New Hampshire
Fire Standards and Training Commission

Curriculum Committee

Firefighter Program Overview

Per FSTC policy, this orientation will cover the following topics:

(1) Overview of the structure of the program;
(2) The focus of the Visiting Committee as declared by the Commission when the Committee was established;
(3) Program prerequisites and program requirements for testing;
(4) Current course schedule format;
(5) Summary of student evaluations;
(6) Summary of past enrollment status;
(7) Historical number of training programs offered;
(8) Historical pass rates for certification examinations;
(9) Any additional information requested by the Commission specific the curriculum.

FSTC Vision

The FSTC Curriculum Committee agreed on the following guidance for the Firefighter Visiting Committee. The Firefighter I and Firefighter II programs must:
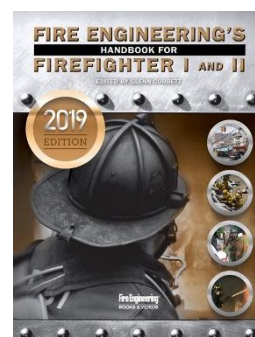
- Meet NFPA standards, including NFPA 1010 and other associated standards related to firefighter training.
- Promote student-centered active learning.
- Have clear performance objectives.
- Consider the various delivery formats, including resident, nights and weekends, and On My Time.
- Provide instructors with flexibility to adapt delivery when appropriate and within clearly defined limits.
- Provide students with opportunities to practice and develop entry-level competence.
- Use hybrid learning to prepare students for in-person performance.

Program Structure

Firefighter I

Length	202 Hours 6 week resident delivery 12-24 week field delivery
Format	Hybrid Offered as a standalone course or combined with FFII
Prerequisites	• Professional Rescuer CPR • FEMA IS-100, 200, 700 • Medical Release
Co-requisites	• Hazardous Materials Awareness Level • Hazardous Materials Operations Level with PPE and Product Control • First Aid

Firefighter II

Length	77 Hours 2 week resident delivery 8-16 week field delivery
Format	Hybrid Offered as a standalone course or combined with FFI
Prerequisites	• Firefighter I
Co-requisites	• None

The same textbook is used for both levels, Fire Engineering's Handbook for Firefighter I & II 2019. (pictured right)

The combination of Firefighter I and II saves some time by integrating similar modules together and removing a FFI skill refresher module. Combined courses typically run around 15 weeks in the field. The resident courses are only offered in a combined format and are 8-weeks in length.

Firefighter I

Modules	25

Hour Breakdown

Lecture	8 hours
Lab	6 hours
Practical	151 hours
Online	37 hours

Firefighter II

Modules	12

Hour Breakdown

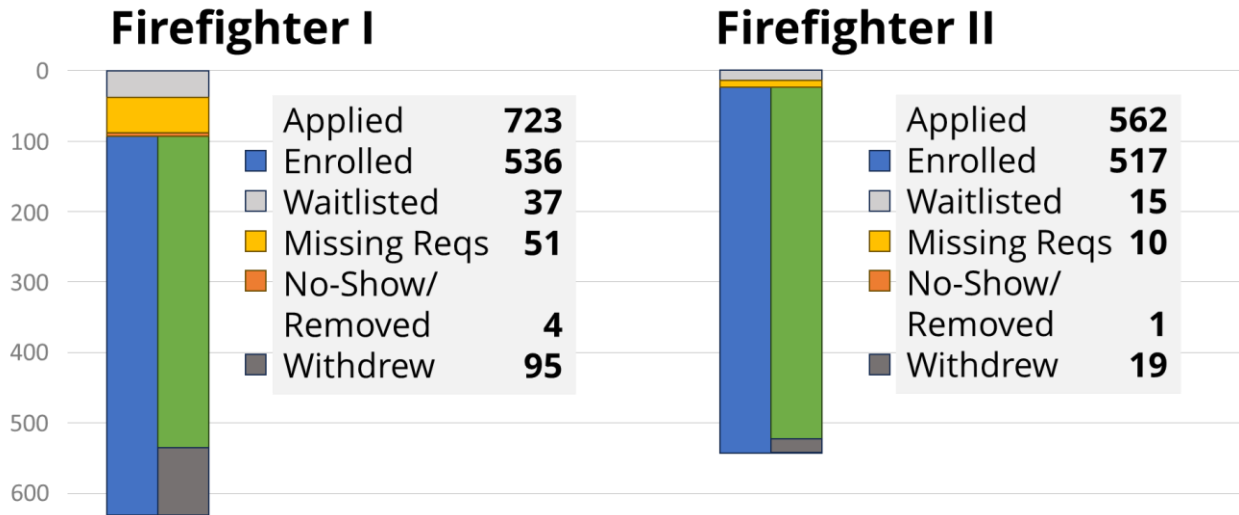| **Lecture**	0 hours
Lab	8 hours
Practical	52 hours
Online	17 hours

