules.	Fabricate defective sections or parts, using metal fabricating machines, saws, brakes, shears, and grinders.
Reassemble engines following repair or inspection and reinstall engines in aircraft.	Clean, refuel, and change oil in line service aircraft.
Service and maintain aircraft and related apparatus by performing activities such as flushing crankcases, cleaning screens, and lubricating moving parts.	Trim and shape replacement body sections to specified sizes and fits and secure sections in place, using adhesives, hand tools, and power tools.
Cure bonded structures, using portable or stationary curing equipment.	Listen to operating engines to detect and diagnose malfunctions such as sticking or burned valves.
Install and align repaired or replacement parts for subsequent riveting or welding, using clamps and wrenches.	Remove or cut out defective parts or drill holes to gain access to internal defects or damage, using drills and punches.
Accompany aircraft on flights to make in-flight adjustments and corrections.	Inventory and requisition or order supplies, parts, materials, and equipment.
Clean engines, sediment bulk and screens, and carburetors, adjusting carburetor float levels.	Communicate with other workers to coordinate fitting and alignment of heavy parts, or to facilitate processing of repair parts.
Remove, inspect, repair, and install in-flight refueling stores and external fuel tanks.	Prepare and paint aircraft surfaces.

Available Certifications

Federal Aviation Administration Aviation Maintenance Technician Certification taken after graduation. (12 Points)	CPR/First Aid Certification (1 Point)
OHSA 10-General Industry (1 Point)	General/Airframe License
ECSI (Emergency Care and Safety Institute)	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Cincinnati State Technical and Community College (Aviation Mechanics Airframe Certificate, up to 55 credit hours possible) • Southern State Community College (Engineering: Aviation Maintenance, up to 58 credit hours possible)
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your Career-Technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

FAA-Certified Airframe Mechanic	Aircraft Salesperson
Airline Mechanic	General Manager



Great Oaks CareerX Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks Website at: <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Credits for Graduation Completed

Students must be on target to graduate based on affiliate school graduation requirements.

Essential Skills Needed to Successfully Complete the CareerX Program

Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
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Key Vocational Factors		Rating
Visual Acuity	Ability to learn how to detect differences/details visually	Medium
Communication	Ability to learn how to verbally explain/express tasks/duties/work in an intelligible manner so others can understand	High
Written/Typed Communication	Ability to communicate in written/typed format and record information accurately	Medium
Mobility/Endurance	Ability to safely navigate work environments, develop a competitive work pace and demonstrate competitive-levels of work endurance	High
Eye-Hand Coordination and Dexterity	Ability to learn how to safely use hand and power tools to complete tasks	Medium
Self-advocacy	Ability to request assistance, express needs and respond to questions as needed to build independence	High
Employment Documentation	Ability to learn how to complete pre-employment forms and applications	
Interacting with Others	Ability to work in teams, maintain professional and appropriate workplace communication/behaviors/relationships with others and positively respond to feedback/direction	High
Workplace Safety	Ability to follow safety procedures (i.e. PPE/awareness of surroundings/recognize personal space), recognize potential hazards and remain in specified work areas	High
Self-care	Ability to demonstrate appropriate self-care and hygiene	Medium

Worker Trait Skills		Rating
Ability to get along with others		High
Ability to learn independent work skills, with fading supervision		Medium
Ability to complete tasks, even those of minimal interest		Medium
Ability to work toward accuracy, recheck and correct work to industry standards		High
Ability to learn how to follow:		
Multistep oral instructions		High

Written instructions/technical vocabulary	Low
Diagram instructions	Low
Visual models or demonstrated instructions	Medium
Ability to safely use hand and power tools	Medium
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Low
Ability to discriminate between objects of similar:	
Size	Medium
Shape	Low
Color	Low
Spatial Relationship	Low
Dexterity-Fine and gross finger/motor	Medium
Ability to organize work process/follow defined procedures	High
Able to sequence events or follow a sequence as necessary	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High
Ability to learn how to self-monitor in school and community settings (safety)	High
Ability to develop problem-solving skills	Medium
Must have a desire to work	High

Math and Computational Skills	
Whole numbers, fractions, decimals	Measurement (temperature, volume, weights)
Basic mathematical operations/functions	Measurement to 1/16 inch
Time (elapsed time, use of analog/digital clock)	Financial Literacy (budgeting, making change, coin/paper money identification)

Additional Abilities/Skills Required in CareerX

Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Information Ordering	The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Spatial Orientation	The ability to know your location in relation to the environment or to know where other objects are in relation to you.
Problem Solving	Identifying problems and reviewing related information to develop and evaluate options and implement solutions.

Knowledge Required in CareerX

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction
Clerical	Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, recording information, designing forms and other office procedures and terminology
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, maintenance and safety
English Language	Knowledge of the basic structure and content of the English language including the meaning of words, general rules of composition and grammar in relationship to employment

CareerX Activities

Community Based Instruction	Preparing a Resume
Customer Service	Practical Assessment Exploration System
Appropriate Workplace Behavior	Career Exploration
Independent Living Skills	Creating and Maintaining a Budget
Organizational Skills	Time Management Skills
Self-Advocacy	Health and Wellness
CPR/First Aid Training	Employability Skills
Cooperative Learning	Workplace Communication Skills

Technology

Microsoft Office Suite	Internet Use and Safety
Ohio Means Jobs	Online Employment Postings
Mobile Applications	E-Commerce

Available Certifications

Public School Works Safety Training	CPR/First Aid Certification (1 Point)
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Career Pathways

Project SEARCH	Employment
Great Oaks Career Technical Program	College



Great Oaks CNC Advanced Manufacturing Technologies Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for CNC Advanced Manufacturing Technologies

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing/sitting, bending, and stooping	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Safety Understanding	Able to comprehend hazards of working with tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	Medium
Ability to work toward work including tasks of minimal interest	Medium
Ability to follow and retain:	
Multistep oral instructions	Medium
Written instructions/technical manuals - multistep	Medium
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium

Ability to use tools of trade (horizontal turning center, height gauges, drill press, radial drill, calipers, boring machines, computer, compass, ruler, protractor, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium
Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color (MUST be able to distinguish between colors)	Medium
Spatial Relationship	Medium
Ability to organize work process/follow defined procedures	Medium
Coordination (eye-hand)	High
Ability to solve problems through a logical process/sequence of steps	High
Ability to stick to assigned task to a positive/expected conclusion	High
Able to sequence events or follow a sequence as necessary	High
Dexterity (fine finger)	Medium
Attendance and Punctuality	High
Operation Monitoring: Watching gauges, dials, or other indicators to make sure a machine is working properly.	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.	High
Operation and Control: Controlling operations of equipment or systems.	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Geometry
Ratio, Algebra, Formulas, Square Roots	Solid and strong Math skills

Additional Abilities Required

Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.

Knowledge Required in CNC Advanced Manufacturing Technologies Field

Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Production and Processing	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.

CNC Advanced Manufacturing Technologies Activities

Calculate dimensions or tolerances, using instruments such as micrometers or Vernier calipers.	Machine parts to specifications, using machine tools, such as lathes, milling machines, shapers, or grinders.
Set up, adjust, or operate basic or specialized machine tools used to perform precision machining operations.	Align and secure holding fixtures, cutting tools, attachments, accessories, or materials onto machines.
Measure, examine, or test completed units to check for defects and ensure conformance to specifications, using precision instruments, such as micrometers.	Study sample parts, blueprints, drawings, or engineering information to determine methods or sequences of operations needed to fabricate products.
Monitor the feed and speed of machines during the machining process.	Maintain machine tools in proper operational condition.
Operate equipment to verify operational efficiency.	Check work pieces to ensure they are properly lubricated or cooled.
Program computers or electronic instruments, such as numerically controlled machine tools.	Diagnose machine tool malfunctions to determine need for adjustments or repairs.
Design fixtures, tooling, or experimental parts to meet special engineering needs.	Confer with engineering, supervisory, or manufacturing personnel to exchange technical information.
Lay out, measure, and mark metal stock to display placement of cuts.	Fit and assemble parts to make or repair machine tools.
Confer with numerical control programmers to check and ensure that new programs or machinery will function properly and that output will meet specifications.	Support metalworking projects from planning and fabrication through assembly, inspection, and testing, using knowledge of machine functions, metal properties and mathematics.
Dispose of scrap or waste material in accordance with company policies and environmental regulations.	Evaluate machining procedures and recommend changes or modifications for improved efficiency or adaptability.
Establish work procedures for fabricating new structural products, using a variety of metalworking machines.	Test experimental models under simulated operating conditions for purposes such as development, standardization, or feasibility of design.
Install repaired parts into equipment or install new equipment.	Prepare working sketches for the illustration of product appearance.

Advise clients about the materials being used for finished products.	Install experimental parts or assemblies, such as hydraulic systems, electrical wiring, lubricants, or batteries into machines or mechanisms.
Stop machines to remove finished work pieces or to change tooling, setup, or work piece placement, according to required machining sequences.	Set up and operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.
Review program specifications or blueprints to determine and set machine operations and sequencing, finished work piece dimensions, or numerical control sequences.	Adjust machine feed and speed, change cutting tools, or adjust machine controls when automatic programming is faulty or if machines malfunction.
Calculate machine speed and feed ratios and the size and position of cuts.	Implement changes to machine programs and enter new specifications, using computers.

Technology

Office Suite software	Enterprise Resource Planning (ERP) software
Analytical or Scientific software	Computer Aided CAM software
Computer Aided Design (CAD) software	

Additional Considerations

Sitting and standing for long periods of time	Strong computer skills
Independent work	Strong organizational skills
Creative	Detail oriented
Enjoy math and science	Strong math background

Available Certifications

National Institute for Metal Working Skills (NIMS) Certification (12 Points)	CPR/First Aid Certification (1 Point)
OHSA 10-General Industry (1 Point)	ECSI (Emergency Care and Safety Institute)
FANUC CNC Certification	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Cincinnati State Technical and Community College (Mechanical Engineering Technology, up to 9 credit hours possible)
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

CNC Operator	Manufacturing Maintenance
Inspector	Engineer



Great Oaks Commercial and Residential Electricity Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Commercial and Residential Electricity

Applied Mathematics-3	Graphic Literacy-4
Workplace Documents-3	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	Medium
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing, bending, stooping, use of ladders, working inside and outside, working at high levels (heights), and working on roofs or at high levels above the ground	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Low
Safety Understanding	Able to comprehend hazards of working with tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	Medium
Ability to work toward work including tasks of minimal interest	Medium
Ability to follow and retain:	
Written instructions/technical manuals - multistep	Medium
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium

Ability to use tools of trade (wire or cable cutter, voltage or current meters, stripping tools, screwdrivers, cable reels, hoists, ladders, circuit testers, utility knives, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium
Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color (MUST be able to distinguish between colors)	High
Spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Coordination (eye-hand)	High
Able to sequence events or follow a sequence as necessary.	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting.	High
Quality Control Analysis: Conducting tests and inspections of products, services, or processes to evaluate quality or performance.	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Grade level: 8-12	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting, recording, comparing, calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Geometry
Ratio, Algebra, Formulas, Square Roots	

Additional Abilities Required

Near Vision	The ability to see details at close range (within a few feet of the observer).
Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Information Ordering	The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).

Knowledge Required in Commercial and Residential Electricity Field

English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Building and Construction	Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.

Commercial and Residential Electricity Work Activities

Measure, cut, and bend wire and conduit, using measuring instruments and hand tools.	Trace out short circuits in wiring, using test meter.
Strip insulation from wire ends, using wire stripping pliers, and attach wires to terminals for subsequent soldering.	Examine electrical units for loose connections and broken insulation and tighten connections, using hand tools.
Construct controllers and panels, using power drills, drill presses, taps, saws, and punches.	Drill holes and pull or push wiring through openings, using hand and power tools.
Clean work area and wash parts.	Install copper-clad ground rods, using a manual post driver.
Maintain tools, vehicles, and equipment and keep parts and supplies in order.	Transport tools, materials, equipment, and supplies to work site by hand, hand truck, or heavy, motorized truck.
Thread conduit ends, connect couplings, and fabricate and secure conduit support brackets, using hand tools.	Disassemble defective electrical equipment, replace defective or worn parts, and reassemble equipment, using hand tools.
Requisition materials, using warehouse requisition or release forms.	Solder electrical connections, using soldering iron.
Erect electrical system components and barricades, and rig scaffolds, hoists, and shoring.	String transmission lines or cables through ducts or conduits, under the ground, through equipment, or to towers.
Perform semi-skilled and unskilled laboring duties related to the installation, maintenance and repair of a wide variety of electrical systems and equipment.	Operate cutting torches and welding equipment, while working with conduit and metal components to construct devices associated with electrical functions.
Dig trenches or holes for installation of conduit or supports.	Trim trees and clear undergrowth along right-of-way.

Bolt component parts together to form tower assemblies, using hand tools.	Paint a variety of objects related to electrical functions.
Raise, lower, or position equipment, tools, and materials, using hoist, hand line, or block and tackle.	Break up concrete, using air hammer, to facilitate installation, construction, or repair of equipment.
Plan layout and installation of electrical wiring, equipment, or fixtures, based on job specifications and local codes.	Connect wires to circuit breakers, transformers, or other components.
Test electrical systems or continuity of circuits in electrical wiring, equipment, or fixtures, using testing devices, such as ohmmeters, voltmeters, or oscilloscopes, to ensure compatibility and safety of system.	Inspect electrical systems, equipment, or components to identify hazards, defects, or the need for adjustment or repair, and to ensure compliance with codes.
Prepare sketches or follow blueprints to determine the location of wiring or equipment and to ensure conformance to building and safety codes.	Diagnose malfunctioning systems, apparatus, or components, using test equipment and hand tools to locate the cause of a breakdown and correct the problem.
Work from ladders, scaffolds, or roofs to install, maintain, or repair electrical wiring, equipment, or fixtures.	Maintain current electrician's license or identification card to meet governmental regulations.

Technology

Word Processing software	Spreadsheet software
Office Suite software	Data Base user interface and query software
Computer aided design CAD software	

Available Certifications

NCCER Core (6 points)	CPR/First Aid Certification (1 point)
NCCER Level 1-Electricity (6 Points)	OHSA 10-Construction Industry (1 point)
NCCER Level 2-Electricity	Man Lift Operations Certification (1 point)

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	<p>Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are:</p> <ul style="list-style-type: none"> • Hocking College (Construction Management-Electricity up to 9 credit hours) • Ohio Valley ABC (Commercial/Residential Electricity Apprenticeship, 144 class hours, 2000 hours work experience, 2nd level) • Independent electrical Contractors (Commercial/Residential Electricity Apprenticeship, 144 class hours, 2,000 hours work experience, 2nd level)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Electrician Helper	Electrician-Residential, Commercial, or Industrial
Electrical Inspector	Electrical Contractor
Engineer	



Great Oaks Construction Framing and Finishing Technologies Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Construction Framing and Finishing Technologies

Applied Mathematics-3	Graphic Literacy-4
Workplace Documents-3	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
Key Vocational Factors			Rating
Visual Acuity	The ability to detect differences/details visually		High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time		High
Oral Communication	The ability to express/explain ideas		Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand		Medium
Written Communication	The ability to communicate in a written format and record information accurately		Medium
Physical Mobility/Strength	Extended standing, bending, stooping, use of ladders, working inside and outside, and working at high levels above the ground		High
Eye-hand Coordination	The ability to use construction tools		High
Auditory Acuity	The ability to detect differences in pitch and sound		Medium
Safety Understanding	Able to comprehend hazards of working with tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task		High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	Medium
Ability to work toward work including tasks of minimal interest	High
Ability to work accurately within industry standards	High
Ability to stick to assigned task to a positive/expected conclusion	High
Ability to follow and retain:	
Multistep oral instructions	Medium
Written instructions/technical manuals - multistep	Medium
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium

Ability to use tools of trade (power saws, man lift or personnel lift, levels, forklifts, blow torch, hammers, squares, power routers, ladders, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium
Ability to discriminate between objects of similar:	
Size	High
Shape	High
Color	Medium
Spatial relationship	High
Ability to organize work process/follow defined procedures	High
Coordination (eye-hand)	High
Able to sequence events or follow a sequence as necessary	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High
Operation Monitoring: Watching gauges, dials, or other indicators to make sure machine is working properly	High
Coordination: Adjusting actions in relation to others' actions	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting, recording, comparing, calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Pre-Algebra and Geometry
Ratio, Algebra, formulas, square roots	Geometry

Additional Abilities Required

Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Multi-limb Coordination	The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.

