 

# High School Based Emergency Medical Services (EMS) Educational Programs Guide

Virginia Department of Health  
Office of Emergency Medical Services  
1041 Technology Park Drive  
Glen Allen, Virginia 23059  
(804) 888-9100

Virginia Department of Education  
Office of Career, Technical, and Adult Education  
P.O. Box 2120  
Richmond, Virginia 23218-2120  
(804) 371-2121

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## Preface

Meeting the increasing emergency medical service (EMS) demands of an aging population is a challenge for many communities. One of the mechanisms for meeting this demand is to introduce emergency medical programs to students during high school. This document was developed through a joint effort of the Virginia Office of Emergency Medical Services (OEMS) and the Virginia Department of Education (VDOE) to provide information to local school divisions in establishing consistent standards for EMS programs. Additionally, this information should assist programs in meeting the requirements as set forth by VDOE and OEMS.

These requirements are referenced wherever possible. This information is derived from the vast experience of instructors currently teaching emergency medical responder (EMR) and emergency medical technician (EMT) courses. We acknowledge and appreciate the dedication of the EMS educators who donated the time, expertise, and experience that made this document possible.

## Purpose

The purpose of this document is to reinforce requirements of EMS educational programs and to share information to ensure quality and consistency in EMS programs offered in high schools and technical centers throughout Virginia.

## Scope

This document provides foundational information for establishing and conducting an EMR or EMT program within the secondary education setting, in accordance with the regulations of the Virginia OEMS and the VDOE. All EMS courses must be conducted in accordance with [Virginia EMS Regulations](https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/) (12VAC5-31) and the Virginia OEMS [Training Program Administration Manual](http://www.vdh.virginia.gov/emergency-medical-services/education-certification/documents-forms-downloads/ems-training-program-administration-manual/) (TPAM). This manual outlines the requirements for medical direction, course length, instructor/coordinator criteria, student-selection criteria, student/parent information, textbook selection, clinical requirements, testing requirements, and equipment requirements.

## Requirements

School divisions and education coordinators (EC) are required to stay up-to-date on changes in regulations, policies, and standards from oversight organizations. The following are minimum requirements regarding information that must be reviewed on the first day of class:

* Instructors must meet the VDOE and OEMS requirements when announcing the course (see Instructor/Coordinator Selection).
* CTE administrators must complete a new course application with VDOE.
* Courses must be approved by OEMS prior to the course start date.
* Courses must meet OEMS requirements; third-party programs without approval are not acceptable.
* Medical director/physician course director (PCD) must be approved by OEMS.
* Only Virginia OEMS physicians can be PCDs.
* Courses must meet length per [the Career and Technical Education Reporting System (CTERS) Manual](http://www.doe.virginia.gov/info_management/data_collection/instruction/career_tech/index.shtml) requirements.
* Course competencies must be completed from those listed in Virginia’s Educational Resource System Online (VERSO), student competency records must be kept using CanDo, and CTE certification must be verified before graduation.
* Signatures on Coordinator Attestation Statements must be completed with course submission paperwork.
* Students must attend at minimum 85% of the didactic and lab aspects of the course to be eligible for EMS certification testing ([12VAC5-31-1501](https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section1501/)).

## General Recommendations

It is strongly recommended that course instructors/coordinators meet with each prospective student and a parent/guardian before enrollment in an EMS course. During this meeting, educators can ensure that parents/guardians and the student fully understand the physical, mental, didactic, and psychomotor requirements of the EMS course. All signatures obtained from students should also have a parent/guardian signature obtained regardless of age, unless student is emancipated while in a high school program.

School divisions are strongly encouraged to announce and have students enroll in an EMR and EMT course. This will allow students for the greatest flexibility in obtaining EMS certification.

Program personnel may contact VDOE and OEMS as frequently as needed for assistance.

## Instructor/Coordinator Requirement

The instructor/coordinator for any Virginia EMS program must possess and maintain a current Virginia EC certification in accordance with the Virginia EMS Regulations ([12VAC5-31-1548](https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section1548/)). An example of the certification is pictured below (Figure 1). If the instructor/coordinator is employed by the school division, he or she must obtain and maintain a valid Virginia teaching license through the process prescribed by the VDOE. All instructors must maintain current OEMS provider and educator certification to teach any EMS course.

School divisions must verify and keep on file verification of the Virginia EC certification. In lieu of a copy of the physical card, this information can be obtained using the [EMS Provider Search](https://vdhems.vdh.virginia.gov/emsapps/ProviderSearch.html) function on the OEMS web page or by calling the Division of Educational Development at 804-888-9100.

