



Chapter 74

Guide for Professional Vocational Technical Teacher Licensure

Massachusetts Department of Elementary and Secondary Education

Office of Educator Licensure

Atten: Vocational Technical Educator Licensure

address 75 Pleasant Street, Malden, MA 02148

telephone: 781-338-6634 **internet** www.doe.mass.edu

email VocEducators@doe.mass.edu.

Introduction

This Guide was prepared to assist teachers with a Preliminary Vocational Technical Teacher license with information on the requirements for obtaining the Professional Vocational Technical Teacher license. This Guide is designed so that individuals will have a “snapshot” of the license requirements by field in an easy to read format.

The Vocational Technical Education Regulations 603 CMR 4.00 and the Guidelines for Vocational Technical Education Programs and Educator Licensure are the basis for this Guide. These documents should be reviewed because they contain important information that is not included in this Guide including, but not limited to, Professional Standards for teachers, administrators and cooperative education coordinators, as well as general provisions for licensure and employment that includes revocation, suspension, limitation, and denial of licenses. The official copies of the Vocational Technical Education Regulations and Guidelines for Vocational Technical Education Programs and Educator Licensure are implemented by the Department of Elementary and Secondary Education. The Department does not represent this Guide as a replacement for the official Vocational Technical Education Regulations and the Guidelines for Vocational Technical Education Programs and Educator Licensure

References

Chapter 74 Selected Sections & 603 CMR 4.00 Vocational Technical Education Regulations and Guidelines available online at <http://www.doe.mass.edu/cte/laws.html>. * This document contains copies of the law, regulations and guidelines on which vocational technical educator licensure and Chapter 74 vocational technical education program approval are based.

Chapter 74 Guide for Preliminary Vocational Technical Teacher Licensure*

Chapter 74 Guide for Initial and Professional Vocational Technical Administrator Licensure*

Chapter 74 Guide for Professional Vocational Technical Educator License Renewal*

The online Educator Licensure & Recruitment System (ELAR) at http://www.doe.mass.edu/educators/e_license.html. ELAR contains full information on vocational technical educator licensure.

Additional references are listed with the requirements for each license field in this Guide.

Required College Degree Credit Courses by Regulation Route

The Vocational Technical Education Regulations requires a total of 39 college degree credits comprised of 21 credits (seven three (3)-credit professional education courses) and 18 credits in English, mathematics and science.

* These documents are available on the ESE-CVTE website at www.doe.mass.edu/cte/. They are also available in print form by contacting the Office of Educator Licensure at the telephone number(s), address or email address listed on the cover.

School District Sponsored One-Year Induction/Mentoring Programs

School districts provide induction programs consisting of an orientation, a mentoring relationship, a support team, opportunities for classroom/shop observation and other mentoring activities. Induction programs help the beginning teacher refine practice and understand professional roles and responsibilities that will affect student achievement. The *Appendices* contains more information on induction/mentoring programs.

Primary License vs. Secondary License

If an educator is licensed in more than one field, the educator must designate, upon license renewal, which license field is the primary license field. The primary license field is usually the license field under which the educator is employed. For example, an educator holds a Professional Vocational Technical Teacher license in the carpentry field, and in the facilities management field. He/she teaches carpentry only. Thus, the carpentry license field would be the primary license field. Note that if he/she teaches both carpentry and facilities management, the primary license field would be the one used more than 50%. The determination of the primary license field is important, because for renewal of the primary license field, 150 professional development points (PDPs) must be documented, and for the renewal of each additional (secondary) license field 30 PDPs must be documented.

Professional License Renewal

Once an individual has been granted a Professional Vocational Technical Teacher license, they begin pursuing the professional development that is required for the renewal of the Professional Vocational Technical Teacher license. The requirements for professional development and license renewal are contained in the Chapter 74 Guide for Professional Vocational Technical Educator License Renewal.

