course catalog 2020-2021

GOULD CONSTRUCTION INSTITUTE

Education & Training Affiliate of ABC Massachusetts

EARN ADDITIONAL INCOME EDUCATING AND GIVING BACK TO THE FUTURE OF YOUR TRADE

CONCERNED ABOUT THE COMMITMENT OF TIME? BECOME A SUBSTITUTE INSTRUCTOR AND GAIN EXPERIENCE AND A BETTER UNDERSTANDING OF THE POSITION

NO TEACHING EXPERIENCE NECESSARY! GCI WILL PROVIDE YOU THE RESOURCES:

- SHADOW CURRENT GCI INSTRUCTORS
- TRAIN-THE-TRAINER WORKSHOPS
- CURRICULUM & LESSON PLANS

INSTRUCTOR POSITIONS AVAILABLE IN:

- ELECTRICAL
- GAS FITTING
- HVAC
- PIPEFITTING
- PLUMBING
- SHEET METAL
- SPRINKLERFITTING

ELEVEN LOCATIONS* ACROSS MA:

- ANDOVER
- CANTON
- CHATHAM
- FRANKLIN
- HOLYOKE
- MEDFORD
- NORTH ADAMS
- PLYMOUTH
- SPRINGFIELD
- TAUNTON
- WESTFIELD



*ALL COURSES WILL BE INSTRUCTED ONLINE ONLY FOR THE FALL 2020 SEMESTER. GCI WILL DECIDE WHETHER OR NOT TO RETURN TO IN-PERSON INSTRUCTION AFTER THE NEW YEAR.

CONTACT MIKE MALONEY, INSTRUCTOR LIAISON DIRECTOR, FOR MORE INFORMATION ABOUT TEACHING OPPORTUNITIES WITH GCI MIKE@GWGCI.ORG

DO YOU OR DOES SOMEONE YOU KNOW HOLD A JOURNEYMAN OR MASTER'S LICENSE IN THE COMMONWEALTH OF MASSACHUSETTS? LEARN MORE AND FIND OUT HOW YOU CAN EARN \$300 JUST FOR REFERRING AN INSTRUCTOR TO US!

CHECK OUT JOBS.GWGCI.ORG FOR MORE INFORMATION AND RESOURCES.

THE MISSION OF THE GOULD CONSTRUCTION INSTITUTE (GCI) IS TO PROVIDE HIGH-QUALITY TRAINING THAT PREPARES INDIVIDUALS FOR GAINFUL EMPLOYMENT AND LONG-TERM OPPORTUNITIES IN THE CONSTRUCTION INDUSTRY.



A NOTE FROM THE PRESIDENT

COVID-19 certainly has forced us to think differently about the new "normal" going forward. With all the uncertainties and many of our school locations staying closed for the first part of the year, we decided to start the new school year with <u>virtual class instruction</u>. While we realize this is not the ideal situation and we would all prefer to be back to in-person classes, we are confident that this is the right decision to keep our instructors and students safe. We will continue to evaluate the situation with the expectation of starting in-person classes in January.

Having this plan in place will allow us time to better communicate as well as prepare our instructors with the training and resources they need to become better virtual instructors. We know that we need to stay ahead of the curve and continue to look at how we can improve our curriculum and delivery methods for virtual teaching. Below are some of the initiatives we are working on to make this new way of teaching a better experience for both our instructors and our students. We encourage companies to support their apprentices as we navigate through this new way of apprenticeship training and think about how you can be of help to your apprentices.

How is the GCI team preparing for the 2020-2021 school year?

- Programs will be increased from 150 hours to 159 hours, except Springfield and Westfield which will remain at 168 hours.
- Monday/Wednesday classes will start on August 31st and Tuesday/Thursday classes will start on September 1st.
- Classes will remain as two 3-hour classes per week during the evening.
- Instructors will be trained over the summer on how to teach virtual classes so that they are better prepared to make the classes more engaging and interactive.
- Hands-on shop hours will be scheduled into the school year, most likely during the second part of the school year. More information is forthcoming.
- Student orientations will be scheduled in advance of the start of school to be sure students are able to log in to classes and understand what will be expected of them.
- A date and location for students to pick up their course books will be scheduled at a location close to the school they would normally attend for in-person classes.
- Online registration for 2020-2021 courses will open July 2020.

How can companies help their apprentices prepare for the 2020-2021 school year?

- Be supportive and provide your apprentices with the resources they may need to take part in the virtual online classes. Some students may need laptops or tablets with a webcam and microphone.
- Provide a space at your shop or office that they can use with WIFI if they are not able to access from home.
- Share ongoing updates and information from GCI with your apprentices to be sure they are receiving important communications regarding their education.
- Remind your apprentices to make sure they update their contact information (email addresses and phone numbers) if they change during the year.
- Do you have a shop space that GCI students can use to fulfill shop hours this year? Please reach out to Julie Kelliher, julie@gwgci.org, if so!

Thank you and we look forward to another successful school year!





GOULD CONSTRUCTION INSTITUTE IS THE EDUCATION AND TRAINING AFFILIATE FOR THE MASSACHUSETTS CHAPTER OF ASSOCIATED BUILDERS AND CONTRACTORS (ABC MA).

WHAT IS AN "ABC MEMBER RATE"?

This rate applies to companies that are members of the Massachusetts Chapter of Associated Builders and Contractors.

WHAT IS ABC MA?

ABC MA is the largest construction trade association in the Commonwealth, representing over 460 local general contractor, subcontractor, supplier, and associate companies. These companies employ more than 20,000 workers throughout Massachusetts.

WHO CAN BE A MEMBER OF ABC MA?

ABC MA members are **companies** that realize their employees are their most valuable resource. Employees of ABC MA member companies can participate in member benefits and discounts.

ABC Member Companies and its employees have access to all the training, apprenticeship, and business development courses and seminars that ABC MA and GCI have to offer. In addition, member companies can receive discounts and save from our numerous vendor partnerships.

More information on ABC Membership can be found at abcma.org.