Firefighter I Modules

1. History
2. Wellness
3. First Aid
4. Safety
5. Cancer Awareness
6. PPE & SCBA
7. Communications
8. Fire Behavior
9. Building Construction & Utilities
10. Portable Extinguishers
11. Tools & Equipment
12. Ropes & Knots
13. Forcible Entry
14. Ladders
15. Search & Rescue
16. Ventilation
17. Water Supply
18. Fire Attack Hose & Streams
19. Firefighter Survival
20. Salvage & Overhaul
21. Rehabilitation
22. Suppression
23. Forestry
24. TIMS
25. Air Monitoring

Firefighter II Modules

1. Courage to be Safe
2. Foam & Flammable Liquids
3. FFI Skills Review
4. Assist Rescue Teams
5. Communications II
6. Preplan & Inspection
7. Public Education
8. Fire Cause & Determination
9. Fire Detection & Suppression Systems
10. Auto Extrication
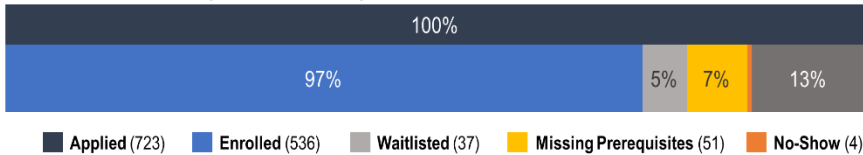11. Advanced Hose
12. Fire Suppression

Summary of Enrollments

Enrollment data were collected from the RespondNH recordkeeping system. All enrollments were taken from courses running the currently approved curriculum.
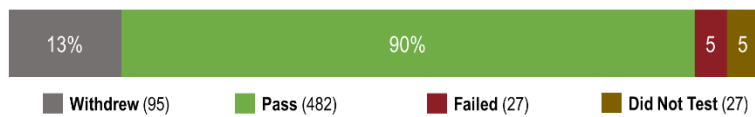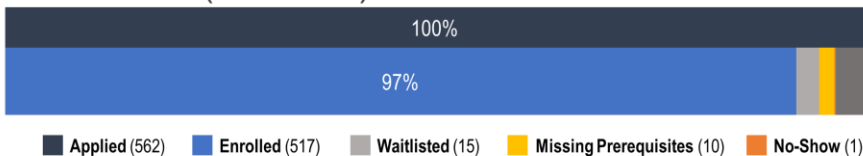
Firefighter I

Firefighter I	
Applied	**723**
Enrolled	**536**
Waitlisted	**37**
Missing Reqs	**51**
No-Show/Removed	**4**
Withdrew	**95**

Firefighter II

Firefighter II	
Applied	**562**
Enrolled	**517**
Waitlisted	**15**
Missing Reqs	**10**
No-Show/Removed	**1**
Withdrew	**19**

Firefighter I

Matriculation (2021-2024)

- 100%
- Enrolled 97%
- Waitlisted 5%
- Missing Prerequisites 7%
- No-Show 13%

Applied (723) · Enrolled (536) · Waitlisted (37) · Missing Prerequisites (51) · No-Show (4)

