



Great Oaks Firefighting and Emergency Medical Service Essential Skills Profile

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

Recommended WorkKeys ® Scores for Firefighting and Emergency Medical Service

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

*Practice tests and more information at <https://jobseeker.ohiomeansjobs.monster.com/Assessments/Home.aspx>

Recommended Essential Skills 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	Stooping, bending, walking, demonstrating, and using equipment such as weights	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)	
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 the 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 an 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
Coordination (eye-hand)	High
Ability to follow sequence or to determine the sequence of actions to a successful conclusion	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 the performance of yourself, other individuals, or organizations to make improvements or take corrective action.	High

Applied Mathematics Skills * Recommended WorkKeys® Scores 4

Understanding of numbers	Work with whole numbers and decimals. Convert fractions to decimals and/or convert from decimals to percentages.
Mathematical Calculations	Use one or two-step calculations to solve problems, decide what information, calculations or unit conversions to use to answer a problem
Solving problems with math	Solve problems that require mathematical operations with multiple units (e.g. 6 feet 4 inches or 4 hours 30 minutes), identify calculation mistakes

Workplace Documents Skills * Recommended WorkKeys® Scores 5

Complexity	Mostly clear and direct but with multiple details, may have complex sentences and/or conditional situations
Information and detail	May need to meet inferences, differentiate/interpret details
Vocabulary	Industry jargon, acronyms, use context to understand words

Graphic Literacy Skills * Recommended WorkKeys® Scores 4

Using Charts/graphs	Locate information in charts or graphs
Interpreting Information	Compare two or more pieces of information, identify trends/patterns, make inferences and identify graphics that accurately represent data

Additional Recommended Abilities

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.

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 the 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 firefighting 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.	Act 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 the 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 the ambulance ride.	Observe, record, and report to the physician the patient's condition or injury, the treatment provided, and reactions to drugs or treatment.
Drive the mobile intensive care unit to the specified location, following instructions from the emergency medical dispatcher.	Decontaminate the ambulance interior following treatment of the patient with infectious disease and report the case to the 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 the patient for placement on a stretcher and ambulance transport, using a backboard or other spinal immobilization device.	Communicate with dispatchers or treatment center personnel to provide information about the situation, arrange the reception of victims, or 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, determine the circumstances of the emergency, and administer emergency treatment.
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Technology

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

Certifications Students Can Earn

Credential	Ohio Graduation Points
State of Ohio and National Registry of Emergency Medical Technicians	12
State of Ohio Professional Firefighter I	12
State of Ohio Professional Firefighter II	12
National Incident Management System 100	4
National Incident Management System 700	4
National Incident Management System 200	1
National Incident Management System 800	1
OSHA 10 Healthcare	1
American Heart Association Basic Life Support CPR, First Aid Certification	1
Hazardous Materials Operations	N/A
Hazardous Materials Awareness	N/A

Possible College Credits

College Credit Plus (CCP)	The CCP program provides Ohio high school students an opportunity to complete college courses and earn transcribed credit.
Career Technical Assurance Guides (CTAGs)	CTAGs award college credit for career-technical coursework to students who complete an approved course and earn a qualifying score at the end of course exam.
Articulated Credit	Some Great Oaks career-technical programs have agreements with colleges where students can earn credit toward a specific degree.

Please speak with your school counselor, Great Oaks counselor and/or career technical instructor to learn more about these potential opportunities.

Possible Career Pathways

Firefighter/EMT-PT Transporter	Fire Safety Inspector
Paramedic ER Technician	Fire Officer