Knowledge Required in Construction Framing and Finishing Technologies Field

Building and Construction	Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.

Administration and Management	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
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Additional Considerations

Inside and outside work in harsh conditions-heat, snow, rain, ice, etc.	Must be ok with heights, moving, bending, lifting, stooping and using ladders.
Must understand hazards of working with tools and materials	Must wear protective equipment suitable for the task.
Will get dirty	

Construction Framing and Finishing Technologies Work Activities

Follow established safety rules and regulations and maintain a safe and clean environment.	Measure and mark cutting lines on materials, using a ruler, pencil, chalk, and marking gauge.
Study specifications in blueprints, sketches, or building plans to prepare project layout and determine dimensions and materials required.	Install structures or fixtures, such as windows, frames, floorings, trim, or hardware, using carpenters' hand or power tools.
Shape or cut materials to specified measurements, using hand tools, machines, or power saws.	Build or repair cabinets, doors, frameworks, floors, or other wooden fixtures used in buildings, using woodworking machines, carpenter's hand tools, or power tools.
Verify trueness of structure, using plumb bob and level.	Select and order lumber or other required materials.
Arrange for subcontractors to deal with special areas, such as heating or electrical wiring work.	Maintain records, document actions, and present written progress reports.
Prepare cost estimates for clients or employers.	Work with or remove hazardous material.
Assemble and fasten materials to make frameworks or props, using hand tools and wood screws, nails, dowel pins, or glue.	Finish surfaces of woodwork or wallboard in houses or buildings, using paint, hand tools, or paneling.
Dig ditches or trenches, backfill excavations, or compact and level earth to grade specifications, using picks, shovels, pneumatic tampers, or rakes.	Tend pumps, compressors, or generators to provide power for tools, machinery, or equipment or to heat or move materials, such as asphalt.
Perform site activities required of green certified construction practices, such as implementing waste management procedures, identifying materials for reuse, or installing erosion or sedimentation control mechanisms.	Perform building weatherization tasks, such as repairing windows, adding insulation, or applying weather-stripping materials.
Perform construction laborer duties at green building sites, such as renewable energy plants or wind turbine installations.	Read plans, instructions, or specifications to determine work activities.

Control traffic passing near, in, or around work zones.	Measure materials or distances, using square, measuring tape, or rule to lay out work.
Cut or saw boards, timbers, or plywood to required size, using handsaw, power saw, or woodworking machine.	Erect forms, framework, scaffolds, hoists, roof supports, or chutes, using hand tools, plumb rule, and level.
Examine structural timbers and supports to detect decay, and replace timbers as required, using hand tools, nuts, and bolts.	Dig or direct digging of post holes and set poles to support structures.

Technology

Project Management software	Operating System software
Computer Aided Design (CAD) software	

Available Certifications

NCCER Core Certification (6 Points)	CPR/First Aid Certification (1 Point)
NCCER Level 1-Construction (6 Points)	OSHA 10 Construction Industry (1 Point)
NCCER Level 2-Construction	Skid Steer Operations Certification

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Hocking College (Construction Management-Carpentry, up to 9 credit hours possible) • Ohio Valley ABC (Carpentry Apprenticeship, 144 class hours, 2000 hours work experience, 2nd level)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Carpenter	Cabinetmaker
Carpentry Subcontractor	Foreperson



Great Oaks Construction Technologies Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Construction Technologies

Applied Mathematics-3	Graphic Literacy-4
Workplace Documents-3	

*Practice tests and more information can be found at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program

Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
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Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing, bending, stooping, use of ladders, working inside and outside, and working on roofs or at high levels above the ground	High
Eye-hand Coordination	The ability to use construction tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Safety Understanding	Able to comprehend hazards of working with tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	Medium
Ability to work toward work including tasks of minimal interest	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (power saws, man lift or personnel lift, levels, forklifts, blow torch, hammers, squares, power routers, ladders, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium

Ability to discriminate between objects of similar:	
Size	High
Shape	Medium
Color	Medium
Spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Coordination (eye-hand)	High
Able to sequence events or follow a sequence as necessary	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High
Operation Monitoring: Watching gauges, dials, or other indicators to make sure machine is working properly	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting, recording, comparing, calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Pre-Algebra and Geometry
Ratio, Algebra, formulas, square roots	Geometry

Additional Abilities Required

Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Multi-limb Coordination	The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.

Knowledge Required in Construction Technologies Field

Building and Construction	Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Administration and Management	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

Construction Technologies Work Activities

Control traffic passing near, in, or around work zones.	Signal equipment operators to facilitate alignment, movement, or adjustment of machinery, equipment, or materials.
Clean or prepare construction sites to eliminate possible hazards.	Read plans, instructions, or specifications to determine work activities.
Load, unload, or identify building materials, machinery, or tools, distributing them to the appropriate locations, according to project plans or specifications.	Measure, mark, or record openings or distances to layout areas where construction work will be performed.
Install sewer, water, or storm drain pipes, using pipe-laying machinery or laser guidance equipment.	Operate or maintain air monitoring or other sampling devices in confined or hazardous environments.
Mix ingredients to create compounds for covering or cleaning surfaces.	Dig ditches or trenches, backfill excavations, or compact and level earth to grade specifications, using picks, shovels, pneumatic tampers, or rakes.
Tend pumps, compressors, or generators to provide power for tools, machinery, or equipment or to heat or move materials, such as asphalt.	Mix, pour, or spread concrete, using portable cement mixers.
Erect or dismantle scaffolding, shoring, braces, traffic barricades, ramps, or other temporary structures.	Provide assistance to craft workers, such as carpenters, plasterers, or masons.
Lubricate, clean, or repair machinery, equipment, or tools.	Position, join, align, or seal structural components, such as concrete wall sections or pipes.
Grind, scrape, sand, or polish surfaces, such as concrete, marble, terrazzo, or wood flooring, using abrasive tools or machines.	Position or dismantle forms for pouring concrete, using saws, hammers, nails, or bolts.
Tend machines that pump concrete, grout, cement, sand, plaster, or stucco through spray guns for application to ceilings or walls.	Spray materials, such as water, sand, steam, vinyl, paint, or stucco, through hoses to clean, coat, or seal surfaces.
Apply caulking compounds by hand or caulking guns to protect against entry of water or air.	Smooth or finish freshly poured cement or concrete, using floats, trowels, screeds, or powered cement finishing tools.
Mop, brush, or spread paints, cleaning solutions, or other compounds over surfaces to clean them or to provide protection.	Perform site activities required of green certified construction practices, such as implementing waste management procedures, identifying materials for reuse, or installing erosion or sedimentation control mechanisms.
Operate jackhammers or drills to break up concrete or pavement.	Place, consolidate, or protect case-in-place concrete or masonry structures.
Raze buildings or salvage useful materials.	Perform building weatherization tasks, such as repairing windows, adding insulation, or applying weather-stripping materials.

Transport or set explosives for tunnel, shaft, or road construction.	Use computers or other input devices to control robotic pipe cutters or cleaners.
Perform minor plumbing, welding, or concrete mixing work.	Finish surfaces of woodwork or wallboard in houses or buildings, using paint, hand tools, or paneling.
Build or repair cabinets, doors, frameworks, floors, or other wooden fixtures used in buildings, using woodworking machines, carpenter's hand tools, or power tools.	Install structures or fixtures, such as windows, frames, floorings, trim, or hardware, using carpenters' hand or power tools.
Follow established safety rules and regulations and maintain a safe and clean environment.	Inspect ceiling or floor tile, wall coverings, siding, glass, or woodwork to detect broken or damaged structures.

Available Certifications

Industrial Forklift Operations (1 point)	NCCER Core (6 Points)
OSHA 10-hour card (1 Point)	NCCER Level 1-Carpentry (6 Points)
CPR/First Aid Certification (1 Point)	Skid-Steer Operations


Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Hocking College (Construction Management-Carpentry, up to 9 credit hours possible) • Ohio Valley ABC (Carpentry Apprenticeship, 144 class hours, 2000 hours work experience, 2nd level)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Carpenter	Electrician
Foreperson	Engineer
Plumber	

 <p>Great Oaks CAREER CAMPUSES Diamond • Laurel • Live • Scarlet</p>	<h2 style="text-align: center;">Great Oaks Cosmetology Essential Skills Profile</h2>
<p>This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at http://hs.greatoaks.com/essential-skills-high-school-programs/ and selecting the corresponding career program.</p>	

Recommended WorkKeys® Scores for Cosmetology

Applied Mathematics-3	Graphic Literacy-3
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing, bending, stooping, and standing for extended times	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Low

Worker Trait Skills		Rating
Ability to get along with others		High
Ability to work independently, without close supervision		High
Ability to work toward work including tasks of minimal interest		Medium
Ability to work accurately, recheck and correct work, to an industry standard		High
Ability to follow and retain:		
Multistep oral instructions		High
Written instructions/technical manuals - multistep		High
Simple to complex diagram instructions		Medium
Visual models or demonstrated instructions		Medium
Ability to use tools of trade (scissors, nail file, chemicals, manicure implements, combs or brushes, barrettes, applicator brushes, etc.)		High
Ability to use numerical data (count, measure, compute, etc.) in applied setting		Medium

Ability to discriminate between objects of similar:	
Size	Medium
Shape	High
Color	High
Spatial relationship	Medium
Ability to organize work process/follow defined procedures	Medium
Ability to refer to charts for troubleshooting and specifications	High
Able to sequence events or follow a sequence as necessary	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High
Reading Comprehension: Understanding written sentences and paragraphs in work related documents	High
Speaking: Talking to others to convey information effectively	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.	High
Service Orientation: Actively looking for ways to help people	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Grade level: text readability 9.05	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting, recording, comparing, calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Ratio, Algebra, formulas, square roots

Additional Requirements

Attendance	Seat hours - meaning students must meet minimum hours required which requires absences made up minute for minute after school.
Anatomy and Physiology	Must like and possess strong background.

Additional Abilities Required

Near Vision	The ability to see details at close range (within a few feet of the observer).
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.

Knowledge Required in Cosmetology Field

Sales and Marketing	Knowledge of principles and methods for showing, promoting, and selling products or services. This includes marketing strategy and tactics, product demonstration, sales techniques, and sales control systems.
Administration and Management	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Cosmetology Work Activities

Keep work stations clean and sanitize tools such as scissors and combs.	Bleach, color, or tint hair, using applicator or brush.
Cut, trim and shape hair or hairpieces, based on customers' instructions, hair type and facial features, using clippers, scissors, trimmers and razors.	Analyze patrons' hair and other physical features to determine and recommend beauty treatment or suggest hair styles.
Schedule client appointments.	Apply artificial fingernails.
Update and maintain customer information records, such as beauty services provided.	Train or supervise other hairstylists, hairdressers and assistants.
Massage and treat scalp for hygienic and remedial purposes, using hands, fingers, or vibrating equipment.	Shampoo, rinse, condition and dry hair and scalp or hairpieces with water, liquid soap, or other solutions.
Operate cash registers to receive payments from patrons.	Demonstrate and sell hair care products and cosmetics.
Administer therapeutic medication and advise patron to seek medical treatment for chronic or contagious scalp conditions.	Attach wigs or hairpieces to model heads and dress wigs and hairpieces according to instructions, samples, sketches or photographs.
Order, display, and maintain supplies.	Comb, brush, and spray hair or wigs to set style.
Develop new styles and techniques.	Shave, trim and shape beards and moustaches.
Apply water, setting, straightening or waving solutions to hair and use curlers, rollers, hot combs and curling irons to press and curl hair.	Recommend and explain the use of cosmetics, lotions, and creams to soften and lubricate skin and enhance and restore natural appearance.
Shape eyebrows and remove facial hair, using depilatory cream, tweezers, electrolysis or wax.	Clean, shape, and polish fingernails and toenails, using files and nail polish.
Give facials to patrons, using special compounds such as lotions and creams.	

Technology

Word Processing software	Spreadsheet software
Office Suite software	Calendar and scheduling software
Accounting software	

Available Certifications

Ohio State Board of Cosmetology License (12 Points)	CPR/First Aid (1 Point)
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Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Hocking College (Massage Therapy, up to 4 credit hours possible) • Kent State University (Associate of Technical Study-Individualized Program, Category A, up to 30 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Hair Stylist	Make-Up Consultant
Image Consultant	Nail Technician
Salon Manager or Owner	Aesthetician
Educator	Platform Artist
Color Consultant/Artist	



Great Oaks Culinary Arts and Hospitality Services Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Culinary Arts and Hospitality Services

Applied Mathematics-3	Graphic Literacy-3
Workplace Documents-3	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Extended standing, bending, stooping, and standing for extended times	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Low

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	Medium
Ability to work accurately, recheck and correct work, to an industry standard	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (commercial use ranges, commercial use deep fryers, commercial use cutlery, commercial use convection ovens, commercial use broilers, dishwashing equipment, measuring cups/spoons, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	

Size	Medium
Shape	High
Color	High
Spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Ability to refer to charts for troubleshooting and specifications	High
Able to follow recipe and/or charts	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High
Reading Comprehension: Understanding written sentences and paragraphs in work related documents	High
Time Management: Managing one's own time and the time of others	High
Monitoring: Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action	High
Judgment and Decision Making: Considering the relative costs and benefits of potential actions to choose the most appropriate one	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High
Coordination: Adjusting actions in relation to others' actions	High
Service Orientation: Actively looking for ways to help people	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting, recording, comparing, calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Ratio and formulas

Additional Abilities Required

Information Ordering	The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
Near Vision	The ability to see details at close range (within a few feet of the observer).
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.

Knowledge Required in Culinary Arts and Hospitality Field

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Additional Considerations

Like to cook, clean, measure, and work with money	Creative
Enjoy wearing a uniform	Like repetitious work
Consider own food allergies, physical barriers to success, and speech needed to communicate	

Culinary Arts and Hospitality Services Work Activities

Clean, cut, and cook meat, fish, or poultry.	Apportion and serve food to facility residents, employees, or patrons.
Clean and inspect galley equipment, kitchen appliances, and work areas to ensure cleanliness and functional operation.	Cook foodstuffs according to menus, special dietary or nutritional restrictions, or numbers of portions to be served.
Monitor use of government food commodities to ensure that proper procedures are followed.	Direct activities of one or more workers who assist in preparing and serving meals.
Wash pots, pans, dishes, utensils, or other cooking equipment.	Compile and maintain records of food use and expenditures.
Take inventory of supplies and equipment.	Bake breads, rolls, or other pastries.
Monitor menus and spending to ensure that meals are prepared economically.	Determine meal prices, based on calculations of ingredient prices.
Plan menus that are varied, nutritionally balanced, and appetizing, taking advantage of foods in season and local availability.	Requisition food supplies, kitchen equipment, and appliances, based on estimates of future needs.