CHAPTER CONTACT INFORMATION

Ken Ledwak Membership Director ABC Massachusetts 100 Unicorn Park Drive, Suite 1 Woburn, MA 01801 Phone: (781) 273-0123 Email: ken@abcma.org

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Trade: Carpentry

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	Hands- On Fee	ABC Member Total	Not Yet a Member Total	Program Hours
Franklin Level 1	\$1,266.00	\$1,555.00	\$127.00	\$225.00	\$1,618.00	\$1,907.00	159

Trade: Electrical

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	Hands- On Fee	ABC Member Total	Not Yet a Member Total	Program Hours
Andover Level 1-3	\$1,266.00	\$1,555.00	\$127.00	\$225.00	\$1,618.00	\$1,907.00	159
Andover Level 4	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00	\$1,682.00	159
Canton Level 1-3	\$1,266.00	\$1,555.00	\$127.00	\$225.00	\$1,618.00	\$1,907.00	159
Canton Level 4	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00	\$1,682.00	159
Medford Level 1-4	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00.	\$1,682.00	159
Springfield Level 1-4	N/A	\$1,376.00	\$127.00	N/A	N/A	\$1,503.00	168
Westfield Level 2	N/A	\$1,376.00	\$127.00	\$225	N/A	\$1,728.00	168

Trade: Electrical Masters

Location	ABC Member Tuition	Not Yet a Member Tuition	Book (charged separately)	Hands- On Fee	ABC Member Total	Not Yet a Member Total	Program Hours
Springfield	N/A	\$1,358.00	\$265.00	N/A	N/A	\$1,358.00	168

Trade: HVAC

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	Hands- On Fee	ABC Member Total	Not Yet a Member Total	Program Hours
Virtual Contractor	\$1,491.00	\$1,780.00	\$127.00	N/A	\$1,618.00	\$1,907.00	108
Andover Level 4	\$1,266.00	\$1,555.00	\$127.00	\$225.00	\$1,618.00	\$1,907.00	159
Plymouth Level 2	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00	\$1,682.00	159



Trade: Gas Fitting

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	Hands- On Fee	ABC Member Total	Not Yet a Member Total	Program Hours
Holyoke Tier	N/A	\$927.00	\$127.00	N/A	N/A	\$1,054.00	120
North Adams Tier I	N/A	\$743.00	\$127.00	N/A	N/A	\$870.00	120

Trade: Pipefitting

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	Hands- On Fee	ABC Member Total	Not Yet a Member Total	Program Hours
Andover Level 1,3	\$1,266.00	\$1,555.00	\$175.00	N/A	\$1,441.00	\$1,730.00	159
Canton Level 3	\$1,266.00	\$1,555.00	\$175.00	N/A	\$1,441.00	\$1,730.00	159
Taunton Level 3	\$1,266.00	\$1,555.00	\$175.00	N/A	\$1,441.00	\$1,730.00	159

Trade: Plumbing

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	Hands- On Fee	ABC Member Total	Not Yet a Member Total		Program Hours
Holyoke Tier II, IV, IV	N/A	\$927.00	\$127.00	N/A	N/A	\$1,054.00		120
North Adams Tier III, V	N/A	\$743.00	\$127.00	N/A	N/A	\$870.00	8	120
Springfield Tier I, II	N/A	\$927.00	\$127.00	N/A	N/A	\$1,054.00		120

Trade: Sheet Metal

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	Hands- On Fee	ABC Member Total	Not Yet a Member Total	Program Hours
Andover Level 1	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00	\$1,682.00	159
Andover Level 2-5	\$1,266.00	\$1,555.00	\$127.00	\$225.00	\$1,618.00	\$1,907.00	159
Chatham Level 3	\$1,266.00	\$1,555.00	\$127.00	\$225	\$1,618.00	\$1,907.00	159
Franklin Level 3, 4, 5	\$1,266.00	\$1,555.00	\$127.00	\$225.00	\$1,618.00	\$1,907.00	159
Plymouth Level 2, 4	\$1,266.00	\$1,555.00	\$127.00	\$225.00	\$1,618.00	\$1,907.00	159
North Adams Level 2	N/A	\$968.00	\$127.00	\$225.00	N/A	\$1,320.00	159
Taunton Level 1	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00	\$1,682.00	159
Taunton Level 2, 3	\$1,266.00	\$1,555.00	\$127.00	\$225.00	\$1,618.00	\$1,907.00	159

Trade: Sprinklerfitting

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	Hands- On Fee	ABC Member Total	Not Yet a Member Total	15	Program Hours
Andover Level 2	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00	\$1,682.00		159
Canton Level 2	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00	\$1,682.00		159
Taunton Level 2	\$1,266.00	\$1,555.00	\$127.00	N/A	\$1,393.00	\$1,682.00		159
Springfield Level 2	N/A	\$1,376.00	\$127.00	N/A	N/A	\$1,503.00		168

Trade: Correspondence Programs

Location	ABC Member Tuition	Not Yet a Member Tuition	Book	ABC Member Total	Not Yet a Member Total	Program Hours
ASME	\$515.00	\$724.00	N/A	\$515.00	\$724.00	350
Correspondence	\$666.00	\$974.00	 \$127.00	\$793.00	\$1,101.00	150
CCL 1	\$666.00	\$974.00	\$149.00	\$806.00	\$1,114.00	150
Special Level 4	\$666.00	\$974.00	\$230.00	\$896.00	\$1,204.00	150
Sheet Metal Restricted	\$1,250.00	\$1,500.00	N/A	\$1,250.00	\$1,500.00	450
Sheet Metal Unrestricted	\$1,500.00	\$2,000.00	N/A	\$1,500.00	\$2,000.00	750



GCI GOLD STANDARD OF EDUCATION & INSTRUCTION

GCI, the education and training affiliate of Associated Builders and Contractors Massachusetts Chapter, is proud to offer CONTREN craft training; standardized training programs for the construction and maintenance industry. For more than two decades, CONTREN has been a leader in construction training.

CONTREN Provides:

- Standardized Training
- Proven Performance in Craft Training

LICENSED: Fully licensed by the Division of Professional Licensure / Office of Private Occupational Education.

APPROVALS: The Gould Construction Institute is approved by the following:

- The Department of Labor, Office of Apprenticeship
- Division of Professional Licensure
- Office of Public Safety and Inspections
- Board of State Examiners of Electricians
- Board of State Examiners of Plumbers and Gas Fitters
- Board of Examiners of Sheet Metal Workers
- The Bureau of Pipefitters, Refrigeration Technicians, and Sprinklerfitters

INSTRUCTION: Provided by State approved trade instructors and industry professionals.

REGISTERED APPRENTICES: Companies and employees may participate in state approved apprenticeship programs and utilize GCI courses to fulfill related instruction requirements. Firms seeking to train apprentices in courses not listed in this catalog may contact GCI. In the event a specific trade program is not offered in your area, the staff can assist in the development of a state approved in-house training program. Standards of apprenticeship approved by the Department of Labor & Standards currently include the following trades:

- Bricklayer/Cement Mason
- Carpentry
- Concrete Finishing
- Construction Craft Laborer
- Electrical
- Elevator

- Heavy Equipment
- HVAC
- Insulation
- Ironworking
- Masonry
- Painting

- Pipefitting
- Plumbing
- Process Piping
- Roofing
- Sheet Metal
- Sprinklerfitting

GCI has the ability to coordinate custom classes. We can arrange training at your facility or locations throughout Massachusetts. If a sufficient number of companies or individuals contact GCI with interest in any particular courses, classes and programs will be added to the calendar.



NCCER PILOT TEST FOR ELECTRICAL PROGRAM LEVELS 1 - 3

WHAT IS THE NCCER ELECTRICAL PILOT TEST?