Attrition

- Withdrew 13%
- Pass 90%
- Failed 5
- Did Not Test 5

Withdrew (95) · Pass (482) · Failed (27) · Did Not Test (27)

Firefighter II

Matriculation (2021-2024)

- 100%
- Enrolled 97%

Applied (562) · Enrolled (517) · Waitlisted (15) · Missing Prerequisites (10) · No-Show (1)

Attrition

- Pass 77%
- Failed 21%

Withdrew (19) · Pass (399) · Failed (111) · Did Not Test (7)

Certification Testing

Firefighter I

Candidates	509
Pass Rate	93%
Average Score	81.8
Reliability	0.76
Error	3.31

Test Item Analysis

- **49%** of test items were marked correctly more than 90% of the time.
- **7%** of test items were marked correctly less than 50% of the time.
- **61%** of test items have very little predictive value for whether candidates passed or failed.
- **32%** of the above test items have a negative predictive value, meaning that candidates who marked a question correctly would go on to fail the test, and vice versa.

Firefighter II

Candidates	510
Pass Rate	79%
Average Score	76.9
Reliability	0.60
Error	2.48

Test Item Analysis

- **18%** of test items were marked correctly more than 90% of the time.
- **7%** of test items were marked correctly less than 50% of the time.
- **26%** of test items have very little predictive value for whether candidates passed or failed.
- **14%** of the above test items have a negative predictive value, meaning that candidates who marked a question correctly would go on to fail the test, and vice versa.

Student Evaluations

Students are required to complete satisfaction surveys following the completion of each module. These surveys are designed to measure key performance indicators related to training delivery and quality. Students are asked rate their level of agreement with a series of statements using a modified Likert scale.

Student Perception of Understanding

1	2	3	4	5
I don't think I can explain anything presented.	I think I would struggle to explain most of what was presented.	I think I could probably summarize most of what was presented.	I think I could explain and provide examples of what was presented.	I think I could explain everything presented in great detail.

This performance indicator measures student self-perception of how much of the course knowledge they believe they've retained. Students are asked on a scale of 1 to 5, how well do you feel you understood the concepts presented in this module?

Student Perception of Presentation

1	2	3	4	5
I think the module was confusing, disorganized, or ineffective.	I think some parts of the module were confusing or difficult to follow.	I think some things could be better, but I was generally able to follow the module.	I think I was able to follow the module and it felt engaging.	I think this module was creative and detailed.

This performance indicator measures student perception of how the course structure and presentation methods impacted their learning experience. Students are asked on a scale of 1 to 5, how engaging did you find the presentation portions of the module?

Student Perception of Instruction

1	2	3	4	5
I think the instructor(s) were unapproachable or the instructional techniques were inappropriate.	I think the instructor(s) style or techniques confusing or difficult to follow.	I think the instructor(s) were mostly effective and prepared to teach.	I think the instructor(s) techniques were good and they put in the work to help me.	I think the instructor(s) techniques were exceptional and they improved the module.

This performance indicator measures student perception of how the instructional techniques used by Division staff instructors impacted their learning experience. Students are asked on a scale of 1 to 5, how did the instructor(s) support your understanding of the material and performance of skills?

Student Perception of Applicability

1	2	3	4	5
I don't think I was prepared at all to practice the skills I learned in the module.	I don't think I was well prepared to practice the skills I learned in the module.	I think the module prepared me a little bit, but I still had a lot of questions.	I think the module was relevant and helped me practice my skills.	I think the module was highly relevant and I felt well prepared to practice my skills.

This performance indicator measures student perception of how they believe the course prepared them to apply the skills and knowledge to the next stage of their learning experience. Students are asked on a scale of 1 to 5, how well did the online portion of the module prepare you for the in-person practical skill evolutions?

