# ASSE 6005 / 6010 /6020

2021 NFPA 99 COURSES

### ASSE 6005 MEDICAL GAS GENERALIST

**Description:** A 24-hour training course for medical gas system engineers, designers, and personnel in need of general medical gas system information.

Prerequisite: None

Cost: \$750.00 (MGA credentialing)

\*This course provides general knowledge of medical gas and vacuum systems for the purpose of providing continuing education. Eligible individuals include any person with an interest in medical gas and vacuum systems and equipment.

### ASSE 6010 MEDICAL GAS INSTALLER

**Description:** A 32-hour course for medical gas system installers, which includes both a written and a practical brazing test. Brazing credentials are re-issued on a six-month time interval to ensure continuity of brazing expertise.

**Prerequisite:** ASSE 6010 Para. 10-3.2.1 "The candidates for the ASSE 6010 certification shall have a minimum of four (4) years of documented practical experience in the field of installation of plumbing or mechanical piping systems.

Cost: \$950.00 (MGA credentialing)

\*This course is approved in the following states: Alabama, Alaska, Arkansas, Georgia, Colorado, Florida, Indiana, Iowa, Kansas, Louisiana, Michigan, Mississippi, New York, North Carolina, Oklahoma, South Carolina, Tennessee, Virginia, Wisconsin. If you work in another state, please check with the governing authority in that state for course approval.

### ASSE 6020 MEDICAL GAS INSPECTOR

**Description:** A 24-hour training course for medical gas system inspectors who inspect and review medical gas system installations for both governmental and private agencies.

**Prerequisite:** ASSE 6010 Para. 20-4.1.1 "The candidates for ASSE 6020 certification shall be employed by a governmental unit as a plumbing and/or mechanical inspector, or as an administrator of such inspectors, or be a person regularly involved in the design, inspection or verification of medical gas systems, or be a 6010 installer. Candidates shall have a minimum of two (2) years of documented practical experience or any combination of the above.

Cost: \$850.00 (MGA credentialing)

\*This course applies to any individual who inspects the installation of medical gas and vacuum distribution systems. Medical gas systems and equipment covered in this standard include health care facilities within the scope of NFPA 99-2021, Health Care Facilities Code. Medical gas systems include vacuum systems.

### **COURSE SYNOPSIS**

Within the three days of classroom time, the NFPA 99 document is covered in (9) segments with each segment reviewed by a corresponding worksheet of multiple-choice questions. A lecture session of each segment will be accompanied by a PowerPoint presentation, after which each student will complete the appropriate worksheet.

Each student will work on a (65) question pre-exam progressively over the three-day period as time permits in class, and/or in the evenings after class. Homework will be issued on days one and two, which will cover the material taught during the day by placing the student in some decision-making scenarios with written questions. Day four will consist of a 100-question written or computer exam. Time will be allocated on the afternoon of day three and/or four for the brazing instruction and test.\*\*

Credentials will be issued by MGA or NITC, after successful completion.

Each student will receive a three-ring instruction binder, and a copy of the 2021 edition of NFPA 99. ASSE 6020 students will receive a copy of the ASSE 6000 Standard and the NFPA 55 book as well. ASSE 6005 students will receive a copy of the NFPA 55 as well as the NFPA 99.

\*\*The course for obtaining the ASSE 6005/6020 credential is the same except for brazing instruction and test. EMGS courses are taught by a credentialed ASSE 6050 instructor with over 20 years of training experience in the medical gas industry.



**Please note:** If you are attending a virtual class, we do require each student to have a computer (desktop or laptop), webcam and high speed internet connection.

Environmental & Medical Gas Services

103 Hunter Industrial Dr. Villa Rica, GA 30180 FAX: 770-459-1812 PHONE: 770-459-5920

Course Date: **April 25-28, 2023** Course Location: **Jackson, MS** Registration Deadline: **February 28, 2023** 

## ASSE 6005/6010/6020 MEDICAL GAS CERTIFICATION

### COURSE OUTLINE

#### DAY ONE (8 hours)

a. Chapter 3 definitions
b. Chapter 4 fundamentals
c. Chapter 5 sources (Manifolds, Bulk
Cryogenic Systems, and Medical Air systems)
Homework (2 hours)

