

Bachelor of Science in Fire Science

Program Mission

The mission of the Anna Maria Fire Science Program is to equip students with analytical, rhetorical, and conceptual knowledge, skills and abilities to lead the fire and emergency services and ancillary fire safety professions in a rapidly changing, fiscally conscious, and multi-cultural world.

Program Goals

The goals for the Bachelor of Science in Fire Science program are:

- To develop a critical understanding of the field of fire science through a balance of theory and practical application;
- To develop students who can lead, manage and collaborate with colleagues, subordinates, constituents and the communities they serve;
- To develop an interdisciplinary perspective on the issues which face Fire Science professionals;
- To develop students with the capability to lead, manage and collaborate with colleagues, subordinates, constituents and the communities they serve;
- To critically assess the current and historical strategies, practices and policies that guide the modern fire and emergency services profession, particularly in a dynamic and multi-cultural environment;
- To develop a commitment to social justice and addressing the impact of fires and emergencies upon the most vulnerable and under-represented members of society.

Educational Objectives/Learning Outcomes

Graduates of the Bachelor of Science in Fire Science program should be able to:

- Comprehend and analyze a broad range of fire science concepts including:
 - the history and lineage of the modern fire and emergency services; fundamental fire chemistry,
 - fire behavior and fire dynamics; how the various types of fire protection systems are designed to meet differences in building construction, hazard type, environmental conditions and compartment configuration
 - contemporary strategies and theories used to effectively manage and lead employees in various organizational settings and contexts.
 - relevant human resources, civil rights, labor rights, and due process legislation that pertains to the management, hiring, firing, and promotion of employees.
 - various technological, educational and legal approaches to preventing and mitigating fires.
 - how people of different ages, cultural backgrounds, and abilities behave in fires, and various approaches to mitigate the impact of these variations in behavior.
- Demonstrate leadership skills that embody a commitment to diversity, social justice and civic responsibility.
- Formulate, conduct and critique basic academic research on fire and emergency services topics.
- Accurately calculate hydraulic flow rates, static pressures, residual pressures, friction losses and pump capacities.
- Conduct a thorough and legally defensible fire investigation.