Train new employees.	Store food in designated containers and storage areas to prevent spoilage.
Clean and sanitize work areas, equipment, utensils, dishes, or silverware.	Butcher and clean fowl, fish, poultry, and shellfish to prepare for cooking or serving.
Prepare a variety of foods, such as meats, vegetables, or desserts, according to customers' orders or supervisors' instructions, following approved procedures.	Take and record temperature of food and food storage areas, such as refrigerators and freezers.
Wash, peel, and cut various foods, such as fruits and vegetables, to prepare for cooking or serving.	Portion and wrap the food, or place it directly on plates for service to patrons.
Weigh or measure ingredients.	Use manual or electric appliances to clean, peel, slice, and trim foods.
Add cutlery, napkins, food, and other items to trays on assembly lines in hospitals, cafeterias, airline kitchens, and similar establishments.	Assist cooks and kitchen staff with various tasks as needed, and provide cooks with needed items.
Receive and store food supplies, equipment, and utensils in refrigerators, cupboards, and other storage areas.	Stock cupboards and refrigerators, and tend salad bars and buffet meals.
Operate cash register and manage money.	

Technology

Word Processing software	Spreadsheet software
Point of Sale POS software	Database user interface and query software
Analytical or Scientific software	

Available Certifications

ProStart Certificate of Achievement (9 points)	ServSafe Certification (3 points)
CPR/First Aid Certification (1 point)	American Culinary Federation Certified Fundamentals Cook (NOTCI)

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Hocking College (Culinary Arts, up to 12 credit hours possible: Baking, up to 11 credit hours possible) • Sullivan University (National Center for Hospitality Studies, up to 14 credit hours possible)
NOCTI	This credit is obtained if you scored a 70% or above on the NOCTI Culinary Arts Certification (American Culinary Federation-Partner Assessment) (up to 3 credit hours possible). An official transcript is available upon request.
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your Career-Technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Cook	Sous Chef
Caterer	Chef
Restaurant Owner	



Great Oaks Dental Assisting Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Dental Assisting

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to see details at close range (within a few feet of the observer)	High
Auditory Acuity	The ability to detect differences in pitch and sound	Low
Oral Communication	The ability to listen to and understand information and ideas presented through spoken words and sentences	High
Oral Expression	The ability to verbally explain and express self in complete sentences in an intelligible manner so others will understand	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Extended standing and bending	Medium
Eye-hand Coordination and Fine Finger Dexterity	Using instruments, care of wounds, etc.	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work accurately and willingness to recheck and correct work to meet industry standards	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Low

Ability to use tools of trade (small tools, dental tools such as steam autoclaves or sterilizers, orthodontic pliers, dental hand pieces or accessories, dental forceps, and dental dam supplies, etc.)	High
Ability to reference and interpret charts- anatomical and geometrical	High
Ability to discriminate between objects of similar:	
Size, shape, color and spatial relationships	Medium
Ability to organize work process	Medium
Detail oriented	High
Work with bodily fluids, blood, bad breath, and be exposed to possible diseases	High
Professional dress, grooming, and hygiene	High
Adheres to health codes, personal and tool cleanliness, and overall cleanliness in work station	High
Wear gloves, masks, and other protective equipment while working in confined or small spaces	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Grade level 9-12	Text Readability Level is at the 10.9 grade level
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Pre-Algebra and Geometry

Technology

Word Processing Software	Medical Software
Spreadsheet Software	Electronic Records
Office Suite Software	Accounting Software

Knowledge Required in Dental Assisting Field

Medicine and Dentistry	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Dental Assisting Work Activities

Prepare patient, sterilize or disinfect instruments, set up instrument trays, prepare materials, or assist dentist during dental procedures.	Fabricate and fit orthodontic appliances and materials for patients, such as retainers, wires, or bands.
Record treatment information in patient records.	Clean teeth, using dental instruments.
Expose dental diagnostic x-rays.	Pour, trim, and polish study casts.
Take and record medical and dental histories and vital signs of patients.	Fabricate temporary restorations or custom impressions from preliminary impressions.
Assist dentist in management of medical or dental emergencies.	Schedule appointments, prepare bills and receive payment for dental services, complete insurance forms, and maintain records, manually or using computer.
Provide postoperative instructions prescribed by dentist.	Apply protective coating of fluoride to teeth.
Instruct patients in oral hygiene and plaque control programs.	Make preliminary impressions for study casts and occlusal registrations for mounting study casts.
Order and monitor dental supplies and equipment inventory.	Clean and polish removable appliances.

Available Certifications

Ohio Dental Assistant Radiography Certification	American Heart Association Heart Saver First Aide Certification (1 point)
American Heart Association Basic Lifesaver Certification	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible Dental agreements are: <ul style="list-style-type: none"> • UC Blue Ash College (Dental Hygiene up to 1 credit hour) • Chatfield College (Associate of Arts Degree up to 2 credit hours)
Career Technical Credit Transfer	<ul style="list-style-type: none"> • The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

General Chairside Assistant	Dental Lab Technician
Endodontic Assistant	Circulatory Assistant
Orthodontic Assistant	Insurance Manager
Oral Surgery Assistant	Business Office Manager
Hygiene Assistant	Business Office Receptionist
Hospital Dental Clinic Assistant	



Great Oaks Digital Arts and Design Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Digital Arts and Design

Applied Mathematics-5	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program		
Rating Key:	Low = Slightly Essential	Medium = Essential
Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	Medium
Perceptual Speed	Ability to quickly and accurately compare similarities and differences among numbers, objects, pictures, or patterns	High
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Sitting for extended times and use of computers, screens, and monitors for extended time	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Low
Reasoning Skills	Deductive: ability to apply general rules to specific problems and Inductive: ability to combine pieces of information to form conclusions among seemingly unrelated events	High

Worker Trait Skills	Rating
Ability to accept constructive criticism and feedback	High
Ability to apply creative thinking to solve design problems	High
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	Medium
Ability to work accurately, recheck and correct work, to an industry standard	High
Ability to follow and retain:	
Multistep oral instructions	Medium
Written instructions/technical manuals – multistep	Medium
Simple to complex diagram instructions	High

Visual models or demonstrated instructions	High
Ability to use tools of trade (tablet computers, personal computers, notebook computers, laser printers, desktop computers, advanced calculators, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size	High
Shape	High
Color	High
Spatial relationship	High
Labels/clerical perception	High
Ability to organize work process/follow defined procedures	Medium
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Ability to understand complex concepts related to the career field of interest (Ex: Military time)	Medium
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High
Speaking: Talking to others to convey information effectively	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios	Ratio, formulas

Additional Abilities Required

Originality	The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
Near Vision	The ability to see details at close range (within a few feet of the observer).
Fluency of Ideas	The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).

Knowledge Required in Digital Arts and Design Field

Design	Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
Communications and Media	Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.

English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
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Additional Considerations

Must like math and science	Must like computers
Must like critical thinking and troubleshooting	Visual barriers may impede progress
Must like to design in non-preferred areas	

Digital Arts and Design Work Activities

Determine size and arrangement of illustrative material and copy, and select style and size of type.	Create designs, concepts, and sample layouts, based on knowledge of layout principles and esthetic design concepts.
Confer with clients to discuss and determine layout design.	Use computer software to generate new images.
Develop graphics and layouts for product illustrations, company logos, and Websites.	Prepare illustrations or rough sketches of material, discussing them with clients or supervisors and making necessary changes.
Review final layouts and suggest improvements as needed.	Maintain archive of images, photos, or previous work products.
Draw and print charts, graphs, illustrations, and other artwork, using computer.	Key information into computer equipment to create layouts for client or supervisor.
Research new software or design concepts.	Mark up, paste, and assemble final layouts to prepare layouts for printer.
Study illustrations and photographs to plan presentation of materials, products, or services.	Prepare notes and instructions for workers who assemble and prepare final layouts for printing.
Produce still and animated graphics for on-air and taped portions of television news broadcasts, using electronic video equipment.	Photograph layouts, using camera, to make layout prints for supervisors or clients.
Design, build, or maintain Web sites, using authoring or scripting languages, content creation tools, management tools, and digital media.	Incorporate technical considerations into Web site design plans, such as budgets, equipment, performance requirements, or legal issues including accessibility and privacy.

Develop and document style guidelines for web site content.	Develop website maps, application models, image templates, or page templates that meet project goals, user needs, or industry standards.
Prepare sketches of ideas, detailed drawings, illustrations, artwork, or blueprints, using drafting instruments, paints and brushes, or computer-aided design equipment.	Modify and refine designs, using working models, to conform with customer specifications, production limitations, or changes in design trends.
Design graphic material for use as ornamentation, illustration, or advertising on manufactured materials and packaging or containers.	Read publications, attend showings, and study competing products and design styles and motifs to obtain perspective and generate design concepts.
Evaluate feasibility of design ideas, based on factors such as appearance, safety, function, serviceability, budget, production costs/methods, and market characteristics.	Present designs and reports to customers or design committees for approval and discuss need for modification.
Design complex graphics and animation, using independent judgment, creativity, and computer equipment.	Make objects or characters appear lifelike by manipulating light, color, texture, shadow, and transparency, or manipulating static images to give the illusion of motion.
Participate in design and production of multimedia campaigns, handling budgeting and scheduling, and assisting with such responsibilities as production coordination, background design, and progress tracking.	Create basic designs, drawings, and illustrations for product labels, cartons, direct mail, or television.
Develop briefings, brochures, multimedia presentations, web pages, promotional products, technical illustrations, and computer artwork for use in products, technical manuals, literature, newsletters, and slide shows.	Convert real objects to animated objects through modeling, using techniques such as optical scanning.

Technology

Graphics or Photo Imaging software	Video Creation and Editing software
Desktop Publishing software	

Available Certifications

Adobe Certified Associate (ACA) – Animate (4 points)	Adobe Certified Associate (ACA) – Photoshop (4 Points)
Adobe Certified Associate (ACA) – Premier Pro (4 points)	Adobe Certified Associate (ACA) – Dreamweaver (4 points)
Adobe Certified Associate (ACA) – Illustrator (4 Points)	Adobe Certified Associate (ACA) InDesign (4 Points)
CPR/First Aid Certification (1 Point)	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Cincinnati State Technical and Community College (Graphic Design, up to 9 credit hours possible) • Miami University-Hamilton (Multimedia Fundamentals, up to 3 credit hours possible) • Wright state University lake Campus (Graphic Design and Visual Media, up to 9 credit hours possible) • Chatfield College (Liberal Arts, up to 3 credit hours possible)
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your Career-Technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. For more information, go to www.transfercredit.ohio.gov

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Production Designer	Graphic Designer
Web Designer	Animator
Video Produce/Editor	



Great Oaks Early Childhood Education Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Early Childhood and Education

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	Medium
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	Medium
Oral Communication	The ability to express/explain ideas.	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Extended times bending, stooping, walking, and moving	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Reasoning Skills	Deductive: ability to apply general rules to specific problems and Inductive: ability to combine pieces of information to form conclusions among seemingly unrelated events	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	Medium
Ability to work accurately, recheck and correct work, to an industry standard	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium

Ability to use tools of trade (computers, scanners, copiers, curriculum guides and maps, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size, shape, color and spatial relationships	High
Ability to organize work process/follow defined procedures	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Dependability (Attendance and Punctuality)	High
Ability to interact with small children and observe/record behavior	High
Social Perceptiveness: Being aware of others' reactions and understanding why they react as they do	High
Speaking: Talking to others to convey information effectively	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios	Ratio, formulas

Additional Abilities Required

Oral Expression	The ability to communicate information and ideas in speaking so others will understand.
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Speech Clarity	The ability to speak clearly so others can understand you.

Knowledge Required in Early Childhood and Education Field

Education and Training	Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
Psychology	Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Additional Considerations

Must like children	Must demonstrate concern for others, self-control, social orientation, integrity, and stress tolerance
Must pass background checks	Must be adaptable and flexible
Must be dependable	Creative
Excellent hygiene	Desire to teach and not be a baby sitter
Must possess basic computer skills	Detail oriented and not easily distracted

Early Childhood and Education Work Activities

Provide extra assistance to students with special needs, such as non-English-speaking students or those with physical and mental disabilities.	Supervise students in classrooms, halls, cafeterias, school yards, and gymnasiums, or on field trips.
Tutor and assist children individually or in small groups to help them master assignments and to reinforce learning concepts presented by teachers.	Provide disabled students with assistive devices, supportive technology, and assistance accessing facilities, such as restrooms.
Enforce administration policies and rules governing students.	Assist in bus loading and unloading.
Discuss assigned duties with classroom teachers to coordinate instructional efforts.	Observe students' performance, and record relevant data to assess progress.
Carry out therapeutic regimens, such as behavior modification and personal development programs, under the supervision of special education instructors, psychologists, or speech-language pathologists.	Present subject matter to students under the direction and guidance of teachers, using lectures, discussions, or supervised role-playing methods.
Instruct and monitor students in the use and care of equipment and materials to prevent injuries and damage.	Maintain computers in classrooms and laboratories and assist students with hardware and software use.
Distribute tests and homework assignments and collect them when they are completed.	Prepare lesson materials, bulletin board displays, exhibits, equipment, and demonstrations.
Grade homework and tests, and compute and record results, using answer sheets or electronic marking devices.	Organize and supervise games and other recreational activities to promote physical, mental, and social development.

Take class attendance and maintain attendance records.	Participate in teacher-parent conferences regarding students' progress or problems.
Distribute teaching materials, such as textbooks, workbooks, papers, and pencils to students.	Prepare lesson outlines and plans in assigned subject areas and submit outlines to teachers for review.
Organize and label materials and display students' work in a manner appropriate for their eye levels and perceptual skills.	Use computers, audio-visual aids, and other equipment and materials to supplement presentations.
Conduct demonstrations to teach skills, such as sports, dancing, and handicrafts.	Plan, prepare, and develop various teaching aids, such as bibliographies, charts, and graphs.
Attend staff meetings and serve on committees, as required.	Type, file, and duplicate materials.
Laminate teaching materials to increase their durability under repeated use.	Requisition and stock teaching materials and supplies.
Operate and maintain audio-visual equipment.	Collect money from students for school-related projects.
Monitor classroom viewing of live or recorded courses transmitted by communication satellites.	Establish and enforce rules for behavior and procedures for maintaining order.
Organize and lead activities designed to promote physical, mental, and social development, such as games, arts and crafts, music, storytelling, and field trips.	Teach basic skills, such as color, shape, number and letter recognition, personal hygiene, and social skills.
Observe and evaluate children's performance, behavior, social development, and physical health.	Attend to children's basic needs by feeding them, dressing them, and changing their diapers.
Provide disabled students with assistive devices, supportive technology, and assistance accessing facilities, such as restrooms.	Teach proper eating habits and personal hygiene.
Identify children showing signs of emotional, developmental, or health-related problems and discuss them with supervisors, parents or guardians, and child development specialists.	Enforce all administration policies and rules governing students.
Establish clear objectives for all lessons, units, and projects and communicate those objectives to children.	Adapt teaching methods and instructional materials to meet students' varying needs and interests.

Technology

Word processing software	Device drivers or system software
E-mail	Database user interface and query software
Office Suite software	Computer based training software

Available Certifications

Child Development Associate Credential (CDA) (12 Points)	Child Abuse Recognition and Prevention (1 Point)
CPR/First Aid Certification (1 Point)	Communicable Diseases Training (1 Point)

Possible College Credits

College Credit Plus in Early Childhood Education, English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Cincinnati State Technical and Community College (Early Childhood Care and Education, up to 6 credit hours possible) • Southern State Community College (Early Childhood Education, up to 3 hours possible) • University of Cincinnati (Early Childhood Education, up to 9 credit hours possible) • Chatfield College (Liberal Arts, up to 7 credit hours possible)
NOCTI	This credit is obtained if you scored a 70% or above on either NOCTI Early Childhood Education- Basic or Early Childhood Education-Advanced assessments (up to 6 credit hours possible). An official transcript is available upon request. *To get official transcript contact your career-technical instructor.