#### DAY THREE (8 hours)

a. Chapter 5 Labeling and Testing
b. chapter 5 Maintenance, Manufactured
Assemblies, and Category 2 Systems
c. Chapter 15 Dental Gas and Vacuum Systems
d. Brazing Instruction and Q&A (6010 students only)
Study Guide (2 hours)

### EQUIPMENT REQUIRED FOR ASSE 6010 COURSES ONLY

#### We recommend that each student have:

#### DAY TWO (8 hours)

- a. Chapter 5 Sources (Medical Vacuum and WAGD Systems and Instrument Air Systems) b. Chapter 5 Valves
- c. Chapter 5 Outlets/Inlets
- d. Chapter 5 Alarms
- e. Chapter 5 Distribution Piping Homework (2 hours)

#### DAY FOUR (2-4 hours)

- a. Oral Question and Answer Session (if required)
- b. Computer Exam (requires webcam for virtual classes)

• (10) 1-1/2" Mueller W 01063 copper coupling fittings (standard type "L" plumbing fittings are acceptable and the fittings do not need to be cleaned for oxygen service). We highly recommend using these ring type couplings rather than dimple type.

• Minimum 10' of copper tubing type "L" size 1-1/2" (standard copper, does not need to be cleaned and capped). The 10' of 1-1/2" copper tubing can be cut into (10) 7" lengths, and (10) 5" lengths for placement in our brazing jig. Please cut pipe with a tubing cutter. This will expedite your practice and brazing procedures. Fittings and pipe need to have no oxidation present.

• (1) Pound or (28) sticks of BCUP 5 silver brazing rods with a minimum of 15% silver content (substitute 2-15% is not acceptable).

ASSE 6005, 6010 and 6020 training courses are taught by Environmental & Medical Gas Services.

Credentials are issued from a "Recognized third party certification agency" either NITC (National Inspection Testing Certification) or MGA, LLC (Medical Gas Accreditation) for compliance with Section 1-1.3, 5-4.1.1, 10-3.2.3, and 20-4.1.2 of the 2021 edition of ASSE/IAPMO/ANSI Series 6000 Standard. For MGA credentialing, please complete the appropriate ASSE 6000 application. For NITC credentialing, please complete the NITC application. We cannot offer NITC testing with our virtual classes.

Please note: Virtual Testing is MGA credentialing only.

In the state of Georgia, a plumbing license is required to install medical gas. You can gain your medical gas license before your plumbing license or vice versa but you must hold both. Other states may or may not require this. If you are unsure, please check with your state authority for state requirements.



**Please note:** If you are attending a virtual class, you can either travel to our office to braze or braze at your own facility as long as you have two witnesses, one of whom should be an officer of your company.

Environmental & Medical Gas Services

103 Hunter Industrial Dr. Villa Rica, GA 30180 FAX: 770-459-1812 PHONE: 770-459-5920

ASSE 6005 Exam Application	COURSE DATE: April 25-28, 2023 TIME: 8:30 AM LOCATION: Jackson, MS REGISTRATION DEADLINE: February 28, 2023 Return application to jdarden@emgsi.com
COMPANY COMPANY NAME:	APPLICANT           NAME:
MAILING ADDRESS:	PHONE:
CITY: STATE: ZIP:	EMAIL:
PHONE:	
CONTACT PERSON <sup>.</sup>	CONTACT EMAIL:

Contact person will receive future renewal information. If this is same as applicant, leave blank.

Paragraph 5-1.1 of the 2021 Edition of the ASSE 6005 Standard states: "This standard provides general knowledge of medical gas and vacuum systems for the purpose of providing continuing education. Eligible individuals include any person with an interest in medical gas and vacuum systems and equipment."

I have read the Information Sheet for MGA Exams and agree to abide by the rules listed.

I have or will have completed the 24-hour course required to fulfill this certification.

Please note: In order to keep this license valid, a short course and test must be completed every 3-years when a new NFPA 99 edition is released. This course and test will cover changes made from the previous edition. It is the license holders responsibility to check their expiration date and schedule testing, although MGA will send an email to currently licensed individuals at least once when a new NFPA 99 edition is released.