Student Perception of Value

1	2	3	4	5
I don't feel like I got anything out of this module, and it was a waste of my time.	I feel like this module had some value, but it wasn't worth the time I spent on it.	I feel like this module had value and that it justified the time I spent on it.	I feel like this module had good value and that my time was well spent.	I feel like this module had excellent value and was well worth the time spent.

This performance indicator measures student perception of how the course benefitted them personally or professionally. Students are asked on a scale of 1 to 5, how useful or valuable were the topics and concepts in this module?
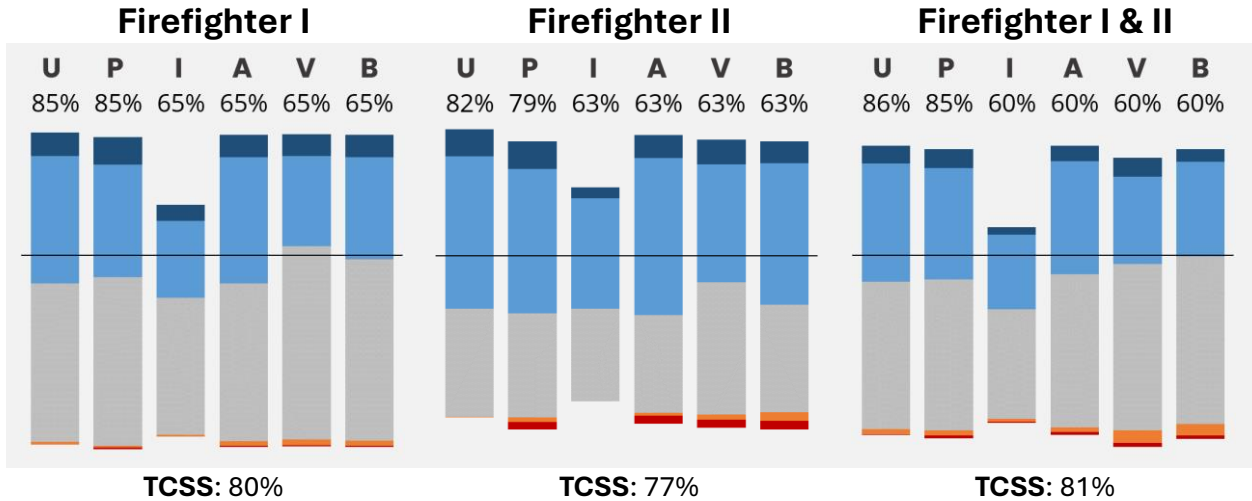
Student Perception of Barriers to Learning

1	2	3	4	5
I feel like it was almost impossible to remain engaged in the module due to factors outside my control.	I feel like there were multiple things preventing me from staying engaged in the module.	I feel like there are some challenges staying engaged, some of which were under my control.	I feel like I had some difficulties staying engaged, but they were addressed.	I feel like the instructor(s) and the program supported me in overcoming any difficulties I experienced.

This performance indicator measures student perception of how the structure or delivery of the course and course materials supported or hindered their success as a learner. Students are asked on a scale of 1 to 5, do you feel that there were barriers to your learning that made it difficult to engage with the material or participate in the module?

Total Satisfaction Score

Scores provided by the students were used to calculate a Total Customer Satisfaction Score (TCSS) which is the ratio of positive scores (4-5) to all scores (1-5) expressed as a percentage.

Firefighter I
U	P	I	A	V	B
85%	85%	65%	65%	65%	65%

TCSS: 80%

Firefighter II
U	P	I	A	V	B
82%	79%	63%	63%	63%	63%

TCSS: 77%

Firefighter I & II
U	P	I	A	V	B
86%	85%	60%	60%	60%	60%

TCSS: 81%

Student Feedback

Students are invited to provide feedback through the survey. Responses have been sorted by theme and summarized.