GCI is currently using the NCCER curriculum but due to constraints with the hands-on requirement in the past, we were not able to be part of the NCCER Accreditation program. As of July 2021, NCCER is moving to online exams only. They are also looking at converting to digital books for curriculum vs. printed books soon. For us to adapt to these needs and changes, we need to become NCCER accredited. Conducting this test pilot will allow us to reduce the risk of failure, organize our resources and optimize their use, save money and ensure effective management and staff buy-in before we make the full investment.

WHY ARE WE PARTICIPATING IN THIS PROGRAM?

GCI's goal is to elevate the level of education to our students by providing a hands-on component to their training; improve the training techniques of our instructors, build the credibility/reputation of GCI and meet the needs of our biggest customer, ABC by working through the logistics and coming up with a process/procedure that will allow us to execute the program effectively.

HOW WILL WE DO THIS?

Test the implementation and administrative procedures required for the NCCER accreditation for the electrical trade in three locations for the 2020/2021 school year. We will provide the 24-hour training to get our instructors accredited; identify the materials needed for the performance evaluations, determine which performance evaluations can be conducted in the classroom vs. lab space; get the students registered and set up in the NCCER data registry and trained on tablets for online testing; monitor and evaluate the process through November so we can be prepared with a recommendation at that time.

WHO WILL PARTICIPATE?

- A. Greater Lawrence Technical School, Andover:
 - Electrical 1A, Electrical 1B, Electrical 2A, Electrical 2B, Electrical 3A, Electrical 3B
- B. Massasoit Community College, Canton:
 - Electrical 1, Electrical 2, Electrical 3
- C. Westfield Technical Academy, Westfield:
 - Electrical 2

CONCLUSION:

For this test to be successful, we will need your cooperation and full participation. We will reach out to you for feedback and comments throughout the test, and we appreciate your help. If you have any questions or comments, please contact:

Julie Kelliher, **julie@gwgci.org** or Diane Craven, **diane@gwgci.org**



ONLINE COURSES

HVAC CONTRACTOR - ONLINE

This course consists of 108 classroom hours

More course information, curriculum and program requirements can be found on Pages 30 & 31.

September 28, 2020 - March 2021 - 5:30PM - 8:30PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

MA HOT WORK SAFETY CERTIFICATION - ONLINE COMING SOON!

More information on this course and availability will be posted online soon!

INTRO TO CONSTRUCTION - ONLINE Price: \$149.00

This 6 lesson construction training program teaches a range of topics to prepare workers for different fields in the construction industry. Beginning with trades safety this program covers:

- Liner and Distance Measurement
- · Fractions, Percentages, Proportions, and Angles
- Common Hand Tools
- Power Cutting Tools

BLUEPRINT READING - ONLINE Price: \$229.00

The Blueprint Reading programs teach learners the basics behind how to read blueprints. Key concepts taught in this 14 lesson program include:

- Introduction to Print Reading
- Print-Reading Symbols & Abbreviations Welding Symbols
- Dimensioning & Tolerancing
- Print Reading Applications
- Building Drawings
- Electronic Drawings
- Hydraulic & Pneumatic Drawings
- Piping: Drawings, Materials & Parts
- Sheet Metal Basics
- Sketching
- · Elements of Print Reading
- Reading Shop Prints
- Reading Electrical Schematic Diagrams
- Electrical Blueprint Reading



ONLINE COURSES

BASIC MATH - ONLINE Price: \$149.00

This math program covers the principles of business and industrial math, from basic operations like addition and multiplication through formulas and algebra. Upon finishing the 6 lessons in the program students will understand key concepts including fractions, proportions and the metric system.

BUSINESS LITERACY - ONLINE Price: \$249.00

The Business Literacy program has 18 lessons and covers the core concepts behind business communication and technical writing while improving the overall writing quality of the student. Lessons include:

- Using Words Well
- Writing Effective Communications
- Organizing, Researching & Illustrating Your Material
- Writing the Report
- Proposals & Special Projects
- The Parts of Speech
- Word Usage

- Sentence Skills
- The Writing Process, Parts 1 & 2
- Writing Business Communications
- Designing Business Communications
- Writing Effectively
- Researching & Documenting
- Writing Proposals

CAREER READINESS BOOTCAMP - ONLINE Price: \$179.00

Career Readiness Bootcamp consists of 10 lessons and is focused on helping you sharpen nine soft skills employers value. This program is designed to keep you moving forward with a fun and engaging curriculum. Key skills covered:

- Integrity
- Professionalism
- Respect
- Communication
- Teamwork
- Planning & Organizing
- Decision Making & Problem-Solving
- Customer Focus
- Working with Tools & Technology



ANDOVER, MA - GREATER LAWRENCE TECHNICAL SCHOOL

ELECTRICAL 1 (NCCER* HANDS-ON COURSE)

This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Page 26.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays OR Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00 ***For NCCER program description, see Page 8.**

ELECTRICAL 2 (NCCER* HANDS-ON COURSE) This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - May 2021- 5:30 PM - 8:30 PM Mondays & Wednesdays OR Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00 *For NCCER program description, see Page 8.

ELECTRICAL 3 (NCCER* HANDS-ON COURSE) This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays OR Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00 *For NCCER program description, see Page 8.

ELECTRICAL 4

This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays OR Tuesdays & Thursdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00



ANDOVER, MA - GREATER LAWRENCE TECHNICAL SCHOOL

HVAC 4 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 30 & 31.

September 1, 2020 - May 2021 - 5:30 PM - 8:30 PM Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

PIPEFITTING 1

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 32.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,441.00 / Not Yet A Member: \$1,730.00

PIPEFITTING 3

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 32 & 33.

September 1, 2020 - May 2021 - 5:30 PM - 8:30 PM Tuesdays & Thursdays ABC Member: \$1,441.00 / Not Yet A Member: \$1,730.00

SHEET METAL 1

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 36.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays OR Tuesdays & Thursdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00

SHEET METAL 2 (HANDS-ON) This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 36.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays OR Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00



ANDOVER, MA - GREATER LAWRENCE TECHNICAL SCHOOL

SHEET METAL 3 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays OR Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SHEET METAL 4 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

September 1, 2020 - May 2021 - 5:30 PM - 8:30 PM Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SHEET METAL 5 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SPRINKLERFITTING 2

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 38.

September 1, 2020 - May 2021 - 5:30 PM - 8:30 PM Tuesdays & Thursdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00



CANTON, MA - MASSASOIT COMMUNITY COLLEGE

ELECTRICAL 1 (NCCER* HANDS-ON COURSE) This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Page 26.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00 ***For NCCER program description, see Page 8.**

ELECTRICAL 2 (NCCER* HANDS ON COURSE) This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00 *For NCCER program description, see Page 8.

ELECTRICAL 3 (NCCER* HANDS-ON COURSE) This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00 *For NCCER program description, see Page 8.