SIGNATURE OF APPLICANT:		DATE:	
Medical Gas Licensing	WEBSITE:	www.medgaslicense.com	
FAX:678-498-2749PHONE:770-783-3630	MAIL:	PO Box 820 Villa Rica, GA 30180	MEDICAL GAS

ACCREDITATION

ASSE 6 Exam Application			COURSE DATE: <u>April 25-28, 2023</u> TIME: <u>8:30 AM</u> LOCATION: <u>Jackson, MS</u> REGISTRATION DEADLINE: <u>February 28, 2023</u> <i>Return application to jdarden@emgsi.com</i>
COMPANY COMPANY NAME:			APPLICANT NAME:
MAILING ADDRESS:			PHONE:
CITY:	STATE:	ZIP:	EMAIL:
PHONE:			

#### CONTACT PERSON: \_\_\_\_

Contact person will receive future renewal information. If this is same as applicant, leave blank.

Paragraph 10-3.2.1 of the 2021 Edition of the ASSE 6010 Standard states "The candidates for the ASSE 6010 certification shall have a minimum of four (4) years of documented practical experience in the field of installation of plumbing or mechanical piping systems."

\_\_\_\_\_CONTACT EMAIL: \_\_\_

#### Please list the documented experience for the applicant below:

Employer, City & Phone Number	Dates

I have read the Information Sheet for MGA Exams and agree to abide by the rules listed.

□ I have or will have completed the 32-hour course required to fulfill this certification.

I understand that in some states (such as Georgia), a plumbing license may be required in order to install medical gas.

Please note: In order to keep this license valid, a short course and test must be completed every 3-years when a new NFPA 99 edition is released. This course and test will cover changes made from the previous edition. It is the license holders responsibility to check their expiration date and schedule testing, although MGA will send an email to currently licensed individuals at least once when a new NFPA 99 edition is released. Brazing Continuity must also be maintained.

\_\_\_ DATE: \_

 Medical Gas Licensing

 FAX:
 678-498-2749

 PHONE:
 770-783-3630

WEBSITE: MAIL: www.medgaslicense.com PO Box 820 Villa Rica, GA 30180



ASSE 6020 Exam Application	COURSE DATE: <u>April 25-28, 2023</u> TIME: <u>8:30 AM</u> LOCATION: <u>8:30 AM</u> REGISTRATION DEADLINE: <u>February 28, 2023</u> <i>Return application to jdarden@emgsi.com</i>
COMPANY COMPANY NAME: MAILING ADDRESS:	PHONE:
CITY: STATE: ZIP: PHONE:	EMAIL:

#### CONTACT PERSON: \_\_\_\_

\_\_\_CONTACT EMAIL: \_\_\_\_\_

Contact person will receive future renewal information. If this is same as applicant, leave blank.

Paragraph 20-4.1.1 of the 2021 Edition of the ASSE 6020 Standard states "The candidates for the ASSE 6020 certification shall be employed by a governmental unit as a plumbing and/or mechanical inspector, or as an administrator of such inspectors, or be a person regularly involved in the design, inspection or verification of medical gas systems, or be a 6010 installer. Candidates shall have a minimum of two (2) years of documented practical experience or any combination of the above."

Please list the documented experience for the applicant below:

Employer, City & Phone Number	Dates

I have read the Information Sheet for MGA Exams and agree to abide by the rules listed.

I have or will have completed the 24-hour course required to fulfill this certification.

Please note: In order to keep this license valid, a short course and test must be completed every 3-years when a new NFPA 99 edition is released. This course and test will cover changes made from the previous edition. It is the license holders responsibility to check their expiration date and schedule testing, although MGA will send an email to currently licensed individuals at least once when a new NFPA 99 edition is released.

SIGNATURE OF APPLICANT:		DA	DATE:	
Madical Cardinanairea	MEDCITE			

 Medical Gas Licensing

 FAX:
 678-498-2749

 PHONE:
 770-783-3630

WEBSITE: MAIL: www.medgaslicense.com PO Box 820 Villa Rica, GA 30180





### Environmental & Medical Gas Services

103 Hunter Industrial Dr. Villa Rica, GA 30180 Ph. (770) 459-5920 Fax (770) 459-1812

#### CREDIT CARD AUTHORIZATION FORM

MasterCard:	Visa:	Discover:	Amex:
Card Number:			
Expiration Date:			
Name as it appears on	credit card:		
C	-1		
Card noider phone nur	nber:		
3-or 4-digit security co	de.		
5 of 4 digit security et			
Total amount authorized	ed to charge:		
		_	
Cardholder signature:			
		ASSE 6005 - \$750 ASSE 6010 - \$950	
		ASSE 6020 - \$850	
		ASSE 6040 - \$950	
	All pricing includes c	lass materials, NFPA 99 book, f	inal test

and supplemental books or standards depending upon certification. Does not include braze materials for ASSE 6010.