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Preschool Assistant	Preschool Teacher
School Counselor	Elementary Teacher
Intervention Specialist	Summer Camp Counselor
Day Care Director	



Great Oaks Engineering Technologies and Robotics Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Engineering Technologies and Robotics

Applied Mathematics-5	Graphic Literacy-6
Workplace Documents-6	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Extended times sitting and using computers	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Reasoning Skills	Deductive: ability to apply general rules to specific problems and Inductive: ability to combine pieces of information to form conclusions among seemingly unrelated events	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	Medium
Ability to work accurately, recheck and correct work, to an industry standard	High
Ability to work accurately/within industry standards	High
Dependability (Attendance and Punctuality)	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	High

Visual models or demonstrated instructions	High
Ability to use tools of trade (soldering iron, signal conditioners, multi-meters, microcontrollers, force or torque sensors, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size	High
Shape	High
Color	Medium
Spatial Relationship	High
Ability to organize work process/follow defined procedures	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High
Reading Comprehension: Understanding written sentences and paragraphs in work related documents	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios	Geometry
Ratio, formulas	Advanced Algebra

Additional Abilities Required

Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Visualization	The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.
Deductive Reasoning	The ability to apply general rules to specific problems to produce answers that make sense.

Knowledge Required in Engineering Technologies and Robotics Field

Engineering and Technology	Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
Computers and Electronics	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
Design	Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

Additional Considerations

Must have strong critical evaluation skills and analytical thinking	Must possess strong attention to detail
Strong computer skills	Independent work
Sitting for extended time	Must be creative
Enjoy Science and Math	Strong Math background

Engineering Technologies and Robotics Work Activities

Debug robotics programs.	Provide technical support for robotic systems.
Review or approve designs, calculations, or cost estimates.	Install, calibrate, operate, or maintain robots.
Supervise, technologists, technicians, or other engineers.	Process or interpret signals or sensor data.
Investigate mechanical failures or unexpected maintenance problems.	Integrate robotics with peripherals, such as welders, controllers, or other equipment.
Create back-ups of robot programs or parameters.	Make system device lists or event timing charts.
Design automated robotic systems to increase production volume or precision in high-throughput operations, such as automated ribonucleic acid (RNA) analysis or sorting, moving, or stacking production materials.	Design robotic systems, such as automatic vehicle control, autonomous vehicles, advanced displays, advanced sensing, robotic platforms, computer vision, or telematics systems.

Document robotic application development, maintenance, or changes.	Plan mobile robot paths and teach path plans to robots.
Analyze and evaluate robotic systems or prototypes.	Design end-of-arm tooling.
Build, configure, and test robots.	Automate assays on laboratory robotics.
Design software to control robotic systems for applications, such as military defense or manufacturing.	Write algorithms or programming code for ad hoc robotic applications.
Conduct research into the feasibility, design, operation, or performance of robotic mechanisms, components, or systems, such as planetary rovers, multiple mobile robots, reconfigurable robots, or man-machine interactions.	Conduct research on robotic technology to create new robotic systems or system capabilities.
Identify opportunities or implement changes to improve products or reduce costs using knowledge of fabrication processes, tooling and production equipment, assembly methods, quality control standards, or product design, materials and parts.	Determine root causes of failures using statistical methods and recommend changes in designs, tolerances, or processing methods.
Troubleshoot new or existing product problems involving designs, materials, or processes.	Review product designs for manufacturability or completeness.
Apply continuous improvement methods such as lean manufacturing to enhance manufacturing quality, reliability, or cost-effectiveness.	Investigate or resolve operational problems, such as material use variances or bottlenecks.
Estimate costs, production times, or staffing requirements for new designs.	Evaluate manufactured products according to specifications and quality standards.
Design layout of equipment or workspaces to achieve maximum efficiency.	Prepare reports summarizing information or trends related to manufacturing performance.

Technology

Operating system software	File versioning software
Development environment software	Computer aided design CAD software
Analytical or scientific software	

Available Certifications

FANUC Handling Tool Operation & Programming J2P0310 IACT (6 Points)	Motoman DX100 Basic Programming with Material Handling (6 points)
Certified Solid Works Professional (CSWA) (6 points)	Certified Solid Works Associate (CSWA) (4 points)
CPR/First Aid Certification (1 point)	OSHA-10 hour –General Industry (1 point)
ECSI (Emergency Care and Safety Institute)	Allen Bradley PLC (6 points)

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>

*Additional college or post-secondary education may be required in this field.

Possible Career Pathways

Manufacturing Installer	Robotic Programmer
Quality Control Inspector	Engineer
Manufacturing Maintenance	



Great Oaks Equine Science and Management Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Equine Science and Management

Applied Mathematics-3	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	Medium
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	Medium
Oral Communication	The ability to express/explain ideas	High
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Bending, lifting more than 20 pounds, standing, lifting cages and equipment	High
Eye-hand Coordination	The ability to use tools	Medium
Auditory Acuity	The ability to detect differences in pitch and sound	Low

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	Medium
Ability to work accurately, recheck and correct work, to an industry standard	Medium
Dependability (Attendance and Punctuality)	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	Medium
Simple to complex diagram instructions	Low
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (reins, pet grooming products, leashes or leads, harnesses or its accessories, domestic pet training kits, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Low

Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color	Medium
Spatial Relationship	Medium
Ability to organize work process/follow defined procedures	Medium
Ability to follow sequence or to determine sequence of actions to a successful conclusion.	High
Dexterity (fine finger)	Medium
Instructing: Teaching others how to do something	High
Learning Strategies: Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things	High
Speaking: Talking to others to convey information effectively	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios	

Additional Abilities Required

Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Oral Expression	The ability to communicate information and ideas in speaking so others will understand.
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.

Knowledge Required in Equine Science and Management Field

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Education and Training	Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
Psychology	Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.

Additional Considerations

Must be dependable	Must like working with large animals
Must like getting dirty and wearing gloves	Does not mind animal and chemical smells
Must not be allergic to pet, animal, and hay	Does not mind handling unfamiliar animals

Equine Science and Management Work Activities

Train horses or other equines for riding, harness, show, racing, or other work, using knowledge of breed characteristics, training methods, performance standards, and the peculiarities of each animal.	Conduct training programs to develop or maintain desired animal behaviors for competition, entertainment, obedience, security, riding, or related purposes.
Talk to or interact with animals to familiarize them to human voices or contact.	Use oral, spur, rein, or hand commands to condition horses to carry riders or to pull horse-drawn equipment.
Cue or signal animals during performances.	Train dogs in human assistance or property protection duties.
Retrain horses to break bad habits, such as kicking, bolting, or resisting bridling or grooming.	Feed or exercise animals or provide other general care, such as cleaning or maintaining holding or performance areas.
Observe animals' physical conditions to detect illness or unhealthy conditions requiring medical care.	Evaluate animals to determine their temperaments, abilities, or aptitude for training.
Train dogs to work as guides for the visually impaired.	Place tack or harnesses on horses to accustom horses to the feel of equipment.
Administer prescribed medications to animals.	Organize or conduct animal shows.
Keep records documenting animal health, diet, or behavior.	Evaluate animals for trainability and ability to perform.
Advise animal owners regarding the purchase of specific animals.	Instruct jockeys in handling specific horses during races.

Technology

Word processing software	Project management software
Presentation software	Database user interface and query software
Calendar and scheduling software	

Available Certifications

Hazardous Occupations Safety Training in Agriculture (HOSTA)	Industrial Forklift Certification (1 Point)
CPR/First Aid Certification (1 Point)	(OSHA-10 for Agriculture (1 Point)

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>
Articulated Credit	<p>Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with:</p> <ul style="list-style-type: none"> • Southern State Community College (Agriculture Production, up to 4 credit hours possible) • Clark State Community College (Agriculture Business Technologies, up to 6 credit hours possible) • Ohio University—Southern Campus (Equine Studies, up to 10 credit hours possible) • Wilmington College (Agriculture, up to 2 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Assistant Trainer	Riding Instructor
Trainer	Farm Manager



Great Oaks Exercise Science and Sports Medicine Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Exercise Science and Sports Management

Applied Mathematics-3	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	Medium
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	Medium
Oral Communication	The ability to express/explain ideas	High
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Stooping, bending, walking, demonstrating and using equipment such as weights	Medium
Eye-hand Coordination	The ability to use tools	Medium
Auditory Acuity	The ability to detect differences in pitch and sound	Low

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	Medium
Ability to work toward work including tasks of minimal interest	Medium
Ability to work accurately, recheck and correct work, to an industry standard	Medium
Dependability (Attendance and Punctuality)	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	Medium
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (pedometers, fitness weights, sports equipment, exercise balls, emergency medical services first aid kits, balance beams or boards or bolsters or	High

rockers for rehabilitation therapy, facial shields, cooling pads or compresses, therapeutic heating, wraps, etc.)	
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size, shape, color, and spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Dexterity (fine finger)	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High
Monitoring: Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios, formulas, square roots	Pre-Algebra/Geometry

Additional Abilities Required

Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Deductive Reasoning	The ability to apply general rules to specific problems to produce answers that make sense.
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.

Knowledge Required in Exercise Science and Sports Management Field

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Therapy and Counseling	Knowledge of principles, methods, and procedures for diagnosis, treatment, and rehabilitation of physical and mental dysfunctions, and for career counseling and guidance.

Medicine and Dentistry	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
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Additional Considerations

Like to instruct and teach others	Looking to help people
Being aware of others' reactions and understanding why they react as they do	Interest in one's health and wellness
Ability to work in groups and on teams	Enjoy exercise and physical activity
Basic understanding of Health and Disease	Like Science and its challenges
Helpful if student has had student/athletic training at school	

Exercise Science and Sports Management Work Activities

Evaluate individuals' abilities, needs, and physical conditions, and develop suitable training programs to meet any special requirements.	Explain and enforce safety rules and regulations governing sports, recreational activities, and the use of exercise equipment.
Observe participants and inform them of corrective measures necessary for skill improvement.	Instruct participants in maintaining exertion levels to maximize benefits from exercise routines.
Teach proper breathing techniques used during physical exertion.	Monitor participants' progress and adapt programs as needed.
Teach and demonstrate use of gymnastic and training equipment such as trampolines and weights.	Provide students with information and resources regarding nutrition, weight control, and lifestyle issues.
Conduct therapeutic, recreational, or athletic activities.	Organize and conduct competitions and tournaments.
Administer emergency first aid, wrap injuries, treat minor chronic disabilities, or refer injured persons to physicians.	Teach individual and team sports to participants through instruction and demonstration, utilizing knowledge of sports techniques and of participants' physical capabilities.
Maintain fitness equipment.	Advise clients about proper clothing and shoes.

Plan physical education programs to promote development of participants' physical attributes and social skills.	Maintain equipment inventories, and select, store, or issue equipment as needed.
Plan or implement comprehensive athletic injury or illness prevention programs.	Instruct coaches, athletes, parents, medical personnel, or community members in the care and prevention of athletic injuries.
Develop training programs or routines designed to improve athletic performance.	Confer with coaches to select protective equipment.
Massage body parts to relieve soreness, strains, or bruises.	Perform team support duties, such as running errands, maintaining equipment, or stocking supplies.

Technology

Word Processing software	Spreadsheet software
Office Suite software	Medical software
Database user interface and query software	

Available Certifications

AMCA – Physical Therapy Aide (12 points)	CPR/First Aid Certification (1 point)
American Council on Exercise- Personal Trainer	OSHA-10 Healthcare (1 point)
American Heart Association Basic Life	American Heart Association Saver

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. • For more information, go to www.transfercredit.ohio.gov
Articulated Credit	<p>Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with:</p> <ul style="list-style-type: none"> • Cincinnati State Technical and Community College (Health and Fitness Technology, up to 14 credit hours possible) • Sinclair Community College (Life and Health Science, up to 3 credit hours) • Chatfield College (Associates of Arts Degree, up to 2 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Personal Trainer	Chiropractor
Occupational Therapist	Athletic Trainer
Physician's Assistant	



Great Oaks Firefighting and Emergency Medical Service Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Firefighting and Emergency Medical Service

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-5	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Stooping, bending, walking, using equipment like axes, controlling hoses, climbing ladders, and dealing with harsh environments such as heat, fire, cold, ice	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	High

Worker Trait Skills		Rating
Ability to get along with others		High
Ability to work independently, without close supervision		High
Ability to work toward work including tasks of minimal interest		High
Ability to work accurately, recheck and correct work, to an industry standard		High
Dependability (Attendance and Punctuality)		High
Ability to follow, interpret, and retain:		
Multistep oral instructions		High
Written instructions/technical manuals - multistep		High
Simple to complex diagram instructions		High
Visual models or demonstrated instructions		High

Ability to use tools of trade (pry bars, power saws, fire suppression hand tools, fire or rescue trucks, blocks or pulleys, spine boards, orthopedic splint systems, laryngoscopes or accessories, emergency response litters or stretchers or accessories, emergency medical service suction units or accessories, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar: size, shape, and color	High
Ability to discriminate spatial relationship	High
Ability to organize work process/follow defined procedures	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Dexterity (fine finger)	High
Active Listening: Giving full attention to what other people are saying, taking time to understand, asking questions as appropriate, and not interrupting at inappropriate times	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High
Monitoring: Monitoring/assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios, formulas, square roots	Pre-Algebra/Geometry

Additional Abilities Required

Static Strength	The ability to exert maximum muscle force to lift, push, pull, or carry objects.
Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.

Knowledge Required in Firefighting and Emergency Medical Service Field

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Public Safety and Security	Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

Education and Training	Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
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Additional Considerations

Solid writing and spelling skills	Physically fit and enjoys working out
Wear a uniform	Pass background screening (BCI)
Work as a team member	Visually astute and detail oriented
CANNOT have a police record	Drug free for last 5 years or more and pass random drug screenings
Certain drugs like heroin, cocaine, ecstasy, etc. are automatic disqualifiers or elimination from the program	Must be able to deal with bodily fluids, smells, and injuries

Firefighting and Emergency Medical Services Work Activities

Rescue victims from burning buildings and accident sites.	Search burning buildings to locate fire victims.
Administer first aid and cardiopulmonary resuscitation to injured persons.	Dress with equipment such as fire-resistant clothing and breathing apparatus.
Drive and operate fire fighting vehicles and equipment.	Respond to fire alarms and other calls for assistance, such as automobile and industrial accidents.
Move toward the source of a fire, using knowledge of types of fires, construction design, building materials, and physical layout of properties.	Assess fires and situations and report conditions to superiors to receive instructions, using two-way radios.
Position and climb ladders to gain access to upper levels of buildings, or to rescue individuals from burning structures.	Create openings in buildings for ventilation or entrance, using axes, chisels, crowbars, electric saws, or core cutters.
Lay hose lines and connect them to water supplies.	Operate pumps connected to high-pressure hoses.
Collaborate with police to respond to accidents, disasters, and arson investigation calls.	Take action to contain hazardous chemicals that might catch fire, leak, or spill.