ELECTRICAL 4

This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - May 2021 - 5:30PM - 8:30PM Mondays & Wednesdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00



CANTON, MA - MASSASOIT COMMUNITY COLLEGE

PIPEFITTING 3

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 32 & 33.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,441.00 / Not Yet A Member: \$1,730.00

SPRINKLERFITTING 2

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 38.

August 31, 2020 - May 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00

CHATHAM, MA - W.V. WHITELEY PLUMBING & HEATING

SHEET METAL 3 (HANDS-ON) This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00



FRANKLIN, MA - TRI-COUNTY REGIONAL VOCATIONAL TECHNICAL SCHOOL

CARPENTRY 1 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 25.

August 31, 2020 - April 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SHEET METAL 3 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

August 31, 2020 - April 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SHEET METAL 4 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

August 31, 2020 - April 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SHEET METAL 5 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

August 31, 2020 - April 2021 - 5:30 PM - 8:30 PM Mondays & Wednesdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00



HOLYOKE, MA - HOLYOKE COMMUNITY COLLEGE

PLUMBING TIER II

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Page 34.

September 1, 2020 - February 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,054.00

PLUMBING TIER IV

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Pages 34 & 35.

September 1, 2020 - February 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,054.00

PLUMBING TIER V

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Pages 34 & 35.

September 1, 2020 - February 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,054.00

GAS FITTING TIER I

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Page 29.

September 1, 2020 - February 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,054.00



MEDFORD, MA - MEDFORD VOCATIONAL SCHOOL

ELECTRICAL 1

This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Page 26.

August 31, 2020 - April 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00

ELECTRICAL 2

This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - April 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00

ELECTRICAL 3

This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - April 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00

ELECTRICAL 4

This course consists of 159 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

August 31, 2020 - April 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00



NORTH ADAMS, MA - MCCANN TECHNICAL SCHOOL

GAS FITTING TIER I

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Page 29.

August 31, 2020 - March 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays Tuition Price: \$870.00

PLUMBING TIER III

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Pages 34 & 35.

August 31, 2020 - March 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays Tuition Price: \$870.00

PLUMBING TIER V

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Pages 34 & 35.

August 31, 2020 - March 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays Tuition Price: \$870.00

SHEET METAL 2 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 36.

August 31, 2020 - April 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays Tuition Price: \$1,320.00



PLYMOUTH, MA - CAPE COD COMMUNITY COLLEGE

SHEET METAL 2 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 36.

September 1, 2020 - April 2021 - 6:00 PM - 9:00 PM Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SHEET METAL 4 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

September 1, 2020 - April 2021 - 6:00 PM - 9:00 PM Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

HVAC 2

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 30.

August 31, 2020 - April 2021 - 6:00 PM - 9:00 PM Mondays & Wednesdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00



SPRINGFIELD, MA - SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ELECTRICAL 1

This course consists of 168 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Page 26.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,503.00

ELECTRICAL 2

This course consists of 168 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,503.00

ELECTRICAL 3

This course consists of 168 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,503.00

ELECTRICAL 4

This course consists of 168 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,503.00



SPRINGFIELD, MA - SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

MASTER'S ELECTRICAL

This course consists of 168 classroom hours

It is required that all students hold an Electrical Journeyman License to attend this class. Book fees are not included in the tuition price. Students are responsible for purchasing books before the first day of the course.

August 31, 2020 - May 2021 - 5:00 PM - 8:00 PM Mondays & Wednesdays Tuition Price: \$1,358.00

Books to purchase for this course can be found on Page 28.

PLUMBING TIER I

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Page 34.

August 31, 2020 - March 2021 - 5:00 PM - 8:00 PM Mondays & Wednesdays Tuition Price: \$1,054.00

PLUMBING TIER II

This course consists of 120 classroom hours

More course information, curriculum and program requirements can be found on Page 34.

August 31, 2020 - March 2021 - 5:00 PM - 8:00 PM Mondays & Wednesdays Tuition Price: \$1,054.00

SPRINKLERFITTING 2

This course consists of 168 classroom hours

More course information, curriculum and program requirements can be found on Page 38.

August 31, 2020 - May 2021 - 5:00 PM - 8:00 PM Mondays & Wednesdays Tuition Price: \$1,503.00



TAUNTON, MA - BRISTOL-PLYMOUTH REGIONAL TECHNICAL SCHOOL

PIPEFITTING 3

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 32 & 33.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays ABC Member: \$1,441.00 / Not Yet A Member: \$1,730.00

SHEET METAL 1

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 36.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00

SHEET METAL 2 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Page 36.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SHEET METAL 3 (HANDS-ON)

This course consists of 159 classroom hours

More course information, curriculum and program requirements can be found on Pages 36 & 37.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays ABC Member: \$1,618.00 / Not Yet A Member: \$1,907.00

SPRINKLERFITTING 2

This course consists of 159 classroom hours

It is required that all students obtain a copy of the latest NFPA 13 Automatic Sprinkler Systems Handbook for classes.

More course information, curriculum and program requirements can be found on Page 38.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays ABC Member: \$1,393.00 / Not Yet A Member: \$1,682.00



WESTFIELD, MA - WESTFIELD TECHNICAL ACADEMY

ELECTRICAL 2 (NCCER* HANDS-ON COURSE) This course consists of 168 classroom hours

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

More course information, curriculum and program requirements can be found on Pages 26 & 27.

September 1, 2020 - April 2021 - 5:00 PM - 8:00 PM Tuesdays & Thursdays Tuition Price: \$1,728.00 *For NCCER program description, see Page 8.



PROGRAM CURRICULUM & REQUIREMENTS: CARPENTRY

CARPENTRY 1

Course Curriculum Areas of Study:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Materials Handling

- Orientation to the Trade
- · Building Materials, Fasteners, and Adhesives
- Hand and Power Tools
- Introduction to Construction Drawings, Specifications, and Layout
- Floor Systems
- Wall Systems
- Ceiling Joist and Room Framing
- · Introduction to Building Envelope Systems
- Basic Stair Layout

CARPENTRY 2 *not offered this year*

Course Curriculum Areas of Study:

- Commercial Drawings
- Cold-Formed Steel Framing
- Exterior Finishing
- Thermal and Moisture Protection
- Roofing Applications
- Doors and Door Hardware

- Drywall Installation
- Drywall Finishing
- Suspended Ceilings
- Window, Door, Floor, and Ceiling Trim
- Cabinet Installation

CARPENTRY 3 *not offered this year*

Course Curriculum Areas of Study:

- Properties of Concrete
- Rigging Equipment
- Rigging Practices
- Trenching and Excavating
- Reinforcing Concrete

- Foundations and Slabs-On-Grade
- Vertical Formwork
- Horizontal Formwork
- Handling and Placing Concrete
- Tilt-Up Wall Systems

CARPENTRY 4 *not offered this year*

- Site Layout One: Differential Leveling
- Site Layout Two: Angular and Distance Measurement
 Introduction to Oxyfuel Cutting and Arc
- Advanced Roof Systems
- Advanced Wall Systems
- Advanced Stair Systems