Education coordinators are responsible for all aspects of the EMS program. They are required to be in the classroom with students during any class time associated with the announced EMS program or have an approved substitute Virginia-certified EC. The school and the EMS program’s EC must approve any additional ECs or classroom assistants.



Figure 1 - Example of Education Coordinator Certification

## Medical Direction Requirements

All EMS courses must be endorsed and supported by a PCD as evidenced by an original signature on a Course Approval Request Form ([EMS.TR.01](http://www.vdh.virginia.gov/emergency-medical-services/education-certification/documents-forms-downloads/#Instructorforms)). Physician course directors must hold current endorsement as an EMS physician issued by the Virginia OEMS in accordance with the Virginia EMS Regulations ([12VAC5-31](https://law.lis.virginia.gov/admincode/title12/agency5/chapter31)). Medical director involvement is paramount in EMS courses. As such, some medical directors may require consultation fees. It is recommended that medical directors meet with the EMS students whenever possible, but at minimum once per course.

## Curriculum

EMS courses are to be taught, at minimum, in accordance with the U.S. Department of Transportation’s [National Emergency Medical Services Education Standards](https://www.ems.gov/education.html) (NEMSES) and the [Virginia Emergency Medical Services Education Standards](http://www.vdh.virginia.gov/emergency-medical-services/virginia-certification-program-outlines/) (VEMSES). In accordance with the VDOE, all EMS programs should utilize the competencies in the [VERSO](http://www.cteresource.org/verso/categories/health-science) system. Educators must ensure the appropriate [Virginia Scope of Practice](http://www.vdh.virginia.gov/emergency-medical-services/education-certification/documents-forms-downloads/ems-training-program-administration-manual/) procedures and formulary components are included in the program. School divisions may not remove any OEMS/VDOE competencies.

There are many EMT textbooks available, written to different reading levels. It is important that the textbook to be used in the course be the most current edition available and of a reading level comparable with the student’s education.

## Equipment Resources

Minimum recommended equipment standards have been set by the Virginia OEMS to facilitate the practical lab sections of the course. A minimum number of equipment sets (2:1 student-to-equipment set ratio) should be available for each student group while maintaining a 6:1 student-to-instructor ratio in the lab setting. The minimum equipment recommendations are available on the Virginia OEMS website.

The Virginia OEMS has prepared an interactive spreadsheet that will ensure sufficient equipment is available for classes of differing sizes. By placing the number of students in the specified section of the spreadsheet, the number of sets of equipment is automatically calculated. This chart is available on the Virginia OEMS website.

It is recommended that courses are conducted in classrooms where the minimum amount of equipment for didactic and laboratory activities is available. It is strongly recommended that there be adequate secure space for equipment with locking cabinets. All student records must comply with VDOE and Virginia OEMS requirements. The EC and school administration should assure adequate access to records and develop a process by which the EC may keep copies they need separately.

## Course Length

The VDOE requires that EMT courses offered by local public school divisions at the secondary level have a course length per the [CTERS Manual](http://www.doe.virginia.gov/info_management/data_collection/instruction/career_tech/index.shtml) (36 weeks).

Courses should ensure student/instructor contact in a didactic and lab setting taught in a minimum of two-hour blocks by a Virginia OEMS-certified EC.

The EC and PCD shall provide sufficient instruction and lab time, covering all required areas in VEMSES and should ensure the student EMR/EMT candidate is competent and possesses the necessary knowledge, skills, and clinical experience necessary to perform as an entry-level EMR or EMT. Such preparation should prepare the candidate to be successful at the cognitive and psychomotor exams required to obtain certification. Ultimately, Virginia EMS courses are based on student competency, not a minimum number of hours.

The ratio for psychomotor labs must be no greater than a 6:1 student-to-instructor ratio in a direct lab setting ([12VAC5-31-1447](https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section1447/)). Students may rotate from the classroom to the lab to meet the 6:1 ratio guideline; however, this will increase the time required to complete the course of study if additional instructors are not available.

## Student Enrollment and Selection Criteria

Due to the nature of EMS and the stresses, both physical and mental, to which the student will be exposed, not all students are good candidates for an EMS program. It is imperative that students and parents/guardians be aware of the course requirements, including clinical experience. All students enrolled in a Basic Life Support (BLS) EMS course must be a minimum of 16 years of age at the beginning date of the certification course and meet all BLS student requirements as specified in the Virginia EMS Regulations ([12VAC5-31-1503](https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section1503/)). These will be reviewed with students and verified on the first day of the course.

All students 16-18 years of age at the start of the course must have a signed Virginia OEMS Parental Permission Form ([EMS.TR.07](http://www.vdh.virginia.gov/emergency-medical-services/education-certification/documents-forms-downloads/#Instructorforms)) on file before the start of the course.