Select and attach hose nozzles, depending on fire type, and direct streams of water or chemicals onto fires.	Participate in courses, seminars and conferences, and study fire science literature, to learn firefighting techniques.
Participate in fire drills and demonstrations of firefighting techniques.	Prepare written reports that detail specifics of fire incidents.
Participate in physical training activities to maintain a high level of physical fitness.	Inspect fire sites after flames have been extinguished to ensure that there is no further danger.
Clean and maintain fire stations and firefighting equipment and apparatus.	Inform and educate the public on fire prevention.
Inspect buildings for fire hazards and compliance with fire prevention ordinances, testing and checking smoke alarms and fire suppression equipment as necessary.	Protect property from water and smoke, using waterproof salvage covers, smoke ejectors, and deodorants.
Establish fire lines to prevent unauthorized persons from entering areas near fires.	Salvage property by removing broken glass, pumping out water, and ventilating buildings to remove smoke.
Spray foam onto runways, extinguish fires, and rescue aircraft crew and passengers in air-crash emergencies.	Operate equipment, such as electrocardiograms (EKGs), external defibrillators, or bag valve mask resuscitators, in advanced life support environments.
Administer first aid treatment or life support care to sick or injured persons in prehospital settings.	Assess nature and extent of illness or injury to establish and prioritize medical procedures.
Perform emergency diagnostic and treatment procedures, such as stomach suction, airway management, or heart monitoring, during ambulance ride.	Observe, record, and report to physician the patient's condition or injury, the treatment provided, and reactions to drugs or treatment.
Drive mobile intensive care unit to specified location, following instructions from emergency medical dispatcher.	Decontaminate ambulance interior following treatment of patient with infectious disease and report case to proper authorities.
Administer drugs, orally or by injection, or perform intravenous procedures under a physician's direction.	Coordinate work with other emergency medical team members or police or fire department personnel.

Immobilize patient for placement on stretcher and ambulance transport, using backboard or other spinal immobilization device.	Communicate with dispatchers or treatment center personnel to provide information about situation, to arrange reception of victims, or to receive instructions for further treatment.
Maintain vehicles and medical and communication equipment and replenish first aid equipment and supplies.	Comfort and reassure patients.
Attend training classes to maintain certification licensure, keep abreast of new developments in the field, or maintain existing knowledge.	Coordinate with treatment center personnel to obtain patients' vital statistics and medical history, to determine the circumstances of the emergency, and to administer emergency treatment.

Technology

Word Processing software	Spreadsheet software
Project Management software	Office Suite software
Database user interface and query software	

Available Certifications

State of Ohio and National Registry of Emergency Medical Technicians (EMT) (12 Points)	CPR/First Aid Certification (1 Point)
State of Ohio Professional Firefighter I (12 Points)	State of Ohio Professional Firefighter II (12 Points)
National Incident Management System (NIMS) 100 (4 Points)	National Incident Management System (NIMS) 700 (4 Points)
(OSHA)-10 Healthcare (1 Point)	Forklift Certification (1 Point)
National Board on Fire Service Professional Qualifications (Pro Board)	Hazardous Material Operations
ECSI (Emergency Care and Safety Institute)	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>
Articulated Credit	<p>Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with:</p> <ul style="list-style-type: none"> • Hocking College (Fire/EMT, up to 17 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Firefighter/EMT	Fire Safety Inspector
Paramedic	Fire Officer



Great Oaks Health Technology Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Health Technology

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program

Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
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Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Extended stooping, bending, walking, and lifting; must be able to lift a minimum of 50 pounds	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	High
Ability to work accurately, recheck and correct work, to an industry standard	High
Dependability (Attendance and Punctuality)	High
Ability to follow, interpret, and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (urinalysis test strips, therapeutic heating or cooling pads or compresses, specimen collection container, glucose monitors or meters, electronic medical thermometers, blood pressure, stethoscope, spirometers, patient stabilization devices, needles, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High

Ability to discriminate between objects of similar:	
Size, shape, and color	Medium
Spatial Relationship	High
Ability to organize work process/follow defined procedures	High
Ability to use various measuring tools with consistency and accuracy	High
Ability to reference charts to determine course of action or equivalencies	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Dexterity (fine finger)	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.	High
Service Orientation: Actively looking for ways to help people	High
Social Perceptiveness: Being aware of others' reactions and understanding why they react as they do	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Grade level: Text Readability 12.0	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios, formulas, square roots	Pre-Algebra/Geometry

Additional Abilities Required

Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Near Vision	The ability to see details at close range (within a few feet of the observer).

Knowledge Required in Health Technology Field

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Knowledge Required in Health Technology Field

Psychology	Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.
Medicine and Dentistry	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.

Additional Considerations

Solid writing and spelling skills	Moving around, stooping, and bending
Wear a uniform	Pass background screening (BCI)
Work as a team member	Visually astute and detail oriented
Enjoy helping others	STRONG memorization skills are needed
Must be able to deal with bodily fluids, smells, and injuries	

Health Technology Work Activities

Answer patient call signals, signal lights, bells, or intercom systems to determine patients' needs.	Review patients' dietary restrictions, food allergies, and preferences to ensure patient receives appropriate diet.
Turn or reposition bedridden patients.	Supply, collect, or empty bedpans.
Provide physical support to assist patients to perform daily living activities, such as getting out of bed, bathing, dressing, using the toilet, standing, walking, or exercising.	Record vital signs, such as temperature, blood pressure, pulse, or respiration rate, as directed by medical or nursing staff.
Measure and record food and liquid intake or urinary and fecal output, reporting changes to medical or nursing staff.	Gather information from caregivers, nurses, or physicians about patient condition, treatment plans, or appropriate activities.
Observe or examine patients to detect symptoms that may require medical attention, such as bruises, open wounds, or blood in urine.	Exercise patients who are comatose, paralyzed, or have restricted mobility.

Document or otherwise report observations of patient behavior, complaints, or physical symptoms to nurses.	Remind patients to take medications or nutritional supplements.
Feed patients or assist patients to eat or drink.	Prepare or serve food trays.
Communicate with patients to ascertain feelings or need for assistance or social and emotional support.	Lift or assist others to lift patients to move them on or off beds, examination tables, surgical tables, or stretchers.
Undress, wash, and dress patients who are unable to do so for themselves.	Clean and sanitize patient rooms, bathrooms, examination rooms, or other patient areas.
Wash, groom, shave, or drape patients to prepare them for surgery, treatment, or examination.	Record height or weight of patients.
Assist nurses or physicians in the operation of medical equipment or provision of patient care.	Apply clean dressings, slings, stockings, or support bandages, under direction of nurse or physician.
Collect specimens, such as urine, feces, or sputum.	Change bed linens or make bed.
Administer medications or treatments, such as catheterizations, suppositories, irrigations, enemas, massages, or douches, as directed by a physician or nurse.	Transport patients to treatment units, testing units, operating rooms, or other areas, using wheelchairs, stretchers, or moveable beds.
Set up treating or testing equipment, such as oxygen tents, portable radiograph (x-ray) equipment, or overhead irrigation bottles, as directed by a physician or nurse.	Operate equipment, such as electrocardiograms (EKGs), external defibrillators, or bag valve mask resuscitators, in advanced life support environments.
Administer first aid treatment or life support care to sick or injured persons.	Assess nature and extent of illness or injury to establish and prioritize medical procedures.
Perform emergency diagnostic and treatment procedures	Observe, record, and report to physician the patient's condition or injury, the treatment provided, and reactions to drugs or treatment.
Explain medical instructions to patients or family members.	Observe patients, charting and reporting changes in patients' conditions, such as adverse reactions to medication or treatment, and taking any necessary action.

Administer drugs, orally or by injection, or perform intravenous procedures under a physician's direction.	Coordinate work with other emergency medical team members or police or fire department personnel.
Immobilize patient for placement on stretcher and ambulance transport, using backboard or other spinal immobilization device.	Communicate with dispatchers or treatment center personnel to provide information about situation, to arrange reception of victims, or to receive instructions for further treatment.
Maintain vehicles and medical and communication equipment and replenish first aid equipment and supplies.	Comfort and reassure patients.
Attend training classes to maintain certification licensure, keep abreast of new developments in the field, or maintain existing knowledge.	Coordinate with treatment center personnel to obtain patients' vital statistics and medical history, to determine the circumstances of the emergency, and to administer emergency treatment.
Provide basic patient care or treatments, such as taking temperatures or blood pressures, dressing wounds, treating bedsores, giving enemas or douches, rubbing with alcohol, massaging, or performing catheterizations.	Provide medical treatment or personal care to patients in private home settings, such as cooking, keeping rooms orderly, seeing that patients are comfortable and in good spirits, or instructing family members in simple nursing tasks.

Technology

Word Processing software	Spreadsheet software
Medical software	Office Suite software
Accounting software	

Available Certifications

Ohio State Tested Nurse Aide (STNA) (12 Points)	National Health Association (NHA)-Clinical Medical Assistant (3 Points)
National Health Association (NHA)-Certified Phlebotomy Technician (12 Points)	OSHA-10 Healthcare (1 Point)
American Heart Association Heart Saver	CPR/First Aid Certification (1 Point)
American Heart Association Basic Life Support for Healthcare Providers	Patient Care Assistant (PCA)

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>
Articulated Credit	<p>Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with:</p> <ul style="list-style-type: none"> • Cincinnati State Technical and Community College (Health Technologies, up to 14 credit hours possible) • Sinclair Community College (Life and Health Science, up to 5 credit hours possible) • Southern State Community College (Medical Assisting, up to 8 credit hours possible) • Chatfield College (Associate of Arts Degree, up to 2 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Nurse Assistant	Paramedic
Patient Care Assistant	LPN
Radiographic Technician	Lab Technician
Nurse Practitioner	RN
Medical Assistant	Physician
Respiratory Therapist	Pharmacy Assistant



Great Oaks Heating, Ventilating and Air Conditioning Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Heating, Ventilating, and Air Conditioning

Applied Mathematics-4	Graphic Literacy-5
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	Medium
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	Medium
Oral Communication	The ability to express/explain ideas	High
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	High
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing, bending, stooping, use of ladders, working inside and outside, and working on roofs or at high levels above the ground or on ground level	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Low
Safety Understanding	Able to comprehend hazards of working with tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High

Worker Trait Skills		Rating
Ability to get along with others		Medium
Ability to work independently, without close supervision		High
Ability to work toward work including tasks of minimal interest		Medium
Ability to follow and retain:		
Multistep oral instructions		Medium
Written instructions/technical manuals - multistep		High
Simple to complex diagram instructions		High

Visual models or demonstrated instructions	High
Ability to use tools of trade (voltage or current meters, screwdrivers, pressure indicators, power saws, hammers, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size, shape, color and spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Coordination (eye-hand)	Medium
Able to sequence events or follow a sequence as necessary	High
Ability to sequence events of follow a sequence as necessary	High
Dexterity (fine finger)	Medium
Equipment Maintenance: Performing routine maintenance on equipment and determining when and what kind of maintenance is needed	High
Installation: Installing equipment, machines, wiring, or programs to meet specifications	High
Quality Control Analysis: Conducting tests and inspections of products, services, or processes to evaluate quality or performance	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Pre-Algebra and Geometry
Ratio, Algebra, formulas, square roots	Geometry

Additional Abilities Required

Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
Near Vision	The ability to see details at close range (within a few feet of the observer).

Knowledge Required in Heating, Ventilating, and Air Conditioning Field

Building and Construction	Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Additional Considerations

Must enjoy working with their hands, able to follow directions, and work independently	Must possess good communication skills
Must be aware of surroundings such as live electrical points, safety glasses, overhead dangers, safety harness requirements, and gas lines	Must be able to problem solve
Wear a uniform	Must have high integrity

Heating, Ventilating, and Air Conditioning Work Activities

Test pipe or tubing joints or connections for leaks, using pressure gauge or soap-and-water solution.	Test electrical circuits or components for continuity, using electrical test equipment.
Repair or replace defective equipment, components, or wiring.	Connect heating or air conditioning equipment to fuel, water, or refrigerant source to form complete circuit.
Discuss heating or cooling system malfunctions with users to isolate problems or to verify that repairs corrected malfunctions.	Repair or service heating, ventilating, and air conditioning (HVAC) systems to improve efficiency, such as by changing filters, cleaning ducts, or refilling non-toxic refrigerants.
Install, connect, or adjust thermostats, humidistats, or timers.	Record and report time, materials, faults, deficiencies, or other unusual occurrences on work orders.
Study blueprints, design specifications, or manufacturers' recommendations to ascertain the configuration of heating or cooling equipment components and to ensure the proper installation of components.	Comply with all applicable standards, policies, or procedures, such as safety procedures or the maintenance of a clean work area.

Install auxiliary components to heating or cooling equipment, such as expansion or discharge valves, air ducts, pipes, blowers, dampers, flues, or stokers.	Lay out and connect electrical wiring between controls and equipment, according to wiring diagrams, using electrician's hand tools.
Inspect and test systems to verify system compliance with plans and specifications or to detect and locate malfunctions.	Install and test automatic, programmable, or wireless thermostats in residential or commercial buildings to minimize energy usage for heating or cooling.
Adjust system controls to settings recommended by manufacturer to balance system.	Cut or drill holes in floors, walls, or roof to install equipment, using power saws or drills.
Install or repair self-contained ground source heat pumps or hybrid ground or air source heat pumps to minimize carbon-based energy consumption and reduce carbon emissions.	Recommend, develop, or perform preventive or general maintenance procedures, such as cleaning, power-washing, or vacuuming equipment, oiling parts, or changing filters.
Install dehumidifiers or related equipment for spaces that require cool, dry air to operate efficiently, such as computer rooms.	Install magnetic-centrifugal chillers, compressors, or related equipment to cool air temperatures through the use of recirculating water.
Measure, cut, thread, or bend pipe or tubing, using pipe fitter's tools.	Wrap pipes, securing insulation in place with cement or wire bands.
Install or repair air purification systems, such as specialized filters or ultraviolet (UV) light purification systems.	Assemble, position, and mount heating or cooling equipment, following blueprints or manufacturer's specifications.
Fabricate, assemble, or install duct work or chassis parts, using portable metal-working tools or welding equipment.	Install radiator controls for room-level zone control heating of residential or commercial buildings.

Technology

Word Processing software	Spreadsheet software
Office Suite software	Database user interface and query software
Computer aided design (CAD) software	

Available Certifications

Environmental Protection Agency (EPA) Refrigerant Recovery (Core+Level 1, Core+Level 2, Core+Level 3, Universal) (12 Points Each)	NCCER Core (6 Points)
OSHA 10-Construction Industry (1 Point)	NCCER Level 1-HVAC (6 Points)
Industrial Forklift Operations (1 Point)	NCCER Level 2-HVAC
CPR/First Aid Certification (1 Point)	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>
Articulated Credit	<p>Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with:</p> <ul style="list-style-type: none"> • Ohio Valley ABC (Air Conditioning, Refrigeration and Heating Apprenticeship, 144 class hours, 2000 hours work experience, 2nd level)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

HVAC Technician	Energy Systems Controller
Foreperson	Mechanical Engineer



Great Oaks Heavy Equipment Operations and Engineering Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Heavy Equipment Operations and Engineering

Applied Mathematics-3	Graphic Literacy-4
Workplace Documents-3	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program

Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
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Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing, bending, stooping, working inside and outside, and working in muddy and rocky conditions, and working in equipment that bumps and shakes the driver	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Safety Understanding	Able to comprehend hazards of working with tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	Medium
Ability to work toward work including tasks of minimal interest	Medium
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	High

Ability to use tools of trade (man lift or personnel lift, forklifts, lifts, forklift or elevator accessories or supplies, cargo handling equipment, shovels, ladders, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium
Ability to discriminate between objects of similar:	
Size, size, shape, and spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Dexterity (fine finger)	Medium
Coordination (eye-hand-legs)	High
Able to sequence events or follow a sequence as necessary	High
Operation and Control: Controlling operations of equipment or systems	High
Coordination: Adjusting actions in relation to others' actions	High
Operation Monitoring: Watching gauges, dials, or other indicators to make sure machine is working properly	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Pre-Algebra and Geometry
Ratio, Algebra, formulas, square roots	Geometry

Additional Abilities Required

Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
Response Orientation	The ability to choose quickly between two or more movements in response to two or more different signals (lights, sounds, pictures). It includes the speed with which the correct response is started with the hand, foot, or other body part.
Multi-limb Coordination	The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.