- Introduction to Construction Equipment
- Introduction to Oxyfuel Cutting and Arc Welding
- Site Preparation
- Fundamentals of Crew Leadership



PROGRAM CURRICULUM & REQUIREMENTS: ELECTRICAL

MASSACHUSETTS ELECTRICAL APPRENTICE

Electrical Journeyman License Requirements

- 600 classroom hours from courses relating to Electrical Theory
- 8,000 field hours obtained on the job

Master's Electrical License Requirements

- Must hold an Electrical Journeyman License in the state of Massachusetts
- Additional 150 classroom hours
- Additional 2,000 field hours

BOARD OF STATE EXAMINERS OF ELECTRICIANS

Address: 1000 Washington Street, Suite 710 Boston, MA 02118

Phone: (617) 727-9931

Fax: (617) 727-9932

Email: electricians.board@mass.gov

ELECTRICAL 1

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Materials Handling
- Orientation to the Electrical Trade
- Electrical Safety

- Introduction to Electrical Circuits
- Electrical Theory
- Introduction to the National Electrical Code (NEC)
- Device Boxes
- Hand Bending
- Raceways and Fittings
- Conductors and Cables
- Basic Electrical Construction Drawings
- Residential Electrical Services
- Electrical Test Equipment.



PROGRAM CURRICULUM & REQUIREMENTS: ELECTRICAL

ELECTRICAL 2

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

Course Curriculum Areas of Study:

- Alternating Current
- Motors: Theory and Application
- Electric Lighting
- · Conduit Bending
- Pull and Junction Boxes
- Conductor Installations

- Cable Tray
- Conductor Terminations and Splices
- Grounding and Bonding
- Circuit Breakers and Fuses
- Control Systems and Fundamental Concepts

ELECTRICAL 3

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

Course Curriculum Areas of Study:

- Load Calculations Branch and Feeder Circuits
- Conductor Selection and Calculations
- Practical Applications of Lighting
- Hazardous Locations
- Overcurrent Protection
- Distribution Equipment

- Transformers
- Commercial Electrical Services
- Motor Calculations
- Voice, Data, and Video
- Motor Controls

ELECTRICAL 4

It is required that all students obtain a copy of the National Electrical Code, 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes.

- Load Calculations –Feeders and Services
- Health Care Facilities
- Standby and Emergency Systems
- Basic Electronic Theory
- Fire Alarm Systems
- Specialty Transformers
- Advanced Controls

- HVAC Controls
- Heat Tracing and Freeze Protection
- Motor Operation and Maintenance
- Medium-Voltage Terminations/Splices
- Special Locations
- Fundamentals of Crew Leadership



PROGRAM CURRICULUM & REQUIREMENTS: ELECTRICAL

MASTER'S ELECTRICAL

The 168 hour Certified Master's Program as per requirements contained in "237 CMR 22.02: Required Electrical Education as a Prerequisite for Master Electrician Examination" will focus the attention of the Eligible Candidate to the current testing edition of the National Electrical Code (NFPA 70-2020) with particular attention also given to the Commonwealth of Massachusetts Electrical Code Amendments (527 CMR 12.00) as contained in the current edition of the National Electrical Code (NFPA 70-2020) and other required documents and information required to sit for the test.

This course is intended to supplement the continuing studies of the serious Eligible Candidate, with emphasis on assisting the Eligible Candidate to pass the desired Commonwealth of Massachusetts, Certificate A (Master) Electrician License Examination. It is required that all students obtain a copy of the National Electrical Code 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00) for classes. It is required that all students hold an Electrical Journeyman License to attend this class. Book fees are not included in the tuition price. Students are responsible for purchasing books before the first day of the course.

Prerequisites:

Massachusetts Electrical Journeyman License

Required Course Materials:

- National Electrical Code 2020 Edition, with the Commonwealth of Massachusetts Amendments (527 CMR 12.00)
- NFPA 72, National Fire Alarm Code, 2019 Edition, 1st Printing
- Mike Holt's Illustrated Guide to Electrical Exam Preparation, based on the 2020 NEC
 ISBN: 978-0-9863534-9-9
- Mike Holt's Illustrated Guide to Electrical Exam Preparation, based on the 2020 NEC, Answer Key
- Contractor's Guide to Business, Law and Project Management, Basic 12th Edition (NASCLA)
- Code of Federal Regulations 29 CFR Part 1926 (OSHA) with latest available amendments

MASTER'S ELECTRICAL COURSE MATERIALS PACKAGE - \$ 265.00

- This package includes all books listed above under "Required Course Materials".
- Master's Electrical students are not obligated to purchase books through GCI.
- Choose this option on your registration application to order books through GCI.



PROGRAM CURRICULUM & REQUIREMENTS: GAS FITTING

MASSACHUSETTS GAS FITTING APPRENTICE

Gas Fitting Journeyman License Requirements

- 330 classroom hours
- 5.100 field hours
- Apprentices MUST apply for an apprentice license through the Board of State Examiners of Plumbers & Gas Fitters.

BOARD OF STATE EXAMINERS OF PLUMBERS & GAS FITTERS

Address: 1000 Washington Street, Suite 710 Boston, MA 02118-6100 Phone: (617) 727-3200 mass.gov/dps - Engineering Division

GAS FITTING TIER 1

Course Curriculum Areas of Study:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Basic Rigging
- **Basic Communication Skills** •
- Basic Employability
- Skills Introduction to Materials Handling

- Introduction to Gas Fitting
- 248 CMR 3.00
- 248 CMR 4.00 & 5.00
- Gas Piping System Design, Material and Components
- Gas Piping Installation

GAS FITTING TIER 2 *not offered this year*

Course Curriculum Areas of Study:

Testing and Inspection

- Equipment Installation
- Installation of Specific Equipment
- Venting of Equipment
- Gas Utilization in Large Equipment

GAS FITTING TIER 3 *not offered this year*

Course Curriculum Areas of Study:

 NFPA 58 Storage and Handling of Liquefied Petroleum Gases

Basic Principles of a Propane Gas System

- Gas Code Review for Exam
- Business Related Costs

- Safety and Installation Practices
- General Provisions for Gas Work in Massachusetts
- Education and Experience Requirements for Licensure 248 CMR 11.00
- Massachusetts Modifications to Sections of NFPA 54



PROGRAM CURRICULUM & REQUIREMENTS: HVAC

MASSACHUSETTS HVAC APPRENTICE

Refrigeration/Air Technician License Requirements

- 100 Refrigeration Theory classroom hours
- 150 Electrical Code classroom hours
- 6,000 field hours
- Apprentices MUST apply for an apprentice license through the Bureau of Pipefitters, Refrigeration Technicians, and Sprinklerfitters AND register as an apprentice through the Division of Apprenticeship Standards.

