**BACHELOR'S CORE CURRICULUM**

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| **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.**
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| **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.**
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| **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.**
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| **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.**
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| **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.**
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| **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**

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| **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** |
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| **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.**
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| **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.**
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| **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.**
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| 1. **Understand the importance and be able to calculate heat release rate for combustibles.**
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| **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**
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| **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.**
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| **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.**
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| **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).**
 |  |