Knowledge Required in Heavy Equipment Operations and Engineering Field

Public Safety and Security	Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Additional Considerations

Must enjoy working with their hands, able to follow directions, and work independently	Must possess good communication skills
Must be aware of surroundings such as live electrical points, safety glasses, overhead dangers, safety harness requirements, and gas lines	Must be able to problem solve
Wear a uniform	Must be able to work in various climates: rain, snow, ice, inside, outside, heat, etc.
Must understand the hazards associated with the equipment and tools	Must not mind heights, using ladders, stooping, and bending.

Technology

Spreadsheet software	Office Suite software
Materials requirement's planning logistics and supply chain software	Inventory management software
Enterprise resource planning ERP software	

Heavy Equipment Operations and Engineering Work Activities

Learn and follow safety regulations.	Take actions to avoid potential hazards or obstructions, such as utility lines, other equipment, other workers, or falling objects.
Inspect product load for accuracy and safely move it around the warehouse or facility to ensure timely and complete delivery.	Manually or mechanically load or unload materials from pallets, skids, platforms, cars, lifting devices, or other transport vehicles.
Position lifting devices under, over, or around loaded pallets, skids, or boxes and secure material or products for transport to designated areas.	Perform routine maintenance on vehicles or auxiliary equipment, such as cleaning, lubricating, recharging batteries, fueling, or replacing liquefied-gas tank.

Weigh materials or products and record weight or other production data on tags or labels.	Operate or tend automatic stacking, loading, packaging, or cutting machines.
Signal workers to discharge, dump, or level materials.	Turn valves and open chutes to dump, spray, or release materials from dump cars or storage bins into hoppers.
Move controls to drive gasoline- or electric-powered trucks, cars, or tractors and transport materials between loading, processing, and storage area.	Take actions to avoid potential hazards or obstructions, such as utility lines, other equipment, other workers, or falling objects.
Hook tow trucks to trailer hitches and fasten attachments, such as graders, plows, rollers, or winch cables to tractors, using hitch pins.	Take actions to avoid potential hazards or obstructions, such as utility lines, other equipment, other workers, or falling objects.
Move levers or controls that operate lifting devices, such as forklifts, lift beams with swivel-hooks, hoists, or elevating platforms, to load, unload, transport, or stack material.	Locate underground services, such as pipes or wires, prior to beginning work.
Monitor operations to ensure that health and safety standards are met.	Adjust hand wheels and depress pedals to control attachments, such as blades, buckets, scrapers, or swing booms.
Start engines, move throttles, switches, or levers, or depress pedals to operate machines, such as bulldozers, trench excavators, road graders, or backhoes.	Coordinate machine actions with other activities, positioning or moving loads in response to hand or audio signals from crew members.
Load and move dirt, rocks, equipment, or other materials, using trucks, crawler tractors, power cranes, shovels, graders, or related equipment.	Drive and maneuver equipment equipped with blades in successive passes over working areas to remove topsoil, vegetation, or rocks or to distribute and level earth or terrain.
Check fuel supplies at sites to ensure adequate availability.	Keep records of material or equipment usage or problems encountered.
Align machines, cutterheads, or depth gauge makers with reference stakes and guidelines or ground or position equipment, following hand signals of other workers.	Operate tractors or bulldozers to perform such tasks as clearing land, mixing sludge, trimming backfills, or building roadways or parking lots.
Drive tractor-trailer trucks to move equipment from site to site.	Repair and maintain equipment, making emergency adjustments or assisting with major repairs as necessary.
Select and fasten bulldozer blades or other attachments to tractors, using hitches.	Talk to clients and study instructions, plans, or diagrams to establish work requirements.

Available Certifications

Ohio Commercial Driver's License (12 points)	CPR/First Aid Certification (1 point)
OHS 10-Construction Industry (1 point)	Rough Terrain Forklift Operations (1 point)
NCCER Core (6 points)	NCCER Level 2-HEO
NCCER Level 1-HEO (6 points)	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Hocking College (Heavy Equipment Management, up to 9 credit hours possible) • Ohio Valley ABC (Air Conditioning, Refrigeration and Heating Apprenticeship, 144 class hours, 2000 hours work experience, 2nd level)
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Equipment Operator	Project Estimator
Site Engineer	Land Developer



Great Oaks Industrial Diesel Mechanics Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Industrial Diesel Mechanics

Applied Mathematics-4	Graphic Literacy-5
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Auditory Acuity	The ability to detect differences in pitch/sound	High
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	The ability to lift 70 pounds or more, bending, stooping, and standing for extended amount of times	High
Eye-Hand-Arm Coordination and Dexterity	The ability to use tools to ensure work is completed	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	Medium
Ability to stick to assigned task to a positive/expected conclusion	High
Ability to work accurately, recheck and correct work to industry standards	High
Ability to follow and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	High
Ability to safely use tools of trade (specialty wrenches, portable data input terminals, engine or component test stands, calipers, boring machines, screwdrivers, pliers, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High

Ability to discriminate between objects of similar:	
Size	High
Shape	High
Color	High
Spatial Relationship	Medium
Dexterity-Fine and gross finger/motor	High
Ability to organize work process/follow defined procedures	High
Able to determine and/or follow a sequence of steps to a logical conclusion	High
Repairing: Repairing machines or systems using the needed tools	High
Troubleshooting: Determining causes of operating errors and deciding what to do about it	High
Operation and Control: Controlling operations of equipment or systems	High

Reading Skills *See Recommended WorkKeys® Scores Above	
*Lexile 1100 9 th grade or higher	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Measurement
Algebra	

Additional Abilities/Skills Required

Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Near Vision	The ability to see details at close range (within a few feet of the observer).
Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.

Knowledge Required in Industrial Diesel Mechanics

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Transportation	Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including the relative costs and benefits.

Industrial Diesel Mechanics Activities

Inspect brake systems, steering mechanisms, wheel bearings, and other important parts to ensure that they are in proper operating condition.	Use hand tools such as screwdrivers, pliers, wrenches, pressure gauges, and precision instruments, as well as power tools such as pneumatic wrenches, lathes, welding equipment, and jacks and hoists.
Adjust and reline brakes, align wheels, tighten bolts and screws, and reassemble equipment.	Adjust and reline brakes, align wheels, tighten bolts and screws, and reassemble equipment.
Examine and adjust protective guards, loose bolts, and specified safety devices.	Raise trucks, buses, and heavy parts or equipment using hydraulic jacks or hoists.
Perform routine maintenance such as changing oil, checking batteries, and lubricating equipment and machinery.	Test drive trucks and buses to diagnose malfunctions or to ensure that they are working properly.
Attach test instruments to equipment, and read dials and gauges to diagnose malfunctions.	Specialize in repairing and maintaining parts of the engine, such as fuel injection systems.
Rebuild gas or diesel engines.	Recondition and replace parts, pistons, bearings, gears, and valves.
Install or repair accessories.	Adjust or repair computer-controlled exhaust emissions devices.
Specialize in repairing and maintaining parts of the engine, such as fuel injection systems.	Record repairs and maintenance performed.
Inspect, test, and listen to defective equipment to diagnose malfunctions, using test instruments such as handheld computers, motor analyzers, chassis charts, and pressure gauges.	Inspect, repair, and maintain automotive and mechanical equipment and machinery such as pumps and compressors.
Study blueprints or manufacturers' manuals to determine correct installation or operation of machinery.	Inspect, repair, and maintain automotive and mechanical equipment and machinery such as pumps and compressors.
Align front ends and suspension systems.	Adjust or repair computer-controlled exhaust emissions devices.
Repair or adjust seats, doors, or windows.	Disassemble and overhaul internal combustion engines, pumps, generators, transmissions, clutches, and differential units.
Measure vehicle emissions to determine whether they are within acceptable limits.	Diagnose and repair vehicle heating and cooling systems.
Repair or maintain the operating condition of industrial production or processing machinery or equipment.	Operate valve-grinding machines to grind and reset valves.
Clean, lubricate, or adjust parts, equipment, or machinery.	Maintain or repair vehicles with alternative fuel systems, including biodiesel, hybrid, or compressed natural gas vehicles.
Analyze test results, machine error messages, or information obtained from operators to diagnose equipment problems.	Observe and test the operation of machinery or equipment to diagnose malfunctions, using voltmeters or other testing devices.

Additional Considerations

Must enjoy working with their hands, able to follow directions, and work independently	Must possess good communication skills
Must be able to learn new technology	Must be able to problem solve
Wear a uniform	Good vision and good hearing
Must understand the hazards associated with the equipment and tools	Must consider allergies to plants, pollen, fertilizers

Technology

Word Processing software	Spreadsheet software
Office Suite software	Facilities Management software
Database interface and query software	

Available Certifications

ASE Student Certifications: Medium/Heavy Truck Student Certifications- HT Brakes, Steering Suspension, HT Electric, HT Diesel Engines (3 Points each)	ASE T4 Brakes (12 Points) Professional exam
OSHA 10-General Industry (1 Point)	CPR/First Aid Certification (1 Point)
ECSI (Emergency Care and Safety Institute)	Refrigerant Recovery and Recycling Certification

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Gateway Community and Technical College (Automotive Technology, up to 10 credit hours possible)
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. For more information, go to www.transfercredit.ohio.gov

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Equipment Salesperson	Service Writer/Manager
Mechanic	Transportation Supervisor
Operator	



Great Oaks IT Systems and Cybersecurity Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for IT Systems and Cybersecurity

Applied Mathematics-5	Graphic Literacy-4
Workplace Documents-5	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program

Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential
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Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	High
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing, bending, stooping, and lifting/moving computers, sitting for extended times	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Clerical Perception	Ability to perceive pertinent detail in verbal and tabular material	High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	Medium
Ability to work toward work including tasks of minimal interest	Medium
Ability to work accurately, recheck and correct work, to an industry standard	High
Ability to follow and retain:	
Multistep oral instructions	Medium
Written instructions/technical manuals - multistep	Medium
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (computer, screwdriver, soldering iron, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium

Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color	Medium
Spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Ability to refer to charts for troubleshooting and specifications	High
Able to sequence events or follow a sequence as necessary	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High
Reading Comprehension: Understanding written sentences and paragraphs in work related documents	High
Speaking: Talking to others to convey information effectively	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting, recording, comparing, calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Geometry
Ratio, Algebra, Formulas, Square Roots	Advanced Algebra
	*Solid Higher-Level Math with Minimum of Algebra

Additional Abilities Required

Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Oral Expression	The ability to communicate information and ideas in speaking so others will understand.
Written Comprehension	The ability to read and understand information and ideas presented in writing.

Knowledge Required in IT Systems and Cybersecurity Field

English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Computers and Electronics	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

IT Systems and Cybersecurity Work Activities

Networking activities, program activities, web design, activities	Microsoft Office activities
Oversee the daily performance of computer systems.	Answer user inquiries regarding computer software or hardware operation to resolve problems.
Enter commands and observe system functioning to verify correct operations and detect errors.	Set up equipment for employee use, performing or ensuring proper installation of cables, operating systems, or appropriate software.
Install and perform minor repairs to hardware, software, or peripheral equipment, following design or installation specifications.	Maintain records of daily data communication transactions, problems and remedial actions taken, or installation activities.
Read technical manuals, confer with users, or conduct computer diagnostics to investigate and resolve problems or to provide technical assistance and support.	Refer major hardware or software problems or defective products to vendors or technicians for service.
Develop training materials and procedures, or train users in the proper use of hardware or software.	Confer with staff, users, and management to establish requirements for new systems or modifications.
Prepare evaluations of software or hardware, and recommend improvements or upgrades.	Hire, supervise, and direct workers engaged in special project work, problem solving, monitoring, and installing data communication equipment and software.
Inspect equipment and read order sheets to prepare for delivery to users.	Read trade magazines and technical manuals, or attend conferences and seminars to maintain knowledge of hardware and software.
Modify and customize commercial programs for internal needs.	Conduct office automation feasibility studies, including workflow analysis, space design, or cost comparison analysis.

Back up network data.	Configure security settings or access permissions for groups or individuals.
Configure wide area network (WAN) or local area network (LAN) routers or related equipment.	Install network software, including security or firewall software.
Evaluate local area network (LAN) or wide area network (WAN) performance data to ensure sufficient availability or speed, to identify network problems, or for disaster recovery purposes.	Monitor industry websites or publications for information about patches, releases, viruses, or potential problem identification
Install and configure wireless networking equipment.	Create or revise user instructions, procedures, or manuals.
Run monthly network reports.	Document network support activities.

Technology

Web platform development software	Operating system software
Enterprise resource planning ERP software	Development environment software
Database user interface and query software	

Available Certifications

Microsoft Technology Associate Database (6 Points)	CompTIA A+ (6 Points)
Microsoft Technology Associate IT Infrastructure (6 Points)	Microsoft Technology Associate Developer (6 Points)
CPR/First Aid Certification (1 Point)	IC3 Digital Literacy (2 Points)
Networking Fundamentals	Software Testing Fundamentals
Window Server Administration Fundamentals	Database Fundamentals
Software Development Fundamentals	HTML5 App Development Fundamentals

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	<p>Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are:</p> <ul style="list-style-type: none"> • Cincinnati State Technical and Community College (PC Support and Administration, up to 9 credit hours possible) • Hocking College (Computer Programming, up to 4 credit hours possible; Network Systems, up to 4 credit hours possible) • Southern State Community College (Computer Technology/networking, up to 12 credit hours possible, Management Information Systems, up to 14 credit hours possible; Computer Technology, up to 12 credit hours possible) • Chatfield College (Liberal Arts, up to 9 credit hours possible)
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your Career-Technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Computer Repair Technician	Cable installer
Network Administrator	Web Designer/Developer
Applications Specialist	Programmer
IT Manager	



Great Oaks Law Enforcement Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Law Enforcement

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-5	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Stooping, bending, walking, using equipment, dealing with harsh environments such as heat, snow, cold, ice, and high stress	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	High
Ability to work accurately, recheck and correct work, to an industry standard	High
Dependability (Attendance and Punctuality)	High
Ability to follow, interpret, and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	High
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (two-way radios, police or security vehicles, notebook computers, handguns, biological evidence collection kits, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	

Size	High
Shape	High
Color	High
Spatial relationship	High
Ability to organize work process/follow defined procedures	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Dexterity (fine finger)	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High
Monitoring: Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action	High
Speaking: Talking to others to convey information effectively	High

Reading Skills *See Recommended WorkKey® Scores Above	
Text readability is 12.0	
Math Skills *See Recommended WorkKey® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios, formulas, square roots	Pre-Algebra/Geometry

Additional Abilities Required

Deductive Reasoning	The ability to apply general rules to specific problems to produce answers that make sense.
Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Inductive Reasoning	The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).

Knowledge Required in Law Enforcement Field

Law and Government	Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.
Public Safety and Security	Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
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Additional Considerations

Solid writing and spelling skills	Physically fit and enjoys working out
Wear a uniform	Pass background screening (BCI)
Work as a team member	Visually astute and detail oriented
CANNOT have a police record	Drug free for last 5 years or more and pass random drug screenings
Certain drugs like heroin, cocaine, ecstasy, etc. are automatic disqualifiers or elimination from the program	Must be able to deal with bodily fluids, smells, injuries, and aggressive/violent individuals

Law Enforcement Work Activities

Identify, pursue, and arrest suspects and perpetrators of criminal acts.	Record facts to prepare reports that document incidents and activities.
Provide for public safety by maintaining order, responding to emergencies, protecting people and property, enforcing motor vehicle and criminal laws, and promoting good community relations.	Monitor, note, report, and investigate suspicious persons and situations, safety hazards, and unusual or illegal activity in patrol area.
Render aid to accident victims and other persons requiring first aid for physical injuries.	Review facts of incidents to determine if criminal act or statute violations were involved.
Testify in court to present evidence or act as witness in traffic and criminal cases.	Relay complaint and emergency-request information to appropriate agency dispatchers.
Process prisoners, and prepare and maintain records of prisoner bookings and prisoner status during booking and pre-trial process.	Monitor traffic to ensure motorists observe traffic regulations and exhibit safe driving procedures.
Photograph or draw diagrams of crime or accident scenes and interview principals and eyewitnesses.	Evaluate complaint and emergency-request information to determine response requirements.
Patrol specific area on foot, horseback, or motorized conveyance, responding promptly to calls for assistance.	Investigate traffic accidents and other accidents to determine causes and to determine if a crime has been committed.

