Emergency Services

Associate of Applied Science Degree in Emergency Services

The Associate of Applied Science degree in Emergency Services is designed to equip students with the skills and knowledge needed for those pursuing a career or already in an established career within various areas of the emergency services. These areas would include Fire Services, Emergency Telecommunicator (dispatchers), Emergency Medical Technician, and Emergency Administration. Many of the required courses supplement course credit that can be granted through external professional certification courses. The core of this program emphasizes the essential skills necessary in these fields, including:

- Having a working understanding of the field of career opportunities in Emergency Services.
- Understanding the relationship among the various Emergency Services units within the community.
- Developing a comprehensive understanding of the relationship between the community, the local government, and the respective Emergency Services Units.
- Identifying the importance of a planned and structured emergency response to a disaster, including both natural disasters and acts of terrorism.
- Understanding the importance of both internal and external communication in the field of Emergency Services.

For more information, visit the <u>E (http://www.ccm.edu/academics/</u> <u>divdep/bmet/department-of-engineering-technologies-and-</u> <u>engineering-science/fire-science/)mergency Services</u> website.

Degrees

Emergency Services

(P3461)

General Education Foundation

Co	Communication			
	ENG-111	English Composition I		
	ENG-112	English Composition II		
Math-Science-Technology				
	Mathematics	Elective		
Social Science / Humanities				
	PSY-113	General Psychology (or any other Social Science/Humanities course)		
General Education			9	
	SOC-120	Principles of Sociology		
	CMP-135	Computer Concepts With Applications		
	SOC-214	Cultural Diversity in America - the Sociology of Ethnic and Minority Groups		
	or ISA-110	Intercultural Communication		
Ge	General Education Foundation Credits			
Emergency Services Core				
	CJS-105	Introduction to Careers in Public Safety		

Т	Total Credits 6				
R	Restricted Elective Tracks Credits				
	FST-210	Current Issues in Fire Science/ Capstone Experience			
	FST-207	Emergency Medical Technician			
	FST-206	Fire Hydraulics			
	FST-205	Fire Investigation			
	FST-204	Fire Protection, Building Construction			
	FST-202	Hazardous Materials			
	FST-201	Fire Service Management			
	FST-107	Fire Apparatus Specifications, Inspections and Maintenance			
	FST-106	Fire Protection Systems			
	FST-103	Fire Fighting Tactics and Strategy			
	FST-102	Fire Prevention and Related Codes			
	FST-101	Introduction to Fire Science			
F	ire Science Op	tion			
R	Restricted Elec	tive Tracks	21		
	CHM-105	Forensic Science			
	POL-231	State and Local Government			
	COM-104	Interpersonal Communication			
	CJS-127	Introduction to Homeland Security			
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Introduction to Emergency Management

Faculty

CJS-126

Dr. William Solomons Chairperson, Assistant Professor, Criminal Justice Ph.D., Capella University M.A., Seton Hall University B.A., CUNY John Jay College of Criminal Justice SH 303 973-328-5648 wsolomons@ccm.edu

Courses

FST-101. Introduction to Fire Science. 3 Credits.

This class is considered to be the foundation course for all students of Fire Science Technology. Students are introduced to the concept of the systems approach to fire protection by presenting the components of modern fire department responsibility including emergency incident management, public education, training, resource management and customer service. Students who have completed their Fire Fighter 1 will receive credit for this course.

FST-102. Fire Prevention and Related Codes. 3 Credits. LECT 45 hrs

This course provides students with basic knowledge of federal, state and local codes related to building construction, fire and life safety requirements, and other codes. Includes New Jersey state fire safety regulations and related state requirements. National Fire Protection Association (NFPA) and other standards related to fire protection and life safety are examined. Students who have completed their Fire Fighter 1 will receive credit for this course.

FST-103. Fire Fighting Tactics and Strategy. 3 Credits.