Refrigeration Contractor License Requirements

- 100 Refrigeration Theory classroom hours
- 2,000 field hours

BUREAU OF PIPEFITTERS, REFRIGERATION TECHNICIANS, AND SPRINKLERFITTERS

Address: 1000 Washington Street, Suite 710 Boston, MA 02118-6100 Phone: (617) 727-3200 mass.gov/dps - Engineering Division

HVAC 1 *not offered this year*

Course Curriculum Areas of Study:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Basic Rigging
- Basic Communication Skills
- Basic Employability
- Skills Introduction to Materials Handling

- Introduction to HVAC
- Trade Mathematics
- Basic Electricity
- Introduction to Heating
- Introduction to Cooling
- Introduction to Air Distribution Systems
- Basic Copper and Plastic Piping Practices
- Soldering and Brazing
- Basic Carbon Steel Piping Practices

HVAC 2

- Alternating Current
- Compressors
- Refrigerants and Oils
- Leak Detection, Evacuation, Recovery, and Charging
- Metering Devices
- Heat Pumps
- Basic Maintenance

- Chimneys, Vents, and Flues
- Sheet Metal Duct Systems
- Fiberglass and Flexible Duct Systems
- Commercial Airside Systems
- Air Quality Equipment
- Introduction to Hydronic Systems

G GOULD CONSTRUCTION INSTITUTE

PROGRAM CURRICULUM & REQUIREMENTS: HVAC

HVAC 3 *not offered this year*

Course Curriculum Areas of Study:

- Fasteners, Hardware, and Wiring Terminations
- Control Circuit and Motor Troubleshooting
- Troubleshooting Cooling
- Troubleshooting Heat Pumps
- Troubleshooting Gas Heating
- Troubleshooting Oil Heating

- Troubleshooting Accessories
- Zoning, Ductless, and Variable Refrigerant Flow Systems
- Commercial Hydronic Systems
- Steam Systems
- Retail Refrigeration System
- Customer Relations

HVAC 4

Course Curriculum Areas of Study:

- Water Treatment
- Indoor Air Quality
- Energy Conservation Equipment
- Building Management Systems
- System Air Balancing
- System Startup and Shutdown

- Construction Drawings and Specifications
- Heating and Cooling System Design
- Commercial/Industrial Refrigeration Systems
- Alternatives and Specialized Heating and Cooling Systems
- Fundamentals of Crew Leadership

HVAC CONTRACTOR - ONLINE

- Refrigeration Theory
- Evaporators
- Metering Devices
- Condensers
- Compressors
- Refrigeration Accessories
- Refrigerants

- Operation, Pressures & Temperatures
- AC and Refrigeration Math
- Multi Temperature Systems
- Other Refrigeration Systems
- Motors
- Purgers and Absorption Systems
- Definitions from ASHRAE 15 & 34
- The Mass Refrigeration Code



PROGRAM CURRICULUM & REQUIREMENTS: PIPEFITTING

MASSACHUSETTS PIPEFITTING APPRENTICE

Unrestricted Pipefitting Journeyman License Requirements

- 350 classroom hours (ASME)
- 6,000 field hours obtained on the job
- Apprentices MUST apply for an apprentice license through the Bureau of Pipefitters, Refrigeration Technicians, and Sprinklerfitters AND register as an apprentice through the Division of Apprenticeship Standards.

Pipefitter Master's License Requirements

- Additional 100 classroom hours (ASME)
- Additional 2,000 field hours
- The ASME Correspondence Course = 350 hours and is only available for those who have been in the field for 6+ years

BUREAU OF PIPEFITTERS, REFRIGERATION TECHNICIANS, AND SPRINKLERFITTERS

Address: 1000 Washington Street, Suite 710 Boston, MA 02118-6100

Phone: (617) 727-3200

mass.gov/dps - Engineering Division

PIPEFITTING 1

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Basic Rigging
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Materials Handling
- Orientation to the Trade
- Pipefitting Hand Tools

- Pipefitting Power Tools
- Oxyfuel Cutting
- Ladder & Scaffolds
- Motorized Equipment
- Piping Systems
- Drawing & Detail Sheets
- Identifying & Installing Valves
- Pipefitting Trade Math
- Threaded Pipe Fabrication
- Socket Weld Pipe Fabrications & Butt Weld
 Pipe Fabrication



PROGRAM CURRICULUM & REQUIREMENTS: PIPEFITTING

PIPEFITTING 2 *not offered this year*

Course Curriculum Areas of Study:

- Excavations
- Underground Pipe Installations
- Rigging Equipment
- Rigging Practices
- Standards & Specifications
- Advanced Trade Math
- Motorized Equipment II
- Introduction to Aboveground Pipe Installations
- Field Routing & Vessel Trim

- Pipe Hangers & Supports
- Testing Piping Systems & Equipment
- Advanced Blueprint Reading
- Advanced Pipe Fabrication
- Stress Relieving & Aligning
- Maintaining Valves
- Introduction to Supervisory Roles

PIPEFITTING 3

- Excavations
- Underground Pipe Installations
- Rigging Equipment
- Rigging Practices
- Standards & Specifications
- Advanced Trade Math
- Motorized Equipment II
- Introduction to Aboveground Pipe Installations
- Field Routing & Vessel Trim
- Pipe Hangers & Supports
- Testing Piping Systems & Equipment
- Advanced Blueprint Reading
- Stress Relieving & Aligning
- Maintaining Valves
- Introduction to Supervisory Roles



PROGRAM CURRICULUM & REQUIREMENTS: PLUMBING

MASSACHUSETTS PLUMBING APPRENTICE

Plumbing Journeyman License Requirements

- 550 classroom hours
- 5,100 field hours under the supervision of a licensed Journeyman or Master
- Apprentices MUST apply for an apprentice license from the Board of State Examiners of Plumbers & Gas Fitters.

Plumbing Master's License Requirements

- MUST hold a Journeyman License for 1 year
- Additional 110 Tier V classroom hours
- Additional 1,700 field hours

THE BOARD OF STATE EXAMINERS OF PLUMBERS AND GAS FITTERS

Address: 1000 Washington Street, Suite 710 Boston, MA 02118-6100 Phone: (617) 727-3100 mass.gov/dpl

PLUMBING TIER I

Course Curriculum Areas of Study:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Basic Rigging
- Basic Communication Skills
- Introduction to Plumbing
- Plumbing Safety
- Tools of the Plumbing Trade

- Introduction to Plumbing Math
- Introduction to Plumbing Drawings
- Plastic Pipe and Fittings
- Copper Tube and Fittings
- Cast-Iron Pipe and Fittings
- Carbon Steel Pipe and Fittings
- Introduction to Plumbing Fixtures
- Introduction to Drain, Waste and Vent (DWV) Systems

PLUMBING TIER II

- Plumbing Math Two
- Reading Commercial Drawings
- Structural Penetrations, Insulation and Fire-Stopping
- Installing and Testing DWV Piping
- Installing Roof, Floor, and Area Drains
- Installing and Testing Water Supply Piping
- Types of Valves
- Installing Fixtures and Valves
- Installing Water Heaters
- Basic Electricity
- · Fuel Gas and Fuel Oil Systems