Direct traffic flow and reroute traffic in case of emergencies.	Issue citations or warnings to violators of motor vehicle ordinances.
Inform citizens of community services and recommend options to facilitate longer-term problem resolution.	Act as official escorts, such as when leading funeral processions or firefighters.
Respond to medical emergencies by administering basic first aid or by obtaining assistance from paramedics.	Inspect public establishments to ensure compliance with rules and regulations.
Answer alarms and investigate disturbances.	Circulate among visitors, patrons, or employees to preserve order and protect property.
Write reports of daily activities and irregularities, such as equipment or property damage, theft, presence of unauthorized persons, or unusual occurrences.	Monitor and authorize entrance and departure of employees, visitors, and other persons to guard against theft and maintain security of premises.
Patrol industrial or commercial premises to prevent and detect signs of intrusion and ensure security of doors, windows, and gates.	

Technology

Internet browser software	Spreadsheet software
Graphic or photo imaging software	Office Suite software
Data Base user interface and query software	

Available Certifications

Ohio Police Officer Training Academy (OPOTA) Private Police Security Certification (4 points)	CPR/First Aid Certification (1 point)
National Incident Management System (NIMS) 100 (4 points)	National Incident Management System (NIMS) 700 (4 points)
OSHA-10 Healthcare (1 point)	Hazardous Material Operations
Certification in FEMA Incident Management	Certification in FEMA Nationwide Suspicious Reporting Initiative for Security Officers
American Heart Association Basic Life Support (BLS) Certification	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>
Articulated Credit	<p>Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with:</p> <ul style="list-style-type: none"> • Southern State Community College (Asset Protection and Loss Prevention, up to 5 credit hours possible; Criminal Justice/Law Enforcement, up to 18 credit hours possible) • Hocking College (Police Science, up to 19 credit hours possible) • Chatfield College (Associate of Arts, up to 11 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Private Security	Police Officer
Detective	Police Supervisor



Great Oaks Secondary Practical Nursing Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Secondary Practical Nursing

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Extended stooping, bending, walking, and lifting; must be able to lift a minimum of 50 pounds	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	High
Ability to work accurately, recheck and correct work, to an industry standard	High
Dependability (Attendance and Punctuality)	High
Ability to follow, interpret, and retain:	
Multistep oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	High
Visual models or demonstrated instructions	High
Ability to use tools of trade (urinalysis test strips, therapeutic heating or cooling pads or compresses, specimen collection container, glucose monitors or meters, electronic medical thermometers, blood pressure, stethoscope, spirometers, patient stabilization devices, needles, patient stabilization devices, patient care beds, nebulizers, etc.)	High

Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color	High
Spatial Relationship	High
Ability to organize work process/follow defined procedures	High
Ability to use various measuring tools with consistency and accuracy	High
Ability to reference charts to determine course of action or equivalencies	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Dexterity (fine finger)	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.	High
Service Orientation: Actively looking for ways to help people	High
Coordination: Adjusting actions in relation to others' actions	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Grade level: Text Readability 12.0	Strong Reading Skills
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios, formulas, square roots	Pre-Algebra/Algebra/Geometry
Strong Math Skills	

Additional Abilities Required

Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Oral Expression	The ability to communicate information and ideas in speaking so others will understand.
Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Knowledge Required in Secondary Practical Nursing Field

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Psychology	Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.
Medicine and Dentistry	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.

Additional Considerations

Solid reading, writing, and math skills	Moving around, stooping, bending, and standing for long periods of time
Wear a uniform	Pass background screening (BCI)
Work as a team member	Visually astute and detail oriented
Enjoy helping others	STRONG memorization skills are needed
Maintain cleanliness standards including own hygiene	Must be able to deal with bodily fluids, smells, and injuries
Understand and maintain confidentiality	Open minded to diverse life styles and environments

Secondary Practical Nursing Work Activities

Administer prescribed medications or start intravenous fluids, noting times and amounts on patients' charts.	Measure and record patients' vital signs, such as height, weight, temperature, blood pressure, pulse, and respiration.
Observe patients, charting and reporting changes in patients' conditions, such as adverse reactions to medication or treatment, and taking any necessary action.	Provide basic patient care or treatments, such as taking temperatures or blood pressures, dressing wounds, treating bedsores, giving enemas or douches, rubbing with alcohol, massaging, or performing catheterizations.
Answer patients' calls and determine how to assist them.	Work as part of a healthcare team to assess patient needs, plan and modify care, and implement interventions.
Supervise nurses' aides or assistants.	Sterilize equipment and supplies, using germicides, sterilizer, or autoclave.

Evaluate nursing intervention outcomes, conferring with other healthcare team members as necessary.	Make appointments, keep records, or perform other clerical duties in doctors' offices or clinics.
Provide medical treatment or personal care to patients in private home settings, such as cooking, keeping rooms' orderly, seeing that patients are comfortable and in good spirits, or instructing family members in simple nursing tasks.	Counsel patients about drug regimens and possible side effects or interactions with other substances such as food supplements, over-the-counter (OTC) medications, or herbal remedies.
Assemble and use equipment, such as catheters, tracheotomy tubes, or oxygen suppliers.	Record food and fluid intake and output.
Collect samples, such as blood, urine, or sputum from patients, and perform routine laboratory tests on samples.	Prepare patients for examinations, tests, or treatments and explain procedures.
Help patients with bathing, dressing, maintaining personal hygiene, moving in bed, or standing and walking.	Prepare or examine food trays for conformance to prescribed diet.
Inventory and requisition supplies and instruments.	Clean rooms and make beds.
Assist in delivery, care, or feeding of infants.	Apply compresses, ice bags, or hot water bottles.
Maintain accurate, detailed reports and records.	Record patients' medical information and vital signs.
Monitor, record, and report symptoms or changes in patients' conditions.	Consult and coordinate with healthcare team members to assess, plan, implement, or evaluate patient care plans.
Provide health care, first aid, immunizations, or assistance in convalescence or rehabilitation in locations such as schools, hospitals, or industry.	Direct or coordinate infection control programs, advising or consulting with specified personnel about necessary precautions.
Prepare patients for and assist with examinations or treatments.	Conduct specified laboratory tests.
Perform physical examinations, make tentative diagnoses, and treat patients en route to hospitals or at disaster site triage centers.	Prepare rooms, sterile instruments, equipment, or supplies and ensure that stock of supplies is maintained.

Technology

Word Processing software	Spreadsheet software
Medical software	Office Suite software
Calendar and scheduling software	

Available Certifications

Ohio State Tested Nurse Aide (STNA) (12 Points)	National Council Licensure Exam (NCLEX) (12 Points)
American Heart Association Basic Lifesaver Certification	CPR/First Aid Certification (1 Point)
American Heart Association Basic Life Support for Healthcare Providers	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university.
Articulated Credit	Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with: <ul style="list-style-type: none"> • Sinclair Community College (Life and Health Science, up to 5 credit hours possible) • Southern State Community College (Nursing, up to 31 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

RN	Nurse Educator
Nurse Practitioner	LPN
Nurse Anesthetist	



Great Oaks Surgical Technology Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Surgical Technology

Applied Mathematics-5	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	Medium
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Extended stooping, bending, walking, and lifting; must be able to lift a minimum of 50 pounds	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	High
Sequencing	Ability to determine and follow a logical or defined series of steps in a sequential manner	High

Worker Trait Skills	Rating
Ability to get along with others	High
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	High
Ability to work accurately, recheck and correct work, to an industry standard	High
Dependability (Attendance and Punctuality)	High
Ability to follow, interpret, and retain:	
Multi step oral instructions	High
Written instructions/technical manuals - multistep	High
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	High

Ability to use tools of trade (surgical lasers or accessories, surgical clamps or clips or forceps or accessories, steam autoclaves or sterilizers, operating room patient positioning devices or accessories, electrosurgical or electrocautery equipment, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium
Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color	Medium
Spatial relationship	High
Ability to organize work process/follow defined procedures	High
Ability to use various measuring tools with consistency and accuracy	High
Ability to reference charts to determine course of action or equivalencies	High
Ability to follow sequence or to determine sequence of actions to a successful conclusion	High
Dexterity (fine finger)	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High
Speaking: Talking to others to convey information effectively	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Grade level: Text Readability 12.0	Strong Reading Skills
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating fractions, ratios, formulas, square roots	Pre-Algebra/Algebra/Geometry
Strong math skills	

Additional Abilities Required

Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.

Knowledge Required in Surgical Technology Field

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Medicine and Dentistry	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.

Additional Considerations

Solid reading, writing, and math skills	Moving around, stooping, bending, and standing for long periods of time
Wear a uniform	Pass background screening (BCI)
Work as a team member	Visually Astute and Detail Oriented
Enjoy helping others	STRONG memorization skills are needed
Maintain cleanliness standards including own hygiene	Must be able to deal with bodily fluids, smells, and injuries
Understand and maintain confidentiality	Open-minded to diverse life styles and environments

Surgical Technology Work Activities

Verify the identity of patient or operative site.	Monitor and maintain aseptic technique throughout procedures.
Cover patients with surgical drapes to create and maintain a sterile operative field.	Maintain an unobstructed operative field, using surgical retractors, sponges, or suctioning and irrigating equipment.
Coordinate or participate in the positioning of patients, using body stabilizing equipment or protective padding to provide appropriate exposure for the procedure or to protect against nerve damage or circulation impairment.	Discuss with surgeon the nature of the surgical procedure, including operative consent, methods of operative exposure, diagnostic or laboratory data, or patient-advanced directives or other needs.

Apply sutures, staples, clips, or other materials to close skin, fascia, or subcutaneous wound layers.	Determine availability of necessary equipment or supplies for operative procedures.
Prepare and apply sterile wound dressings.	Assist with patient resuscitation during cardiac arrest or other life-threatening events.
Clamp, ligate, or cauterize blood vessels to control bleeding during surgical entry, using hemostatic clamps, suture ligatures, or electrocautery equipment.	Assess skin integrity or other body conditions upon completion of the procedure to determine if damage has occurred from body positioning.
Obtain or inspect sterile or non-sterile surgical equipment, instruments, or supplies.	Pass instruments or supplies to surgeon during procedure.
Operate sterilizing devices.	Remove patient hair or disinfect incision sites to prepare patient for surgery.
Monitor patient intra-operative status, including patient position, vital signs, or volume and color of blood.	Assist in the insertion, positioning, or suturing of closed-wound drainage systems.
Incise tissue layers in lower extremities to harvest veins.	Assist members of surgical team with gowning or gloving.
Gather, arrange, or assemble instruments or supplies.	Coordinate with anesthesia personnel to maintain patient temperature.
Adjust and maintain operating room temperature, humidity, or lighting, according to surgeon's specifications.	Postoperatively inject a subcutaneous local anesthetic agent to reduce pain.
Assist in applying casts, splints, braces, or similar devices.	Transport patients to operating room.
Insert or remove urinary bladder catheters.	Assist in volume replacement or autotransfusion techniques.
Maintain a proper sterile field during surgical procedures.	Count sponges, needles, and instruments before and after operation.
Operate, assemble, adjust, or monitor sterilizers, lights, suction machines, or diagnostic equipment to ensure proper operation.	Maintain files and records of surgical procedures.

Technology

Medical software	Spreadsheet software
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Available Certifications

Sterile Processing Distribution Technician Certification (12 points)	CPR/First Aid Certification (1 Point)
American Heart Association Basic Lifesaver Certification	American Heart Association Heart Saver First Aid Certification
American Heart Association Basic Life Support for Healthcare Providers	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>
Articulated Credit	<p>Great Oaks has agreements with certain colleges; if you attend one of those colleges you can get credit toward a specific degree. Currently, Great Oaks has agreements in your program with:</p> <ul style="list-style-type: none"> • Cincinnati State Technical and Community College (Health Technologies, up to 14 credit hours possible)

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Sterile Processing Technician	Surgical or Emergency Room Nurse
Sterile Processing Distribution Manager	Surgical Technician



Great Oaks Veterinary Assisting Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Veterinary Assisting

Applied Mathematics-3	Graphic Literacy-3
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Standing, stooping, bending, restraining/holding animals, and lifting animals/cages weighing more than 20 pounds. Move around a lot.	High
Safety Understanding	Able to comprehend hazards of working with animals, diseases, blood/animal fluids, tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High
Auditory Acuity	The ability to detect differences in pitch/sound	Medium

Worker Trait Skills		Rating
Ability to get along with others		Medium
Ability to work independently, without close supervision		High
Ability to work toward work including tasks of minimal interest		High
Ability to stick to assigned task to a positive/expected conclusion		High
Ability to follow and retain:		
Multistep oral instructions		High
Written instructions/technical manuals - multistep		High
Simple to complex diagram instructions		High
Visual models or demonstrated instructions		High

Ability to use tools of trade (blades, clippers, grooming clippers, muzzles, x-rays, etc.)- various scientific measuring instruments and the computer	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium
Ability to discriminate between objects of similar:	
Size	High
Shape and color	Medium
Spatial Relationship	Low
Dexterity-Fine finger/motor	High
Ability to organize work process/follow defined procedures	Medium
Coordination (eye-hand)	High
Able to sequence events or follow a sequence as necessary	High
Active Listening: Give full attention to what other people are saying, taking time to understand the points being made, asking appropriate questions and not interrupting	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High
Reading Comprehension: Understanding written sentences and paragraphs in work related documents	High
Monitoring: Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Grade level	12.0 text passage readability
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Pre-Algebra/Geometry

Additional Abilities Required

Oral Expression	The ability to communicate information and ideas in speaking so others will understand.
Deductive Reasoning	The ability to apply general rules to specific problems to produce answers that make sense.
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.

Additional Considerations

Strong memorization skills	Handle chemical and animal smells and contacts
Consideration and understanding of allergies such as pet/animal/hay	Handling excrement, getting dirty, urine, and other conditions associated with working with animals
Handling unfamiliar, dangerous, large, and small animals	Enjoy Math and Science

Knowledge Required in Veterinary Assisting

Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Biology	Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Veterinary Assisting Activities

Hold or restrain animals during exams or procedures.	Clean and sterilize instruments, equipment, or materials.
Observe the behavior and condition of animals and monitor their clinical symptoms.	Provide veterinarians with the correct equipment or instruments, as needed.
Prepare and label samples for laboratory testing, culture, or microscopic examination.	Prepare animals for surgery, performing such tasks as shaving surgical areas.
Prepare treatment rooms.	Schedule appointments and procedures for animals.
Clean kennels, animal holding areas, surgery suites, examination rooms, or animal loading or unloading facilities to control the spread of disease.	Examine animals to detect behavioral changes or clinical symptoms that could indicate illness or injury.
Provide assistance with animal euthanasia and the disposal of remains.	Maintain instruments, equipment, or machinery to ensure proper working condition.
Bathe animals, clip nails or claws, and brush or cut animals' hair.	Conduct specialized procedures, such as animal branding or tattooing or hoof trimming.
Fill medication prescriptions.	Prepare feed for animals according to specific instructions, such as diet lists or schedules.
Assist veterinarians in examining animals to determine the nature of illnesses or injuries.	Perform routine laboratory tests or diagnostic tests, such as taking or developing x-rays.
Prepare surgical equipment and pass instruments or materials to veterinarians during surgical procedures.	Dust, spray, or bathe animals to control insect pests.
Exercise animals or provide them with companionship.	Write reports, maintain research information, or perform clerical duties.
Perform accounting duties, such as bookkeeping, billing customers for services, or maintaining inventories.	

