

The New Hampshire School of Mechanical Trades
7 Perimeter Rd. Manchester, NH 03103

FUEL GAS SERVICE TECHNICIAN LICENSE

40 HOUR Classroom requirements consisting of an **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 Gas Equipment Installer. (STN/STP License)

This class is not a hands on course. Prerequisites for this course: Gas Piping Installer and Gas Equipment Installer requirements.

WHAT IS COVERED?

Total time = 40 hours

Total time with GPI & GEI = 140 hours

	Ignition Modules	
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

Saf-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 gas meter or first stage regulator or residential and non-residential heating equipment systems or water heating systems using liquified 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 distribution systems, placing a fuel gas system in service including purging, initial pressure testing and leak check of gas distribution piping and appliances;

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- 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 piping 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 clearance and installation;
 - h) Placing propane and natural gas appliances equipment into service while controlling propane/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) Interpret 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 is 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 Saf-Mec 301.18, 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 Saf-Mec 305.03 and wishing to ascend to their licensing level shall provide proof of:
- 1. Successful completion of a formal education program of at least 40 hours approved pursuant to Sef-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 Saf-Mec 301.18, 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 – Treasury” (check the initial licensing or upgrade forms for pricing)
- Color Photograph at least 2” X 2” or more with no hat and no sunglasses, not needed for upgrades.
- Proof of identification, not needed for upgrades
- Copy of current/VALID NH fuel gas trainee card(use initial licensing form), or a current/VALID NH fuel gas equipment installer license (use upgrade form), or a copy of an out of state license (must meet the state qualifications).
- Proof of the successful completion of the licensing exam for the endorsement being applied for (NH Gas fitters certificate(s) provided by NHgasFitters.com)
- Proof of successful completion of the required educational hours for the endorsement being applied for (the course certificate(s) provided by The NH School of Mechanical Trades)
- Proof of hours of field experience signed by the licensee you are working under (page 2 of the initial licensing application)
- One letter signed and written by a licensed gas fitter 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.