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Agricultural Mechanics – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in agricultural mechanics
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the agricultural mechanics * program with the Preliminary Vocational Technical Teacher license in agricultural mechanics or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Animal Science – Professional Vocational Technical Teacher License	
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<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in animal science
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the animal science* program with the Preliminary Vocational Technical Teacher license in animal science or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Automotive Collision Repair & Refinishing – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in automotive collision repair & refinishing
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Possession of at least three full years of teaching in the automotive collision repair and refinishing* program with the Preliminary Vocational Technical Teacher license in automotive collision repair & refinishing or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current Automotive Services Excellence (ASE) certification in at least two areas of automotive collision repair and refinishing (one of the areas must be painting/refinishing)

Information regarding Automotive Service Excellence (ASE) certification is available from the National Institute for Automotive Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF), both at 1305 Dulles Technologies Drive, Herndon, VA 20171-3421, Tel: 703/713-0100 <http://www.natef.org>.

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Automotive Technology – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in automotive technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the automotive technology* program with the Preliminary Vocational Technical Teacher license in automotive technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current Automotive Services Excellence (ASE) certification in at least three areas of automotive technology

Information regarding Automotive Service Excellence (ASE) certification is available from the National Institute for Automotive Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF), both at 1305 Dulles Technologies Drive, Herndon, VA 20171-3421, Tel: 703/713-0100 <http://www.natef.org>.

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Baking – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in baking
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the culinary arts * program with the Preliminary Vocational Technical Teacher license in baking or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current Food Sanitation Certification

Food Sanitation certification is issued by the following:

- Experior Assessments, 600 Cleveland St., Suite 900, Clearwater, FL 33755, 800-200-6241
- National Registry of Food Safety Professionals, 1200 E. Hillcrest St., Suite 303, Orlando, FL 32803, 800-446-0257
- ServSafe The Educational Foundation of the National Restaurant Association, 250 South Wacker Drive, Suite 1400 Chicago, IL 60606-5834, 800-765-2122

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Biotechnology – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in biotechnology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the biotechnology* program with the Preliminary Vocational Technical Teacher license in biotechnology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Cabinetmaking – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in cabinetmaking
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the cabinetmaking* program with the Preliminary Vocational Technical Teacher license in cabinetmaking or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Carpentry – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in carpentry
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the carpentry* program with the Preliminary Vocational Technical Teacher license in carpentry or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA construction supervisor license

MA Construction Supervisor licenses are issued by the MA Department of Public Safety, 1 Ashburton Place, Room 1301, Boston, MA 02108-1618, Tel. 617/727-3200 or 1-800-223-0933 www.state.ma.us/bbrs

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Construction Craft Laborer – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher construction craft laborer license
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching the in the construction craft laborer* program with the Preliminary Vocational Technical Teacher construction craft laborer license or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

Cosmetology – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in cosmetology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the cosmetology* program with the Preliminary Vocational Technical Teacher license in cosmetology
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA Cosmetologist license
<input type="checkbox"/>	Possession of current MA Cosmetologist Instructor license

The MA Board of Registration of Cosmetologists at the Division of Professional Licensure, 239 Causeway Street, Suite 500, Boston, MA 02114, Tel. (617) 727-9940, issues MA Cosmetologist license and Instructor’s licenses <http://www.state.ma.us/reg/boards/htm>

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Culinary Arts – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in culinary arts
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the culinary arts* program with the Preliminary Vocational Technical Teacher license in culinary arts or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current certification in food sanitation

Food Sanitation certification is issued by the following:

- Experior Assessments, 600 Cleveland St., Suite 900, Clearwater, FL 33755, Tel. 800-200-6241
- National Registry of Food Safety Professionals, 1200 E. Hillcrest St., Suite 303, Orlando, FL 32803, Tel. 800-446-0257
- ServSafe The Educational Foundation of the National Restaurant Association, 250 South Wacker Drive, Suite 1400 Chicago, IL 60606-5834, Tel. 800-765-2122

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Dental Assisting – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in dental assisting
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the dental assisting* program with the Preliminary Vocational Technical Teacher license in dental assisting
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current dental assisting certification

The Dental Assisting National Board, 676 N. St. Clair St., Suite 1808, Chicago, Illinois 60611, issues Dental Assisting Certification <http://www.dentalassisting.com/>

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Design & Visual Communications – Professional Vocational Technical Teacher License

Possession of current Preliminary Vocational Technical Teacher license in design & visual communications

Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education

Completion of at least three full years of teaching in the design & visual communications* program with the Preliminary Vocational Technical Teacher license in design & visual communications or a related field

Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Diesel Technology – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in diesel technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the diesel technology* program with the Preliminary Vocational Technical Teacher license in diesel technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current Automotive Services Excellence (ASE) certification in at least one area of diesel technology

Information regarding Automotive Service Excellence (ASE) certification is available from the National Institute for Automotive Excellence (ASE) and National Automotive Technicians Education Foundation (NATEF), both at 1305 Dulles Technologies Drive, Herndon, VA 20171-3421, Tel: 703/713-0100 <http://www.natef.org>.