Students must have a valid Social Security number (SSN). Non-US citizens who do not possess a SSN must have an appropriate visa. This shall be verified by the Virginia OEMS per [TPAM Policy Number T-1507](http://www.vdh.virginia.gov/emergency-medical-services/education-certification/documents-forms-downloads/ems-training-program-administration-manual/). This shall be submitted with a manual enrollment form to the Virginia OEMS. Until approved by the Virginia OEMS, the student cannot enroll in the program. Students who do not meet this requirement are not eligible for course enrollment. Students who are not eligible for enrollment in an EMS program should not be allowed to participate, sit in, or monitor the program.

Students enrolled in an EMT course will be required to complete clinical training rotations and may be exposed to physical and mental stresses above those experienced in a typical school setting. These rotations may require after-school or weekend hours to complete. To ensure that prospective students and parents are informed and understand the nature of this course, an information packet outlining the course requirements should be given to each prospective student/parent for review before enrollment. The information packet should include, at a minimum:

1. Letter from the school
2. Letter from the course instructor/coordinator
3. Parental notification form from the course instructor/coordinator
4. Parental approval form from the school
5. First Class Paperwork which includes:
   1. Prerequisites for EMS Training (TR.35)
   2. Functional Position Description for the BLS Provider (TR.14B)
   3. Course Expectations for Successful Completion (TR.16)
   4. BLS Certification Testing (TR.11B)
   5. Virginia Accommodation Policy (TR.15A)
   6. National Registry of Emergency Medical Technicians (NREMT) Accommodation Policy (TR.15B)
6. Student Permission Form (TR.07)
7. Immunization requirements and checklist
8. Hepatitis-B non-participation form
9. Course syllabus
10. Checklist of required forms needing signature
11. Mature content permission form

A sample information packet has been provided as Appendix B.

It is imperative that school counselors understand the requirements and nature of the course before assigning students. It is highly recommended that a test of each student’s reading comprehension be conducted and that the instructor/coordinator and school division establish acceptable reading levels for the course.

Students with disabilities who are admitted to the program shall have an individualized education program (IEP). The EMS course instructor/coordinator must meet with the special education committee to develop the IEP. IEPs and 504 plans must meet all BLS student requirements as specified in the Virginia EMS Regulations ([12VAC5-31-1503](https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section1503/)). It is important to note that simply because a student has an IEP/504 within an educational program, this does not automatically translate to those being applied to an EMS program and testing.

Any prospective student who does not meet the requirements may submit for a variance/exemption to the Virginia OEMS, [Division of Regulation and Compliance](http://www.vdh.virginia.gov/emergency-medical-services/regulations-compliance/). Please note that these variances/exemptions only apply to coursework and psychomotor testing. Students requiring accommodations on the cognitive exam shall request these during the candidate application with the NREMT. Educators are encouraged to start this process at the beginning of the course so appropriate decisions can be made early.

Each course has an enrollment limitation determined by available resources, be that staffing or equipment, up to a maximum of 30 students ([12VAC5-31-1447](https://law.lis.virginia.gov/admincode/title12/agency5/chapter31/section1447/)). Additionally, some Virginia school divisions open their school year in August and others open in September; therefore, the start date EMS courses throughout the Commonwealth may vary.

## Clinical/Field Requirements

The Virginia OEMS establishes the clinical requirements for certification at the EMT level. A minimum of 10 patient contacts is required, with at least five clinical or field contacts in a hospital emergency department or as ride-along tours with local emergency medical service agencies. No more than five clinical or field contacts may be done by simulation. These shall be documented on the ([EMS.TR.05](http://www.vdh.virginia.gov/emergency-medical-services/education-certification/documents-forms-downloads/#Instructorforms)) form.

The coordination of rotations may require completion outside normal school hours. The school division is responsible for determining transportation requirements for these rotations. School divisions are required to ensure that contractual agreements with a local healthcare facility or EMS agency are in place before the start of the EMT program to permit students to complete the clinical component. Additionally, the school division is responsible for ensuring that all required medical and liability insurance for the student is in effect before the start of EMT classes.

## Testing Requirements

The students’ testing requirements for the completion of the course of study to receive school credit are established by the school division and the course instructor/coordinator. It is highly recommended that a comprehensive cognitive and psychomotor examination be administered at the end of each module of the course. Though not required, it is highly recommended that students qualify for and take the examination for certification as an EMR and/or EMT in the Commonwealth of Virginia.

For students to receive student-selected verified credit for the course, it is recommended that they successfully complete the EMR and/or EMT certification exams. Other credentialing options for students to earn the student-selected verified credits are identified within the EMT course description in the [Administrative Planning Guide](http://www.cteresource.org/apg/search?utf8=%E2%9C%93&amp;coursesearch=emergency%2Bmedical%2Btechnician&amp;commit=Course%2BSearch). Students who do not meet course requirements will not be eligible for certification testing.