PROGRAM CURRICULUM & REQUIREMENTS: PLUMBING

PLUMBING TIER III

Course Curriculum Areas of Study:

- Plumbing Math Two
- Reading Commercial Drawings
- Structural Penetrations, Insulation and Fire-Stopping
- Installing and Testing DWV Piping
- Installing Roof, Floor, and Area Drains
- Installing and Testing Water Supply Piping
- Types of Valves
- Installing Fixtures and Valves
- Installing Water Heaters
- Basic Electricity
- Fuel Gas and Fuel Oil Systems
- PLUMBING TIER IV

Course Curriculum Areas of Study:

- Business Principles for Plumbers
- Fundamentals of Crew Leadership
- Water Pressure Booster and Recirculation Systems
- Indirect and Special Waste
- Hydronic and Solar Heating Systems
- Codes

- Private Water Supply Well Systems
- Private Waste-Disposal Systems
- Swimming Pools and Hot Tubs
- Plumbing for Mobile Homes and Travel Trailer
 Parks
- Introduction to Medical Gas and Vacuum Systems

PLUMBING TIER V

- Review of all sections of the Massachusetts State Plumbing Code:
 - 248 CMR 3.00
 - 248 CMR 10.00
 - 248 CMR 11.00
- Review of all sections of:
 - NFPA-54-2012
 - NFPA-58-2011
 - Massachusetts Fuel Gas Code 248 CMR 4.00
 - Amendments for NFPA-54-2012 248 CMR 5.00
 - Large Gas Utilization Equipment 248 CMR 7.00 and Amendments to NFPA 58-2011 248 CMR 8.00
- Review of all plumbing related math covered in Tier I through Tier V
- Review of all sketches in Massachusetts State Plumbing Code Section 10.22 Figures
- Business Related Costs



PROGRAM CURRICULUM & REQUIREMENTS: SHEET METAL

MASSACHUSETTS SHEET METAL APPRENTICE

Sheet Metal Journeyman License Requirements*

- Unrestricted License
 - 750 classroom hours
 - 8,000 field hours
- Restricted License
 - 450 classroom hours
 - o 4,800 field hours

*All Sheet Metal apprentices MUST apply for an apprentice license through the Board of Examiners of Sheet Metal Workers.

BOARD OF EXAMINERS OF SHEET METAL WORKERS

Address: 1000 Washington Street, Suite 710 Boston, MA 02118

Phone: (617) 727-3022

SHEET METAL 1

Course Curriculum Areas of Study:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Basic Rigging
- Basic Communication Skills

- Basic Employability Skills
- Introduction to Materials Handling
- Introduction to the Sheet Metal/HVAC Trades
- Introduction to M.G.L. c. 112, s. 237-251 and 271 CMR
- Tools of the Trade and Installation Ductwork

SHEET METAL 2

- Safety Review
- Trade Math 104
- Shop Production and Organization
- Installation of Air Distribution Accessories
- Air Systems

- Duct Fabrication Standards
- Introduction to Layout
- Fabrication I Parallel Line Development
- Fabrication II Radial Line Development
- Hands-on Shop Fabrication



PROGRAM CURRICULUM & REQUIREMENTS: SHEET METAL

SHEET METAL 3

Course Curriculum Areas of Study:

- Trade Math II
- Introduction to Supervisory Skills
- Air Properties and Distribution
- Principles of Airflow

- Air Testing and Balancing
- Fabrication III Triangulation
- Plans and Specifications
- Hands-on Shop Fabrication

SHEET METAL 4

Course Curriculum Areas of Study:

- Massachusetts Uniform Sheet Metal Code
- Trade Math III Field Measuring
- Comprehensive Plan and Specification Reading
- Soldering

- Architectural Sheet Metal
- Louvers, Dampers and Access Doors
- Fabrication IV Comprehensive Review
- Hands-on Shop Fabrication

SHEET METAL 5

- Trade Math Estimating
- Fume Exhaust Design
- Introduction to Welding, Brazing and Cutting
- Advanced Architectural Sheet Metal
- Hands-on Shop Fabrication
- Exam Review and Preparation



PROGRAM CURRICULUM & REQUIREMENTS: SPRINKLERFITTING

MASSACHUSETTS SPRINKLERFITTER APPRENTICE

Sprinklerfitter Journeyman License Requirements

- 576 classroom hours
- 8,000 field hours
- Apprentices MUST apply for an apprentice license through the Bureau of Pipefitters, Refrigeration Technicians, and Sprinklerfitters

BUREAU OF PIPEFITTERS, REFRIGERATION TECHNICIANS, AND SPRINKLERFITTERS

Address: 1000 Washington Street, Suite 710 Boston, MA 02118-6100

Phone: (617) 727-3200

mass.gov/dps - Engineering Division

SPRINKLERFITTING 1 *not offered this year*

Course Curriculum Areas of Study:

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools
- Introduction to Construction Drawings
- Basic Rigging
- Basic Communication Skills

- Orientation to the Trade
- Introduction to Components and Systems
- Steel Pipe
- CPVC Pipe and Fittings
- Copper Tube Systems
- Underground Pipe

SPRINKLERFITTING 2

- Hangers, Supports, Restraints, and Guides
- General Purpose Valves
- General Trade Math
- Shop Drawings

- Standard Spray Fire Sprinklers
- Wet Fire Sprinkler Systems
- Dry-Pipe Systems



PROGRAM CURRICULUM & REQUIREMENTS: SPRINKLERFITTING

SPRINKLERFITTING 3 *not offered this year*

Course Curriculum Areas of Study:

- Deluge/Preaction Systems
- Standpipes
- Water Supplies
- Fire Pumps
- Application-Specific Sprinklers and Nozzles

SPRINKLERFITTING 4 *not offered this year* Course Curriculum Areas of Study:

- System Layout
- Inspection, Testing, and Maintenance
- Special Extinguishing Systems
- Introductory Skills for Foreman
- Procedures and Documentation



CORRESPONDENCE COURSES

ASME CODE REVIEW COURSE

GCI is pleased to offer this correspondence course. It is intended for those pursuing their Massachusetts Pipefitters license and is open to both ABC Members and Not-Yet-Members alike. This course is meant to be used in conjunction with the 2016 edition of the ASME/ANSI B31.1 Power Piping Code. A copy of the Code must be purchased through ASME directly. The course is divided into 14 modules of 25 hours each. Total of 350 hours.

Prerequisite: 6+ years of experience in the field.

Apprentices MUST apply for an apprentice license through the Bureau of Pipefitters, Refrigeration Technicians, and Sprinklerfitters AND register as an apprentice through the Division of Apprenticeship Standards.