Hands-On vs. Online Learning

- Many students emphasized the value of hands-on learning, often finding online modules less engaging or effective.
- A preference for in-person instruction to reinforce online materials was a recurring suggestion.
- *"In-class instruction would have made a big difference in my learning."* (FFII Vehicle Extrication)
- *"More live fire time with this module."* (FFI/II Fire Behavior)

Module Content Quality

- Students appreciated modules with clear, detailed, and relevant content but noted inconsistencies or lack of depth in some areas.
- There were comments about outdated or insufficient examples and materials that could be improved.
- *"The module was another example of a class with great potential, that entirely missed the mark."* (FFII Origin and Cause)
- *"This online module seemed to be a hastily put-together highlights reel of the book and served nothing to further our understanding. Example... It is simply an image of a set of irons with the label Set of Irons. That's it."* (FFI Forcible Entry)

Engagement and Interactivity

- Feedback highlighted the need for more interactive elements in online modules, such as quizzes after each section to reinforce learning.
- Students requested more engaging videos and practical demonstrations.
- *"I liked the scenario where I was able to choose what the firefighter did next."* (FFI/II Portable Extinguishers)
- *"I liked the videos that were provided throughout the module. They helped my understanding of what was being talked about."* (FFI/II Fire Behavior)
- *"Having step-by-step instruction on how to complete each exercise was extremely helpful."* (FFI Health & Wellness)

Instructor Impact

- Positive feedback on instructors' ability to explain concepts clearly and engage students was frequent.
- Students expressed frustration when instructional quality varied or was inconsistent with the material.

- *"The instructors kept the class fully engaged. I feel their focus on quality and making sure the students were properly dressed over how fast they can don their gear was appropriate."* (FFI PPE & SCBA)
- *"I learned so much from the instructors during our PPE SCBA training. I feel much more comfortable with my gear after this lesson."* (FFI/II PPE & SCBA)
- *"The instructors kept the class fully engaged. I feel their focus on quality and making sure the students were properly dressed over how fast they can don their gear was."* (FFI PPE & SCBA)

Time Management and Pacing

- Some modules were deemed too lengthy or challenging to complete within the allocated time.
- Students recommended breaking down extensive content into smaller, more manageable parts.
- *"I personally felt that the chapter was [really] long and the module took as long as my previous 3 modules did combined."* (FFI/II Firefighter Safety)
- *"The chapter took far longer than the estimated 70 minutes to get through."* (FFI/II Ventilation)

Practical Application

- There was a strong desire for more practical application of skills learned, with suggestions for integrating live demonstrations and practice sessions.
- *"Would've been valuable to see the various forcible entry techniques in video as opposed to just being described or showing still shots."* (FFI/II Forcible Entry)
- *"This is a really hard topic to grasp through an online course. It definitely needs a lot of hands-on practical time to really sink in."* (FFI/II Ventilation)
- *"Both the book and the online portion presumed a baseline level of knowledge about motor vehicles that did not exist for me or about 1/3 of the class."* (FFII Vehicle Extrication)

Relevance and Context

- Students highlighted the importance of contextualizing lessons to their future roles, including historical perspectives and operational scenarios.
- *"Firefighting has a rich history, and I understand the importance of not only knowing where we come from but also knowing what to improve upon to make us and the communities we serve safer."* (FFI/II History of the Fire Service)
- *"This is a critical skill that deserves extensive class time dedicated to the topic. An online module is entirely insufficient to cover this topic."* (FFII Fire Protection Systems)

Suggestions for Improvement

- Adding worksheets, updated materials, more live fire time, and better preparation for quizzes and tests were commonly proposed.
- *"There should be some classroom instruction to help learn the skills and tools."* (FFII Support Tech Rescue)

- *"Foam and fire suppression should not be in the same online module. They are separate days on the drill yard, and rightfully so, they should also be covered in different modules."* (FFII Advanced Fire Attack)
- *"It would have been nice to have learned about this with instructors or to have been able to go around and see examples."* (FFII Fire Protection Systems)
- *"An in-person course would have been a much better way to share the information ."* (FFII Pre-Incident Planning)
- *"Captions or transcript for the videos would be super helpful when I don't have access to headphones or don't have strong enough internet to play full videos."* (FFI/II Tools and Equipment)