

Great Oaks Firefighting / 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 Work Keys 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:	
Multi step oral instructions	High
Written instructions/technical manuals-multi step	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	High
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.)	
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	High
understand, asking questions as appropriate, and not interrupting at inappropriate times.	
Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of	High
alternative solutions, conclusions or approaches to problems.	
Monitoring: Monitoring/assessing performance of yourself, other individuals, or	High
organizations to make improvements or take corrective action.	

Reading Skills * See Work Keys Recommended Scores	
Math Skills * See Work Keys Recommended Scores	
Counting-Recording-Comparing-Calculating	Whole numbers
Calculating Fractions, ratios, formulas, square	Pre-Algebra/Geometry
roots	

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.

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
Data base user interface and query software	

Available Certifications

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

Possible College Credits

College Credit Plus in English, Math, Social	Must be preapproved. Must pass a college
Studies, or Science	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:

	 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: 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