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Drafting – Professional Vocational Technical Teacher License
Possession of current Preliminary Vocational Technical Teacher license in drafting
Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
Completion of at least three full years of teaching in the drafting* program with the Preliminary Vocational Technical Teacher license in drafting or a related field
Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Early Education and Care - Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in early education and care
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the early education and care* program with the Preliminary Vocational Technical Teacher license in early education and care
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA Office of Child Care Services lead teacher license

MA OCCS Lead Teacher licenses are issued by the MA Office of Child Care Services (OCCS), 600 Washington Street, Suite 6100, Boston, MA 02111, Tel. 617/988-6600
<http://www.qualitychildcare.org>

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Electricity – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in electricity
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the electricity* program with the Preliminary Vocational Technical Teacher license in electricity
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA Journeyman Electrician license
<input type="checkbox"/>	Possession of current MA Master Electrician license

The MA Board of State Examiners of Electricians at the Division of Professional Licensure, 239 Causeway Street, Suite 500, Boston, MA 02114, Tel. (617) 727-9931, issues MA Master and Journeyman Electrician licenses
<http://www.state.ma.us/reg/boards.htm>

* The Vocational Technical Education Framework for this program is available at
<http://www.doe.mass.edu/cte/frameworks/>.

Electronics – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in electronics
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the electronics* program with the Preliminary Vocational Technical Teacher license in electronics or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Engineering Technology – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in engineering technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the engineering technology* program with the Preliminary Vocational Technical Teacher license in engineering technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Environmental Science & Technology – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in environmental science & technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the environmental science & technology* program with the Preliminary Vocational Technical Teacher license in environmental science & technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Facilities Management – Professional Vocational Technical Teacher License

Possession of current Preliminary Vocational Technical Teacher license in facilities management

Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education

Completion of at least three full years of teaching in the facilities management* program with the Preliminary Vocational Technical Teacher license in facilities management or a related field

Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Fashion Technology – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in fashion technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the fashion technology* program with the Preliminary Vocational Technical Teacher license in fashion technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Graphic Communications – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in graphic communications
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the graphic communications* program with the Preliminary Vocational Technical Teacher license in graphic communications or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Health Assisting – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in health assisting
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the health assisting* program with the Preliminary Vocational Technical Teacher license in health assisting or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA license as a registered nurse (RN)

The MA Board of Registration in Nursing, 239 Causeway Street, Suite 500, Boston, MA 02114, Tel. (617) 727-9961, issues MA RN license <http://www.state.ma.us/reg/boards/htm>

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Heating-Ventilation-Air Conditioning-Refrigeration– Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in heating-ventilation-air conditioning-refrigeration
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the heating-ventilation-air conditioning-refrigeration* program with the Preliminary Vocational Technical Teacher license in heating-ventilation-air conditioning-refrigeration or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA refrigeration technician license
<input type="checkbox"/>	Possession of current Section 608 EPA certification at the universal level

MA Refrigeration Technician licenses are issued by the MA Department of Public Safety, 1 Ashburton Place, Room 1301 Boston, MA 02108-1618, Tel. (617) 727-3200 or 1-800-223-0933
<http://www.state.ma.us/dps/ENGINEER.HTM>

Section 608 EPA Certification at the Universal Level is issued by Ferris State University HVACR Institute 1020 Maple St. Big Rapids, MI 49307-1670, Tel. (866) 880-7674
www.ferris.edu/cot/hvacr/certhvacr.htm.

