



# GREAT NECK PUBLIC SCHOOLS

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## Curriculum Profile: Fire Science Technology

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| <u>Department</u>                       | Technology Education                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| <u>Course Name</u>                      | Fire Science Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| <u>Course Length</u>                    | ½ year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| <u>High School Credits</u>              | .5 Units                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| <u>Description</u>                      | <p>This class is designed to provide an in-depth study in the field of Fire Science Technology to our students. Our department feels a need to constantly look towards areas that are preparing all of our students for a wide variety of careers. This class provides the student interested in the Fire Service with an in-depth understanding of the many aspects of this important area that affects each and every one of us.</p> <p>Students will be introduced to the history of fire suppression in our country and throughout the world. The role and philosophy of fire departments will also be discussed. Roles at the fire scene will be studied, including incident command, engine, ladder and rescue operations. In conjunction with our architecture classes, we will also be studying types of buildings, codes and OSHA regulations. Fire insurance and the business end of firefighting will be investigated</p> <p>Current issues involving arson, hazardous materials and terrorism in our ever-changing global environment will also be units of study.</p> <p>Finally, career opportunities at the local volunteer, city, state and national levels will be topics of instruction.</p> |  |
| <u>Target/eligible students</u>         | 9-12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| <u>State Learning Standards Link(s)</u> | <a href="https://www.nysed.gov/career-technical-education/technology-education-learning-standards">https://www.nysed.gov/career-technical-education/technology-education-learning-standards</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| <u>Primary texts and materials</u>      | Emergency Response Guidebook -U.S. Department of Transportation<br>Introduction to Fire Protection -Robert W. Klinoff                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| <u>Scope/Sequence</u>                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| <u>Unit 1a</u>                          | Introduction to Class and classroom procedures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| <u>Unit 1b</u>                          | Administrative Tasks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| <u>Unit 1c</u>                          | Safety Procedures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| <u>Unit 2</u>                           | Introduction to the history of the fire service, locally, nationally, globally                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| <u>Unit 3</u>                           | Roles of fire departments and emergency services in the world                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <u>Unit 4</u>                           | Philosophy of Fire Science Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| <u>Unit 5</u>                           | Chain of command and leadership<br>Incident Command                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| <u>Unit 6</u>                           | Engine Operations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| <u>Unit 7</u>                           | Ladder Operations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| <u>Unit 8</u>                           | Rescue Operations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| <u>Unit 9</u>                           | Identifying Fire Hazards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| <u>Unit 10</u>                          | Methods of protecting life and property                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| <u>Unit 11</u>                          | Building construction types                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |

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| <u>Unit 12</u>          | Building Codes                                  |
| <u>Unit 13</u>          | Fire Law                                        |
| <u>Unit 14</u>          | Fire Triangle                                   |
| <u>Unit 15</u>          | Risk Management                                 |
| <u>Unit 16</u>          | Fire and other insurances                       |
| <u>Unit 17</u>          | Fire and arson investigation                    |
| <u>Unit 18</u>          | Fire prevention techniques and public education |
| <u>Unit 19</u>          | OSHA and governmental regulations               |
| <u>Unit 20</u>          | Hazardous materials                             |
| <u>Unit 21</u>          | Terrorism and the fire service                  |
| <u>Unit 22</u>          | Career opportunities                            |
| <u>Unit 23</u>          | Current and future issues of the fire service   |
| <u>Additional Notes</u> |                                                 |