**BACHELOR'S CORE CURRICULUM**

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C260- Applications of Fire Research** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Locate, evaluate, and analyze fire-related research.** |  |
| 1. **Conduct a literature review of current research on a fire-related topic.** |  |
| 1. **Write a fire-related research proposal.** |  |
| 1. **Design a research plan using one or more qualitative and/or quantitative methodologies.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C287-Community Risk Reduction for the Fire & Emergency Services** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Become champions of risk reduction.** |  |
| 1. **Develop and meet risk reduction objectives.** |  |
| 1. **Identify and develop intervention strategies.** |  |
| 1. **Implement a risk reduction program.** |  |
| 1. **Review and modify risk reduction programs.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C271-Fire & Emergency Services Administration** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Define and discuss the elements of effective departmental organization.** |  |
| 1. **Classify what training and skills are needed to establish departmental organization.** |  |
| 1. **Analyze the value of a community-related approach to risk reduction.** |  |
| 1. **Outline the priorities of a budget planning document while anticipating the diverse needs of a community.** |  |
| 1. **Assess the importance of positively influencing community leaders by demonstrating effective leadership.** |  |
| 1. **Analyze the concept of change and the need to be aware of future trends in fire management.** |  |
| 1. **Report on the importance of communications technology, fire service networks, and the Internet, when conducting problem-solving analysis and managing trends.** |  |
| 1. **Develop a clear understanding of the national assessment models and their respective approaches to certification.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C264-Fire Prevention Organization & Management** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Describe aspects of risk reduction education and overall community risk reduction.** |  |
| 1. **Explain the fundamental aspects of codes and standards, and the inspection and plan review process.** |  |
| 1. **Describe the fire investigation process and discuss fire prevention research.** |  |
| 1. **Discuss historical and social influences and describe the master planning process.** |  |
| 1. **Describe economic and governmental influences on fire prevention.** |  |
| 1. **Explain the effects of departmental influences on fire prevention programs and activities.** |  |
| 1. **Discuss strategies for fire prevention.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C266-Personnel Management for the Fire & Emergency Services** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Identify and explain contemporary personnel management issues.** |  |
| 1. **Explain potential personnel management issues.** |  |
| 1. **Classify the collective rules, procedures, laws, and policies that relate to personnel management issues.** |  |
| 1. **Analyze simple/complex personnel management issues from recruitment to retirement.** |  |
| 1. **Formulate recommendations and solutions to personnel management issues.** |  |
| 1. **Explore organizational development and leadership styles and how they relate to personnel relationships.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C258-Political & Legal Foundations of Fire Protection** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| **1. Identify potential legal and political issues in fire and emergency services.** |  |
| **2. Describe legal lessons learned from recent cases, and identify best practices in the fire service to avoid legal liability.** |  |
| **3. Analyze and apply legal rules and political issues to manage risk.** |  |
| **4. Formulate political and legal conclusions and recommendations based on the analysis.** |  |
| **5. Locate and apply recent legal and legislative online resources.** |  |

**BACHELOR'S NON-CORE CURRICULUM**

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C280-Advanced Principles in Fire & Emergency Services Safety & Survival** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C265-Analytical Approaches to Public Fire Protection** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Discuss the uses of analytical approaches to rational decision making.** |  |
| 1. **Differentiate techniques of analysis.** |  |
| 1. **Select appropriate analytic tools to support critical thinking.** |  |
| 1. **Discuss how the use of databases, histograms, inferential statistics and probabilities and GIS are used in fire station location planning.** |  |
| 1. **Apply the 5-step cost-benefit analysis process to justify essential budgetary needs.** |  |
| 1. **Use linear programming to solve fire department equipment, revenue, facility and personnel issues.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C296-Disaster Planning & Control** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Discuss the importance of disaster planning, preparation, and mitigation.** |  |
| 1. **Evaluate the hazard assessment processes and the role of the firefighter in community disaster planning and recovery.** |  |
| 1. **Assess hazard response and planning procedures.** |  |
| 1. **Define the impact of hazard occurrence on community response.** |  |
| 1. **Define the parameters and effectiveness of an Emergency Operations Plan (EOP) and its components.** |  |
| 1. **Differentiate the multilevel agency responsibilities in disaster mitigation.** 2. **Define the relationships between disaster planning, mitigation, and recovery.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C257-Fire Dynamics** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Analyze building structural components for fire endurance and fire resistance.** |  |
| 1. **Understand the flame spread and smoke production properties of building furnishings and materials.** |  |
| 1. **Understand the importance and be able to calculate heat release rate for combustibles.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C285-Fire Investigation & Analysis** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Demonstrate a technical understanding of the characteristics and impacts of fire loss and the crime of arson necessary to conduct competent fire investigation and analysis.** |  |
| 1. **Document the fire scene, in accordance with best practice and legal requirements.** |  |
| 1. **Analyze the fire scenario utilizing the scientific method, fire science, and relevant technology.** |  |
| 1. **Analyze the legal foundation for conducting a systematic incendiary fire investigation and case preparation.** |  |
| 1. **Design and integrate a variety of arson related intervention and mitigation strategies** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C295-Fire Protection Structures & Systems** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Analyze building structural components for fire endurance and fire resistance.** |  |
| 1. **Understand the flame spread and smoke production properties of building furnishings and materials.** |  |
| 1. **Analyze, evaluate, and determine appropriate use for fire detection and alarm systems; water-based fire suppression systems; special hazard fire suppression systems; and smoke management systems, with a sophisticated understanding of how they integrate to function as a complete life safety system.** |  |
| 1. **Understand the fundamental principles related to structural fire protection, building furnishings, and fire protection systems.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C263-Fire-Related Human Behavior** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Apply knowledge to create a system that integrates human behavior factors into life safety planning and practice.** |  |
| 1. **Understand how psychology and sociology factors influence behavior.** |  |
| 1. **Demonstrate how current computer systems modeling functions.** |  |
| 1. **Locate and analyze current human-related fire research.** |  |

|  |  |
| --- | --- |
| **FESHE COURSE CODE & TITLE** | **INSTITUTION COURSE CODE & TITLE (Please include a link to course outcomes)** |
| **C269-Managerial Issues in Hazardous Materials** |  |
| **FESHE Course Outcomes** | **Institution Course Outcomes** |
| 1. **Explain and apply local, State, and Federal regulations concerning hazmat.** |  |
| 1. **Participate meaningfully in the process of planning, organizing, and training for response to hazmat/terrorist incidents.** |  |
| 1. **Interpret and act on departmental responsibility for hazmat response preparedness, incident prevention, and incident response.** |  |
| 1. **Identify and work with representatives of multiple services, levels of government, and organizations in an organized incident-management structure.** |  |
| 1. **Discuss issues pertaining to terrorism and tactical violence, including terrorism preparedness, response, and planning issues.** |  |
| 1. **Develop an incident command organizational structure for a hazmat response using the guidelines set forth in the National Incident Management System (NIMS).** |  |