LECT 45 hrs

Analysis of the basic rules of fire fighting strategy, defining engine company responsibilities, defining ladder company functions, correlating mutual aid fires and general fire problems. Studies the effective management of suppression forces at various fire situations. Includes consideration of pre-fire planning, problem identification and solution implementation.

FST-106. Fire Protection Systems. 3 Credits.

LECT 45 hrs

A study of the nature of public and private fire protection with an emphasis on analysis of systems of fire detection, fire alarm, fire communications, water distribution networks, fire service, hydraulics and fire suppression.

Prerequisites: Permission of department chair.

FST-107. Fire Apparatus Specifications, Inspections and Maintenance. 3 Credits.

LECT 45 hrs

This course covers the principles of care, maintenance and operation of fire apparatus and pumps. Includes pump construction and accessories, pumping techniques, power development and transmission. Also includes driving, troubleshooting and producing effective fire streams.

FST-201. Fire Service Management. 3 Credits.

LECT 45 hrs

This course introduces the student to the principles of personnel management through the use of effective leadership techniques. Topics include overview of the fire service as an organization and the officer's role in it, interpersonal communications, personality typing, skill development, leadership techniques, group dynamics and principles of fire company management. **Prerequisites:** FST-101 or equivalent.

FST-202. Hazardous Materials. 3 Credits.

LECT 45 hrs

A comprehensive study of the physical, chemical and toxicological characteristics of hazardous materials. This course includes basic methods of recognition and identification based upon the chemical and physical properties of hazardous materials, basic safety procedures when utilizing specific types of protective clothing and equipment, and basic tactical information relating to scene management.

Prerequisites: MAT-007 or passing score on the algebra section of the placement test.

FST-204. Fire Protection, Building Construction. 3 Credits. LECT 45 hrs

This course introduces basic construction principles and the special characteristics of wood and ordinary construction as they concern the fire service. Primary emphasis is on improving the fire officer's ability to ensure firefighter safety by recognizing common causes and indicators of failure and other hazards relating to building construction. Course material enables the fire officer to better predict the overall reaction of a building to fire conditions.

FST-205. Fire Investigation. 3 Credits.

LECT 45 hrs

An in-depth course that defines successful methods for conducting fire investigations. Specific topics include basic chemistry of fire, point of origin, fire cause (both accidental and incendiary), motivation of the fire setter, fire scene investigations, evidence collection, photography, follow-up investigation and court testimony.

FST-206. Fire Hydraulics. 3 Credits.

LECT 45 hrs

This course is a concentrated study in the application of mathematics and physics to the properties of water as used in fire suppression operations. Classic hydraulics formulas are used to solve problems for flow velocity, nozzle reaction, friction loss, water distribution systems, fire flow testing, fire service pumps and fire ground hose evolutions.

Prerequisites: MAT-007 or passing score on the algebra section of the placement test.

FST-207. Emergency Medical Technician. 6 Credits. LECT 60 hrs LAB 60 hrs

This course is designed to prepare the basic Emergency Medical Technician in accordance with the United States Department of Transportation curriculum and the New Jersey Department of Health guidelines. This course covers an introductory survey of emergency medical services including medical, legal/ethical aspects, role of the Emergency Medical Technician, patient assessment, care of wounds and fractures, airway maintenance, medical and environmental emergencies, patient transportation, emergency childbirth and basic extrication. After completion of this course, the student will be eligible to take the National Registry Examination for certification as an Emergency Medical Technician-Basic. Students who are already registered EMT-Basic in New Jersey will be given credit for this course.

FST-210. Current Issues in Fire Science/ Capstone Experience. 3 Credits.

LECT 45 hrs

A review of the current problems affecting the fire service with particular emphasis on resource allocation, planning and fiscal constraints. The capstone experience requires the student to author and present a scholarly research paper on a topic covered in this course. Students must have completed 40 credit hours in the Fire Science Curriculum or have permission of department chair. **Prerequisites:** Permission of department chair.