Testing fees do apply. The Virginia OEMS currently pays for a student’s first attempt at the cognitive certification exam. The Virginia OEMS does not pay for subsequent cognitive exams or any psychomotor examinations. Subsequent attempts for the cognitive exam and all psychomotor examinations may be covered by Perkin’s funding. Students who do not show up for a scheduled certification exam will forfeit the provided funding for subsequent testing.

A candidate has up to six attempts for the cognitive exam and four attempts at the psychomotor exam to gain certification. All testing registration must be completed online. Information regarding registration is listed in last class paperwork. It is imperative that educators clearly explain testing timelines to students.

When possible, it is recommended that course instructors/coordinators register directly with Pearson VUE in a group block. This service is available for a fee paid directly to Pearson VUE. It is recommended for educators to work closely with their regional EMS councils to ensure adequate and appropriate scheduling of the initial psychomotor exam. Being that there is no test order requirement, it may be feasible to schedule a student’s cognitive exam prior to the psychomotor date to decrease the amount of time that lapses from the end of the program to testing.

For students who are not successful in testing, there are continued education (CE) hours required to gain additional attempts. Remediation for students should be provided by the program for students to gain additional eligibility for testing.

## Dual Enrollment with Virginia Community College System (VCCS)

It is recommended that each school division with an EMS program establish a dual enrollment or articulation agreement with a local community college. These agreements allow students to obtain college-level credit for successful completion of the courses. Several programs in the Commonwealth are currently operating under this system, with positive outcomes for both the institutions and the students. School divisions are encouraged to reach out to their local VCCS EMS program for more information.

## Accreditation

Accreditation of high school EMS programs is available through the Virginia OEMS. Accreditation allows for EMS programs to have greater autonomy while meeting more stringent requirements. Educators and programs seeking accreditation show a dedication to EMS education and national standards. School divisions interested in BLS Program Accreditation and accredited programs can reference the [Virginia OEMS website](http://www.vdh.virginia.gov/emergency-medical-services/ems-training-program-accreditation/) for additional information.

Instructor and psychomotor testing requirements under an accredited program differ from that of non-accredited programs. Students enrolled in an accredited EMR program may be exempted from the psychomotor exam if the program has adopted the competency-based education requirements. Programs which are not accredited are encouraged to follow the competency-based model. More information about programmatic accreditation can be obtained from the Virginia OEMS.

## Appendix A – References and Helpful Links

Virginia Department of Education: [Career and Technical Health and Medical Sciences instruction](http://www.doe.virginia.gov/instruction/career_technical/health_medical_sciences/index.shtml)

Virginia OEMS: [VDH Emergency Medical Services](http://www.vdh.virginia.gov/emergency-medical-services/)

Virginia OEMS TPAM: [VDH EMS Education Certification Documents forms to download EMS Training Program Administration Manual](http://www.vdh.virginia.gov/emergency-medical-services/education-certification/documents-forms-downloads/ems-training-program-administration-manual/)

Virginia OEMS Regulations: [VDH Medical Services Regulations Compliance](http://www.vdh.virginia.gov/emergency-medical-services/regulations-compliance/regulations/)

Virginia OEMS Division of Regulation and Compliance: [VDH Emergency Medical Services Regulation & Compliance](http://www.vdh.virginia.gov/emergency-medical-services/regulations-compliance/)

Virginia OEMS Forms: [VDH Emergency Medical Services Education Certifications, Documents, and forms to download](http://www.vdh.virginia.gov/emergency-medical-services/education-certification/documents-forms-downloads/)

National Registry of EMT: [NREMT](https://www.nremt.org/rwd/public)

Virginia Regional EMS Councils: [VAEMS](https://www.vaems.org/)

National Highway Transportation Safety Administration’s (NHTSA’s) Office of EMS: [NHTSA Office of Emergency Medical Services](https://one.nhtsa.gov/Driving-Safety/Office-of-Emergency-Medical-Services)

National Association of State EMS Officials Projects: [NASEMSO](https://nasemso.org/)

Administrative Planning Guide: [CTE Resource APG](http://cteresource.org/apg/)

VERSO Curriculum for Health Sciences: [CTE Resource VERSO Health Science](http://cteresource.org/verso/categories/health-science)

CTERS Manual: [DOE Information Management Data Collection](http://www.doe.virginia.gov/info_management/data_collection/instruction/career_tech/index.shtml)

## Appendix B – Sample Paperwork

VOEMS Initial BLS Training Programs: First Class Paperwork

VOEMS Initial BLS Training Programs: Last Class Paperwork