ABC MEMBER: \$515.00 / NOT YET A MEMBER: \$724.00

SHEET METAL CORRESPONDENCE

GCI is pleased to offer this correspondence course. It is intended for those pursuing their Massachusetts Sheet Metal license. This course is open to both ABC Members and Not-Yet-Members alike, and is available with two curriculum options:

- J-2 Restricted License is made up of 3-course levels:
 - Sheet Metal 1, 2 & 3 150 hours of course time per level
- J-1 Unrestricted License is made up of 5-course levels:
 - Sheet Metal 1, 2, 3, 4 & 5 150 hours of course time per level

Prerequisites:

- All applicants must be Board approved
- Restricted License applicants must have 6+ years of field experience
- Unrestricted License applicant must have at least 10-years of field experience
- Applicants who meet the prerequisite will be given the following:
 - Sheet Metal textbooks with exam guestions for each chapter
 - Copy of Candidate Bulletin
 - List of reference materials
 - List of review questions for the final exam.

RESTRICTED LICENSE: ABC MEMBER: \$1,250.00 / NOT YET A MEMBER: \$1,500.00

UNRESTRICTED LICENSE: ABC MEMBER: \$1,500.00 / NOT YET A MEMBER: \$2,000.00

CORRESPONDENCE PROGRAM

Did you not see your trade or a trade that interests you in this catalog? This might be your solution. This program allows apprentices to learn construction-related courses at their own pace, in the privacy of their own home. Gould Construction Institute is pleased to offer several 150 clock hour correspondence courses:

Insulating

Masonry

Painting

Roofing

Ironworking

- Bricklayer/Cement Mason
- Carpentry
- Concrete Finishing
- Construction Craft Laborer
- Heavy Equipment

CORRESPONDENCE

ABC MEMBER: \$793.00 NOT YET A MEMBER: \$1,101.00

ABC MEMBER: \$806.00 NOT YET A MEMBER: \$1,114.00

CONSTRUCTION CRAFT LABORER 1

SPECIAL LEVEL 4 ABC MEMBER: \$896.00

NOT YET A MEMBER: \$1,204.00



GCI LOCATIONS

ANDOVER

GREATER LAWRENCE TECHNICAL SCHOOL

57 River Road Andover, MA 01810

CANTON MASSASOIT COMMUNITY COLLEGE

> 900 Randolph Street Canton, MA 02021

> > CHATHAM

W.V. WHITELEY

102 Commerce Park South Chatham, MA 02659

FRANKLIN

TRI-COUNTY REGIONAL VOCATIONAL TECHNICAL HIGH SCHOOL

147 Pond Street Franklin, MA 02038

HOLYOKE HOLYOKE COMMUNITY COLLEGE

> 303 Homestead Avenue Holyoke, MA 01040

MEDFORD

MEDFORD VOCATIONAL TECHNICAL HIGH SCHOOL

489 Winthrop Street Medford, MA 02155



GCI LOCATIONS

NORTH ADAMS

CHARLES H. MCANN TECHNICAL SCHOOL

70 Hodges Cross Road North Adams, MA 01247

PLYMOUTH CAPE COD COMMUNITY COLLEGE

at Plymouth Airport 246 South Meadow Road, Gate 6 Plymouth, MA 02360

SPRINGFIELD

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

1 Armory Street Springfield, MA 01105

TAUNTON

BRISTOL-PLYMOUTH REGIONAL TECHNICAL SCHOOL

207 Hart Street Taunton, MA 02780

WESTFIELD

WESTFIELD TECHNICAL ACADEMY

3 Avenue Holyoke, MA 01040

WOBURN GCI CENTRAL OFFICE

100 Unicorn Park Drive, Suite 2 Woburn, MA 01801



REGISTRATION INFORMATION

TO REGISTER FOR COURSES LISTED IN THIS CATALOG

- Please visit gwgci.org to register online.
- Tuition is due for Trade Specific courses before the start of the school year. The tuition fee for each Trade Specific course includes registration, textbook(s), and class materials unless otherwise noted.
 - See Page 4 for Tuition Breakdown information.
- We urge you to register as soon as possible to ensure a place in the course of your choice. Early registration will often prevent the cancellation of a course due to low enrollment.
- At the end of the school year, students will receive a certificate for the hours earned for the year. If a duplicate copy is needed, a \$30.00 administrative fee will apply.

Gould Construction Institute, in compliance with both state and federal laws and regulations, does not discriminate on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, marital status, disability or Veteran's status in any of its policies, procedures, or practices.

POLICIES

RESOLVING STUDENT COMPLAINTS

All student complaints are to be submitted in writing to Julie Kelliher, President of GCI. The student will receive a response to the complaint in writing within 10 business days. A written record of the student's complaint will be maintained by GCI for one year following the student's completion date or withdrawal. GCI is licensed by the Division of Professional Licensure / Office of Private Occupational School Education and any student has the right to contact this office. Any comments, questions, or concerns about this school's license should be directed to: occupational.schools@state.ma.us or (617) 727-5811.

NO SOLICITATION

Solicitation for any purpose may NOT take place on the school premises by any individual. This would include solicitation of employment from one student to another, selling of items, or the distribution of materials and literature. Should any of the above occur, the individual may be asked to leave the class.

CANCELLATIONS & REFUNDS

R	EFUND LAW (AS PER M.G.L. CHAPTER 255, SECTION 13K):	DATES:
1.	You may terminate this agreement at any time.	N/A
2.	If you terminate this agreement within five days you will receive a refund of all monies paid, provided that you have not commenced the program. Refund Amount: \$	5 th day after date both parties have signed the contract Date:
	If you subsequently terminate this agreement prior to the commencement of the program, you will receive a refund of all monies paid, less the actual reasonable administrative costs described in paragraph 7. Refund Amount: \$	<i>Program start date</i> Date:
4.	If you terminate this agreement during the first quarter of the program, you will receive a refund of at least seventy-five percent of the tuition, less the actual reasonable administrative costs described in paragraph 7. Refund Amount: \$	<i>Last date of first quarter</i> Date:
5.	If you terminate this agreement during the second quarter of the program, you will receive a refund of at least fifty per cent of the tuition, less the actual reasonable administrative costs described in paragraph 7. Refund Amount: \$ 50.00	Last date of second quarter Date:
	If you terminate this agreement during the third quarter of the program, you will receive a refund of at least twenty-five percent of the tuition, less the actual reasonable administrative costs described in paragraph 7. Refund Amount: \$	<i>Last date of third quarter</i> Date:
7.	If you terminate this agreement after the initial five day period, you will be responsible for actual reasonable administrative costs incurred by the school to enroll you and to process your application, which administrative costs shall not exceed fifty dollars or five percent of the contract price, whichever is less. A list of such administrative costs is attached hereto and made a part of this agreement.	5 th day after date both parties have signed the contract Date:
	If you wish to terminate this agreement, you must inform the school in writing of your termination, which will become effective on the day, such writing is mailed.	N/A
9.	The school is not obligated to provide any refund if you terminate this agreement during the fourth quarter of the program.	<i>First day of fourth quarter</i> Date:



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