#### **Information Sheet for MGA Exams**

- To qualify for the **ASSE 6005** exam, the candidate must meet the requirements of the **ASSE 6005** which are as follows:
  - 1. Have a general interest in medical gas and vacuum systems and equipment.
  - 2. Complete a 24-hour course taught by an ASSE 6050 certified instructor.
  - 3. Successfully complete a written or computer exam.
- To qualify for **the ASSE 6010** exam, the candidate must meet the requirements of the **ASSE 6010** which are as follows:
  - ASSE 6010 2021 Para. 10-3.2.1 "The candidates for the ASSE 6010 certification shall have a minimum of four (4) years of documented practical experience in the field of installation of plumbing or mechanical piping systems."
  - 2. Complete a 32- hour course taught by an ASSE 6050 certified instructor.
  - 3. Successfully complete a written or computer exam.
  - 4. Successfully complete a practical brazing exam.
  - 5. In addition, most states require that medical gas installers hold a journeyman or master plumbing license. If you are in the process of gaining your plumbing license, the ASSE 6010 certification can typically be added after you've gained your plumbing license even if this course is completed first.
- To qualify for the **ASSE 6020** exam, the candidate must meet the requirements of the **ASSE 6020** which are as follows:
  - ASSE 6020 2021 Para. 20-4.1.1 "The candidates for ASSE 6020 certification shall be employed by a governmental unit as a plumbing and/or mechanical inspector, or as an administrator of such inspectors, or be a person regularly involved in the design, inspection or verification of medical gas systems, or be a 6010 installer. Candidates shall have a minimum of two (2) years of documented practical experience or any combination of the above."
  - 2. Complete a 24-hour course taught by an ASSE 6050 certified instructor.
  - 3. Successfully complete a written or computer exam.
- To qualify for the **ASSE 6040** exam, the candidate must meet the requirements of the **ASSE 6040** which are as follows:
  - ASSE 6040 2021 Para. 40-3.2.1 "The candidates for ASSE 6040 certification shall be employed or contracted by a health care facility or be actively engaged in working with medical gas systems and shall have one (1) year minimum experience in the maintenance of the medical gas and vacuum systems."
  - 2. Complete a 24-hour course taught by an ASSE 6050 certified instructor.
  - 3. Successfully complete a written or computer exam.



#### Appeals Process:

Appeals to any certification rule or procedure must be made in writing and sent via US mail, email or fax. A written response from MGA will be returned within 30 days.

#### Suspension or Revocation Process:

For ASSE 6010 licenses: Brazing must be performed every six months and a sworn affidavit returned stating that the installer has used the brazing technique within the previous six months at least once. These can be returned late provided that the installer is willing to sign sworn affidavits that the brazing process was actually performed every six months. However, if no affidavits have been returned for a period of (24) months, the installer must submit a vertical brazed coupon for testing in order to reinstate his brazing certification.

For ASSE 6005, 6010, 6020 and 6040 licenses: If a license holder neglects to take the required course and test on two subsequent NFPA 99 editions, his license may be revoked, and a new course may be required.

#### Inappropriate Representation:

If any MGA license holder misrepresents his license in any way, to include falsifying the scope of his certification or ability, his license can be revoked.

#### Test Rules:

For all virtual exams administered, a webcam must be visible by the proctor for the entire duration of the exam. If the webcam is not visible for the entire exam, it is at the proctor's discretion to close the exam before it's completed and have the student retake at a later date.

No cell phones or other types of electronic devices are permitted to be used during the exam. The only material that should be available to the student is a copy of the NFPA 99 book. It is at the proctor's discretion to ask the student to remove any additional materials.



PO Box 820, Villa Rica, Georgia 30180

Exam Grade Requirements per ASSE 6000:

ASSE 6005 Passing Grade - 70% ASSE 6010 Passing Grade - 70% ASSE 6020 Passing Grade - 75% ASSE 6030 Passing Grade - 85% ASSE 6035 Passing Grade - 85% ASSE 6040 Passing Grade - 70% ASSE 6050 Passing Grade - 85%

Recertification Exam Grade Requirements:

ASSE 6000 (for ASSE 6005, 6010, 6020 and 6040) – 70% ASSE 6030 – 85% ASSE 6035 – 85% ASSE 6050 – 85%