Technology

Word Processing software	Office Suite software
Medical software	Data Base user interface and query software
Calendar and scheduling software	

Available Certifications

OHSA 10 for Healthcare (1 point)	CPR/First Aid Certification (1 point)
Animal Care Technologies Certification (ACT)	Pet First Aid & Disaster Response Certification
Industrial Forklift Operations	

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Clark State Community College (Agriculture Business, up to 6 credit hours possible) • Southern State Community College (Agriculture Production, up to 4 credit hours possible) • Wilmington college (Agriculture, 2 hours possible) • UC Blue Ash (Veterinary Technology, up to 3 credit hours possible)
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov.</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Veterinary Aide	Veterinary Technician
Lab Technician	Veterinarian



Great Oaks Web Applications and Game Development Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Web Applications and Game Development

Applied Mathematics-5	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	High
Oral Communication	The ability to express/explain ideas	High
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	High
Written Communication	The ability to communicate in a written format and record information accurately	High
Physical Mobility/Strength	Extended standing, bending, stooping, and lifting/moving computers, sitting for extended times	Medium
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Clerical Perception	Ability to perceive pertinent detail in verbal and tabular material	High

Worker Trait Skills		Rating
Ability to get along with others		Medium
Ability to work independently, without close supervision		High
Ability to work toward work including tasks of minimal interest		High
Ability to work accurately, recheck and correct work, to an industry standard		High
Ability to follow and retain:		
Multistep oral instructions		High
Written instructions/technical manuals - multistep		High
Simple to complex diagram instructions		High
Visual models or demonstrated instructions		High

Ability to use tools of trade (personal computer, notebook computers, high capacity removable media drives, desktop computers, computer servers, mobile phones, various software and programming, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	High
Ability to discriminate between objects of similar:	
Size	Medium
Shape	Medium
Color	Medium
Spatial relationship	Medium
Ability to organize work process/follow defined procedures	High
Ability to refer to charts for troubleshooting and specifications	High
Able to sequence events or follow a sequence as necessary	High
Programming: Writing computer programs for various purposes.	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	High
Complex Problem Solving: Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions	High
Active Listening: Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times	High

Reading Skills *See Recommended WorkKeys® Scores Above	
High Reading Comprehension and Written Language skills	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Geometry
Ratio, Algebra, formulas, square roots	Advanced Algebra
	*Solid Higher-Level math with minimum of Algebra

Additional Abilities Required

Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Deductive Reasoning	The ability to apply general rules to specific problems to produce answers that make sense.
Near Vision	The ability to see details at close range (within a few feet of the observer).
Originality	The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.

Fluency of Ideas	The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
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Knowledge Required in Web Applications and Game Development Field

English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Computers and Electronics	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

Additional Considerations

This program is not about playing or learning to play games	Students must like to code
High level of math and analytical skills required	

Web Applications and Game Development Work Activities

Design, build, or maintain web sites, using authoring or scripting languages, content creation tools, management tools, and digital media.	Confer with management or development teams to prioritize needs, resolve conflicts, develop content criteria, or choose solution.
Perform or direct website updates.	Write, design, or edit web page content, or direct others producing content.
Maintain understanding of current web technologies or programming practices through continuing education, reading, or participation in professional conferences, workshops, or groups.	Python programming: if then statements; do while; if, then, else; conditions based on Boolean operators; convert strings to value; concatenation.
Back up files from web sites to local directories for instant recovery in case of problems.	Analyze user needs to determine technical requirements.
Identify problems uncovered by testing or customer feedback, and correct problems or refer problems to appropriate personnel for correction.	Evaluates code to ensure it is valid, is properly structured, meets industry standards, and is compatible with browsers, devices, or operating systems.
Work activities centered on debugging and trouble-shooting code.	Develop or validate test routines and schedules to ensure that test cases mimic external interfaces and address all browser and device types.

Develop databases that support web applications and websites.	Write supporting code for Web applications or websites.
Renew domain name registrations.	Select programming languages, design tools, or applications.
Collaborate with management or users to develop e-commerce strategies and to integrate these strategies with websites.	Communicate with network personnel or Web site hosting agencies to address hardware or software issues affecting websites.
Design and implement website security measures, such as firewalls or message encryption.	Perform website tests according to planned schedules, or after any website or product revision.
Incorporate technical considerations into website design plans, such as budgets, equipment, performance requirements, or legal issues including accessibility and privacy.	Develop website maps, application models, image templates, or page templates that meet project goals, user needs, or industry standards.
Respond to user email inquiries, or set up automated systems to send responses.	Develop or implement procedures for ongoing web site revision.
Develop and document style guidelines for website content.	Identify or maintain links to and from other websites and check links to ensure proper functioning.
Establish appropriate server directory trees.	Create searchable indices for web page content.
Recommend and implement performance improvements.	Register websites with search engines to increase website traffic.
Provide clear, detailed descriptions of website specifications, such as product features, activities, software, communication protocols, programming languages, and operating systems software and hardware.	Monitor security system performance logs to identify problems and notify security specialists when problems occur.
Create web models or prototypes that include physical, interface, logical, or data models.	Document test plans, testing procedures, or test results.
Evaluate or recommend server hardware or software.	Develop system interaction or sequence diagrams.
Research, document, rate, or select alternatives for web architecture or technologies.	Guide design discussions between development teams.
Document technical factors such as server load, bandwidth, database performance, and browser and device types.	Install and configure hypertext transfer protocol (HTTP) servers and associated operating systems.
Create core game features including storylines, role-play mechanics, and character biographies for a new video game or game franchise.	Create and manage documentation, production schedules, prototyping goals, and communication plans in collaboration with production staff.
Conduct regular design reviews throughout the game development process.	Solicit, obtain, and integrate feedback from design and technical staff into original game design.
Document all aspects of formal game design, using mock-up screenshots, sample menu layouts, gameplay flowcharts, and other graphical devices.	Prepare and revise initial game sketches using two- and three-dimensional graphical design software.

Prepare two-dimensional concept layouts or three-dimensional mock-ups.	Consult with multiple stakeholders to define requirements and implement online features.
Write or supervise the writing of game text and dialogue.	Provide test specifications to quality assurance staff.

Technology

Web platform development software	Operating system software
Database user interface and query software	Development environment software
Video creation and editing software	Object or component-oriented development software
Graphics or photo imaging software	

Available Certifications

Microsoft Technology Associate IT Developer (6 points)	Microsoft Technology Associate IT Database (6 points)
Microsoft Technology Associate IT Infrastructure (6 points)	CompTIA A+ Certification (6 points)
IC3 Digital Literacy (2 points)	CPR/First Aid Certification (1 point)
CompTIA ITF+ Certification	MOS Certifications

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Career Technical Credit Transfer	<p>The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university:</p> <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov.</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Database Specialist	Website Developer
Program Developer	Game Designer
Applications Developer	Customer Service Pathway
Office Specialist Pathway	



Great Oaks Welding Essential Skills Profile

This profile provides an outline of the skills required for successful completion of this career program. Additional information is located on the Great Oaks website at <http://hs.greatoaks.com/essential-skills-high-school-programs/> and selecting the corresponding career program.

Recommended WorkKeys® Scores for Welding

Applied Mathematics-4	Graphic Literacy-4
Workplace Documents-4	

*Practice tests and more information at www.act.org/workkeys

Essential Skills Needed to Successfully Complete the Program			
Rating Key:	Low = Slightly Essential	Medium = Essential	High = Very Essential

Key Vocational Factors		Rating
Visual Acuity	The ability to detect differences/details visually	High
Depth Perception	The ability to detect the physical distance/depth of objects in space and time	Medium
Oral Communication	The ability to express/explain ideas	Medium
Oral Expression	The ability to verbally explain and express self in an intelligible manner so others will understand	Medium
Written Communication	The ability to communicate in a written format and record information accurately	Medium
Physical Mobility/Strength	Extended standing, bending, stooping, use of ladders, working inside and outside, working at high levels (heights), and working on roofs or at high levels above the ground, lifting and maneuvering welding equipment and materials	High
Eye-hand Coordination	The ability to use tools	High
Auditory Acuity	The ability to detect differences in pitch and sound	Medium
Safety Understanding	Able to comprehend hazards of working with tools, materials, equipment, and environmental conditions; able to wear personal protective equipment suitable for task	High

Worker Trait Skills	Rating
Ability to get along with others	Medium
Ability to work independently, without close supervision	High
Ability to work toward work including tasks of minimal interest	High
Ability to stick to assigned task to a positive/expected conclusion	High
Attendance, dependability and punctuality	High
Ability to work accurately/within industry standards	High
Ability to follow and retain:	

Multistep oral instructions	Medium
Written instructions/technical manuals - multistep	Medium
Simple to complex diagram instructions	Medium
Visual models or demonstrated instructions	Medium
Ability to use tools of trade (welding masks, man lift or personnel lift, gas welding or brazing or cutting apparatus, electrode holder, drill press or radial drill, hammers, calipers, measuring devices, etc.)	High
Ability to use numerical data (count, measure, compute, etc.) in applied setting	Medium
Ability to discriminate between objects of similar:	
Size, shape, color and spatial relationships	Medium
Dexterity-fine finger	Medium
Ability to organize work process/follow defined procedures	High
Ability to solve problems through a logical process/sequence of steps	High
Coordination (eye-hand)	High
Able to sequence events or follow a sequence as necessary	High
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.	High
Operation and Control: Controlling operations of equipment or systems.	High
Monitoring: Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.	High

Reading Skills *See Recommended WorkKeys® Scores Above	
Math Skills *See Recommended WorkKeys® Scores Above	
Counting-Recording-Comparing-Calculating	Whole numbers and decimals
Calculating fractions, decimals, ratios, order of operations	Geometry
Ratio, Algebra, formulas, square roots	

Additional Abilities Required

Near Vision	The ability to see details at close range (within a few feet of the observer).
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.

Knowledge Required in Welding Field

Production and Processing	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.
Design	Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
Administration and Management	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
Welding and Cutting Process	Knowledge of safety, setup and application of the following Welding and Cutting Processes: SMAW, GMAW, GTAW, FCAW, OAC, and Thermal Cutting

Additional Considerations

Detail oriented	May get dirty
May work in harsh environments: water, heat, cold, snow, ice, heights, below ground, etc.	NEED strong computer skills
Must be an independent and dependable worker	Creative
Enjoy Science and Math	Strong Math background

Welding Work Activities

Weld components in flat, vertical, or overhead positions.	Operate safety equipment and use safe work habits.
Lay out, position, align, and secure parts and assemblies prior to assembly, using straightedges, combination squares, calipers, and rulers.	Examine workpieces for defects and measure workpieces with straightedges or templates to ensure conformance with specifications.
Recognize, set up, and operate hand and power tools common to the welding trade, such as shielded metal arc and gas metal arc welding equipment.	Clamp, hold, tack-weld, heat-bend, grind or bolt component parts to obtain required configurations and positions for welding.
Weld separately or in combination, using aluminum, stainless steel, cast iron, and other alloys.	Select and install torches, torch tips, filler rods, and flux, according to welding chart specifications or types and thicknesses of metals.
Ignite torches or start power supplies and strike arcs by touching electrodes to metals being welded, completing electrical circuits.	Determine required equipment and welding methods, applying knowledge of metallurgy, geometry, and welding techniques.

Connect and turn regulator valves to activate and adjust gas flow and pressure so that desired flames are obtained.	Monitor the fitting, burning, and welding processes to avoid overheating of parts or warping, shrinking, distortion, or expansion of material.
Operate manual or semi-automatic welding equipment to fuse metal segments, using processes such as gas tungsten arc, gas metal arc, flux-cored arc, plasma arc, shielded metal arc, resistance welding, and submerged arc welding.	Analyze engineering drawings, blueprints, specifications, sketches, work orders, and material safety data sheets to plan layout, assembly, and welding operations.
Mark or tag material with proper job number, piece marks, and other identifying marks as required.	Chip or grind off excess weld, slag, or spatter, using hand scrapers or power chippers, portable grinders, or arc-cutting equipment.
Remove rough spots from work pieces, using portable grinders, hand files, or scrapers.	Preheat work pieces prior to welding or bending, using torches or heating furnaces.
Prepare all material surfaces to be welded, ensuring that there is no loose or thick scale, slag, rust, moisture, grease, or other foreign matter.	Develop templates and models for welding projects, using mathematical calculations based on blueprint information.
Signal crane operators to move large work piece.	Use fire suppression methods in industrial emergencies.
Position and secure work pieces, using hoists, cranes, wire, and banding machines or hand tools.	Guide and direct flames or electrodes on or across work pieces to straighten, bend, melt, or build up metal.
Detect faulty operation of equipment or defective materials and notify supervisors.	Clean or degrease parts, using wire brushes, portable grinders, or chemical baths.
Cut, contour, and bevel metal plates and structural shapes to dimensions as specified by blueprints, layouts, work orders, and templates, using powered saws, hand shears, or chipping knives.	Repair products by dismantling, straightening, reshaping, and reassembling parts, using cutting torches, straightening presses, and hand tools.
Fill holes, and increase the size of metal parts.	Set up and use ladders and scaffolding as necessary to complete work.
Estimate materials needed for production and manufacturing and maintain required stocks of materials.	Check grooves, angles, or gap allowances, using micrometers, calipers, and precision measuring instruments.
Operate metal shaping, straightening, and bending machines, such as brakes and shears.	Mix and apply protective coatings to products.
Join parts such as beams and steel reinforcing rods in buildings, bridges, and highways, bolting and riveting as necessary.	Dismantle metal assemblies or cut scrap metal, using thermal-cutting equipment such as flame-cutting torches or plasma-arc equipment.
Gouge metals, using the air-arc gouging process.	Hammer out bulges or bends in metal work pieces.
Operate brazing and soldering equipment.	Melt lead bars, wire, or scrap to add lead to joints or to extrude melted scrap into reusable form.

Technology

Analytical or Scientific software	Spreadsheet software
Calendar and Scheduling software	Database User Interface and Query software
Computer Aided Design (CAD) software	

Available Certifications

American Welding Society Certification (AWS) (12 Points)	CPR/First Aid Certification (1 Point)
OSHA 10-General Industry (1 Point)	ECSI (Emergency Care and Safety Institute)

Possible College Credits

College Credit Plus in English, Math, Social Studies, or Science	Must be preapproved. Must pass a college course at an Ohio college or College Credit Plus class at Great Oaks.
Articulated Credit	Great Oaks has agreements with certain colleges that may give you credits for a specific degree. Possible agreements are: <ul style="list-style-type: none"> • Sinclair Community College (Welding, up to 7 credit hours possible) • Cincinnati State Technical and Community College (Mechanical Engineering Technology, up to 9 credit hours possible)
Career Technical Credit Transfer	The Ohio Transfer to Degree Guarantee helps career and technical students transfer credits earned in high school to community college or four-year degree programs. The credit can be used at any Ohio public college or university: <ul style="list-style-type: none"> • If you successfully completed your career-technical program and passed certain required assessments. • If you attend a similar program at a public Ohio college or university. <p>For more information, go to www.transfercredit.ohio.gov</p>

*Additional college or post-secondary education may be required in this field

Possible Career Pathways

Welder	Inspector
Robotic Welding Operator/Programmer	Metal Fabricator