# **FUEL GAS SERVICE TECHNICIAN LICENSE**

**40 HOUR** Classroom requirements consisting of a **Service Technician Course** combined with a minimum of 2000 hours of field experience (approximately 2 years) including the Gas Piping Installer and Gas Equipment Installer license requirements to become licensed as a New Hampshire Fuel Gas Service Technician.

### This class is not a hands-on course.

Prerequisites for this course:

Gas Installation Technician License, or Gas Installation Technician Certificate, Gas Installation Technician Exam Certificate, and Trainee Card

### WHAT IS COVERED?

Total time = 40 hours

Total time with Gas Piping Installer and Gas Installation Technician courses = 140 hours

Customer Service	Hot Surface Ignition	Troubleshooting
Basic Electricity	Direct Spark Ignition	Thermostats
Basic Circuits	Integrated Control Boards	Service Techniques
Controls	Ignition Systems	Combustion & Gas Flames
Transformers	Standing Pilot	Combustion Analysis

Capacitors Thermo-piles Using Combustion Analyzers

Relays

## STATE OF NEW HAMPSHIRE GAS LICENSING REQUIREMENTS

Mec 305.04 Eligibility Requirements for Initial Individual Fuel Gas Fitter Licensure as a Fuel Gas Service Technician.

- (a) A fuel gas service technician specialty license shall be provided to individuals engaged in the servicing and repair of inside and outside piping from the outlet of the gas meter or first stage regulator or residential and non-residential heating equipment systems or water heating systems using liquefied propane gas or natural gas.
- (b) An individual applying for the fuel gas service technician specialty license shall provide proof of successful completion of the following:
  - (1) A minimum of 140 hours of educational training in the following subject matter:
    - a. Basic gas theory involving a thorough understanding of the physical properties and characteristics of propane and natural gas;
    - b. Reading and interpretation of fuel gas piping plans and drawings;
    - c. Determining proper fuel gas piping systems using appropriate sizing tables and charts;
    - d. Piping installation involving review of gas pipe sizing, gas pipe material selection, proper installation of underground and above ground fuel gas piping supply and
- 1 Find applications at https://www.oplc.nh.gov/applications-mechanical-safety-and-licensing

## The New Hampshire School of Mechanical Trades

distribution systems, placing a fuel gas system in service including purging, initial pressure testing, and leak check of gas distribution piping and appliances;

- e. The documentation of fuel gas piping system pressure testing, leak checking including customer notification as to the safety procedures, and recognition of fuel gas odors;
- f. Liquefied propane and natural gas appliance installation including clearance to combustibles, combustion, dilution, and the proper sizing of ventilation air requirements;
- g. Liquefied propane and natural gas appliance venting including venting categories, selection and use of proper venting materials, vent sizing and clearances, and installation;
- h. Placing propane and natural gas appliances equipment into service while controlling propane and air mixtures for proper combustion;
- i. Verification for proper operation of safety controls and devices;
- j. The proper utilization of combustion analyzing equipment with respect to applicable codes and manufacturer's installation instructions;
- k. Troubleshooting electrical circuits and control devices while measuring electrical quantities using an electrical meter;
- l. Identifying operating characteristics and components of common appliance safety and sensing devices including the testing and replacement of operating controls;
- m. Gas pressure measurements including supply and appliance burner pressure detection;
- n. Ignition safety systems including the 100 percent pilot safety shut-off and other electronic safety shut-off devices;
- o. Flue gas analysis and carbon monoxide detection;
- p. Interpretation of gas appliance equipment wiring diagrams to determine the sequence of operation of any given appliance;
- q. Fuel gas equipment maintenance and inspection, heat exchanger inspection, and routine service requirements; and
- r. Application of the adopted codes and standards as it relates to the items above; and
- (2) A minimum of 2,000 working hours of on-the-job experience in the trade or its equivalent in an approved educational setting as defined in Mec 301.01, relevant to the installation, service, and repair of gas appliances or equipment within 60 consecutive months, 750 hours of which may be applied if the applicant can demonstrate proof of relevant field experience installing, servicing, and repairing heating oil fired appliances or equipment.
- (c) Notwithstanding any rule to the contrary, an individual holding a fuel gas installation technician license pursuant to Mec 305.03 and wishing to ascend to this licensing level shall provide proof of:
  - (1) Successful completion of a formal educational program of at least 40 hours approved pursuant to Mec 305.04 in the subject matter prescribed by (b)(1) k. through r. above; and
  - (2) A minimum of 2,000 working hours of on-the-job experience in the trade or its equivalent in an approved educational setting as defined in Mec 301.01, relevant to the installation, service, and repair of gas appliances or equipment within 60 consecutive months, 750 hours of which may be applied if the applicant can demonstrate proof of relevant field experience installing, servicing, and repairing heating oil fired appliances or equipment.
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### STATE OF NEW HAMPSHIRE GAS LICENSING CHECK LIST:

- Check, Money order made out to "State of NH Treasurer"
- If you answered "yes" to question 1 on the application please attach a copy of your criminal record.
- Must provide an email address
- Proof of Identification (Copy of one)
  - State ID
  - Non Driver ID
  - Passport
  - Other government ID Name date of birth facial features
- o Copy of current/valid NH fuel gas trainee license; or
- If applicable a copy of licensure from an out of state licensing agency in which proof can be demonstrated that the applicant's license meets or exceeds the minimum qualifications for the licensing endorsement applied for; and
- o If out of state license is held we will need a letter of good standing from state the license is held in if you cannot provide a letter from a NH licensed gas fitter.
- One letter signed and written by a licensed gas fitter with their license number who was supervising, sponsoring or directing the applicant's fuel gas fitting training and development during the applicant's service or employment stating that the applicant meets the minimum competency requirements for the licensing endorsement being applied for.
- o Proof of hours of field experience affidavit signed by the licensee and sponsor/supervisor.
- o Proof of completion of education by board approved school.
- For those who attend NH School of Mechanical Trades you will need copies of your exam results.