

# Technical and Vocational Programs

## A 45 34 0 Emergency Medical Science - Associate in Applied Science

### CONCENTRATION OVERVIEW

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce. Students will gain complex knowledge, competency, and experience while employing evidence-based practice under medical oversight and serve as a link from the scene into the healthcare system.

COA's Emergency Medical Services – Paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). Contact CAAHEP: Commission on Accreditation of Allied Health Education Programs (CAAHEP), 9355 – 113th St. N, #7709, Seminole, FL 33775, 727-210-2350. [www.caahep.org](http://www.caahep.org)

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

### Student Learning Outcomes – Upon completion of the program, students will:

1. Apply the basic concepts of pathophysiology, development, and pharmacology to the assessment and management of a wide variety of emergency patients.
2. Demonstrate proficiency in administration of medications and safely accessing venous circulation.
3. Establish and/or maintain a patent airway, oxygenate, and ventilate any patient.
4. Demonstrate technical proficiency in all skills necessary to fulfill the role of entry-level paramedic in the state of North Carolina.
5. Demonstrate proficiency in the role of entry-level paramedic in the state of North Carolina.

**Partnership: N/A**

**Some Health Sciences and Wellness Programs may have additional requirements related to required GPAs, grades, and other progression policies required for graduation. Please see program handbooks for more information.**



# A 45 34 0 Emergency Medical Science - Associate in Applied Science

First Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ACA 111 (or ACA 122) College Student Success		1	0	0	1	1
ENG 111 Writing and Inquiry	Prereq: ENG 002 Tier 1	3	0	0	3	3
MAT 143 Quantitative Literacy	Prereq: MAT 003 Tier 1 and ENG 002 Tier 1	2	2	0	4	3
EMS 110 EMT	Prereq: Admission to EMS Program	6	6	3	15	9
<b>TOTAL SEMESTER HOURS</b>		<b>12</b>	<b>8</b>	<b>3</b>	<b>23</b>	<b>16</b>
First Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
BIO 163 Basic Anatomy and Physiology (Or BIO 168 and BIO 169 - recommended option for transfer to a 4 year institution)**	Pre-Requisites: ENG 002 Tier 1, and either BIO 090 or one unit of HS Biology	4	2	0	6	5
PSY 150 General Psychology	Prereq: ENG 002 Tier 1	3	0	0	3	3
EMS 120 Advanced EMT	Prereq: EMS 110 Coreqs: EMS 121	4	6	0	10	6
EMS 121 AEMT Clinical Practicum	Prereq: EMS 110 Coreqs: EMS 120	0	0	6	6	2
<b>TOTAL SEMESTER HOURS</b>		<b>11</b>	<b>8</b>	<b>6</b>	<b>25</b>	<b>16</b>
First Year Summer Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
EMS 160 Cardiology I	Prereq: EMS 120 Coreqs: EMS 130, 210, 221	2	3	0	5	3
EMS 130 Pharmacology	Prereq: EMS 120 Coreqs: EMS 160, 210, 221	3	3	0	6	4
EMS 210 Adv. Patient Assessment	Prereq: EMS 110 or Admission to EMS Bridge Program Coreqs: EMS 130, 160, 221 or Admission to EMS Bridge Program	1	3	0	4	2
EMS 221 EMS Clinical Practicum II	Prereq: EMS 121 Coreqs: EMS 130, 160, 210	0	0	6	6	2
<b>TOTAL SEMESTER HOURS</b>		<b>6</b>	<b>9</b>	<b>6</b>	<b>21</b>	<b>11</b>

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Second Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ENG 112 Writing/Research in the Disciplines	Prereq: ENG 111	3	0	0	3	3
EMS 220 Cardiology II	Prereq: EMS 160, 130, 210, 221 Coreqs: EMS 231, 250, 260	2	3	0	5	3
EMS 231 EMS Clinical Practicum III	Prereq: EMS 221 Coreqs: EMS 220, 250, 260	0	0	9	9	3
EMS 250 Medical Emergencies	Prereq: EMS 160, 130, 210, 221 Coreqs: EMS 220, 231, 260	3	3	0	6	4
EMS 260 Trauma Emergencies	Prereq: EMS 160, 130, 210, 221 Coreqs: EMS 220, 231, 250	1	3	0	4	2
<b>TOTAL SEMESTER HOURS</b>		<b>9</b>	<b>9</b>	<b>9</b>	<b>27</b>	<b>15</b>
Second Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
Human/FA Elective	Varies	3	0	0	3	3
EMS 240 Patients with Special Challenges	Prereq: EMS 220, 231, 250, 260 Coreqs: EMS 241, 270, 285	1	2	0	3	2
EMS 241 EMS Clinical Practicum IV	Prereq: EMS 231 Coreqs: EMS 240, 270 & 285	0	0	12	12	4
EMS 270 Life Span Emergencies	Prereq: EMS 220, 231, 250, 260 Coreqs: EMS 240, 241 & 285	3	3	0	6	4
EMS 285 EMS Capstone	Prereq: EMS 220, 231, 250, 260 Coreqs: EMS 240, 241 & 270	1	3	0	4	2
<b>TOTAL SEMESTER HOURS</b>		<b>8</b>	<b>8</b>	<b>12</b>	<b>28</b>	<b>15</b>
<b>TOTAL DEGREE HOURS</b>						<b>73</b>

\*\*Four year institutions determine their acceptance of transfer courses ...students should check with the 4 year institutions they plan to attend to see if this option will be accepted.