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Horticulture – Professional - 2003 Regulations Route	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in horticulture
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the horticulture* program with the Preliminary Vocational Technical Teacher license in horticulture or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of a current MA Pesticide Applicator License

MA Pesticide Applicator licenses are issued by the MA Dept. of Food & Agriculture, 251 Causeway Street, Suite 500, Boston, MA 02114, Tel. (617) 626-1700 <http://www.state.ma.us/dfa/>

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Hospitality Management – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in hospitality management
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the hospitality management* program with the Preliminary Vocational Technical Teacher license in hospitality management or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current certification in food sanitation

Food Sanitation certification is issued by the following:

- Experior Assessments, 600 Cleveland St., Suite 900, Clearwater, FL 33755, Tel. 800-200-6241
- National Registry of Food Safety Professionals, 1200 E. Hillcrest St., Suite 303, Orlando, FL 32803, Tel. 800-446-0257
- ServSafe The Educational Foundation of the National Restaurant Association, 250 South Wacker Drive, Suite 1400 Chicago, IL 60606-5834, Tel. 800-765-2122

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Information Support Services & Networking – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in information support services & networking
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the information support services & networking* program with the Preliminary Vocational Technical Teacher license in information support services & networking or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Machine Tool Technology – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in machine tool technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the machine tool technology* program with the Preliminary Vocational Technical Teacher license in machine tool technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Major Appliance Installation/Repairing – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in major appliance installation/repairing
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the major appliance installation/repairing* program with the Preliminary Vocational Technical Teacher license in major appliance installation/repairing or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current Section 608 EPA certification at the universal level

Section 608 EPA Certification at the Universal Level is issued by Ferris State University HVACR Institute 1020 Maple St. Big Rapids, MI 49307-1670, Tel. (866) 880-7674
www.ferris.edu/cot/hvacr/certhvacr.htm

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Marine Service Technology– Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in marine service technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the marine service technology* program with the Preliminary Vocational Technical Teacher license in marine service technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Marketing – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in marketing
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the marketing* program with the Preliminary Vocational Technical Teacher license in marketing or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Masonry & Tile Setting – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in masonry & tile setting
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the masonry & tile setting* program with the Preliminary Vocational Technical Teacher license in masonry & tile setting or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Medical Assisting – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in medical assisting
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the medical assisting* program with the Preliminary Vocational Technical Teacher license in medical assisting or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current national certification as a medical assistant or medical assistant/secretary

National Medical Assisting Certification is issued by:

American Medical Technologists
 710 Higgins Road, Park Ridge, IL 60068-5765
 Tel: 847/823-5169
 Website: <http://www.amt1.com/>

and

National Health Career Association
 134 Evergreen Place, E. Orange, NJ 07018
 Tel: 1/800-499-9092
 Website: <http://www.nhanow.com>

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Medical Laboratory Technology – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in medical laboratory technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the medical laboratory technology* program with the Preliminary Vocational Technical Teacher license in medical laboratory technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Metal Fabrication & Joining Technologies – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in metal fabrication & joining technologies
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the metal fabrication & joining technologies* program with the Preliminary Vocational Technical Teacher license in metal fabrication & joining technologies or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Office Technology – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in office technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the office technology* program with the Preliminary Vocational Technical Teacher license in office technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Operating Room Technology – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in operating room technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the operating room technology* program with the Preliminary Vocational Technical Teacher license in operating room technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Painting & Design Technologies – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in painting & design technologies
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the painting & design technologies* program with the Preliminary Vocational Technical Teacher license in painting & design technologies* or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Plumbing – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in plumbing
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the plumbing* program with the Preliminary Vocational Technical Teacher license in plumbing
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA Journeyman Plumber license
<input type="checkbox"/>	Possession of current MA Master Plumber license

The MA Board of State Examiners of Plumbers & Gas Fitters at the Division of Professional Licensure, 239 Causeway Street, Suite 500, Boston, MA 02114, Tel. (617) 727-9952, issues MA Master and Journeyman Plumber licenses <http://www.state.ma.us/reg/boards/htm>

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Power Equipment Technology– Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in power equipment technology
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the power equipment technology* program with the Preliminary Vocational Technical Teacher license in power equipment technology or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Practical Nursing (LPN) – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in practical nursing (LPN)
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the practical nursing (LPN) program with the Preliminary Vocational Technical Teacher license in practical nursing (LPN)
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA license as a registered nurse (RN)

The MA Board of Registration in Nursing, 239 Causeway Street, Suite 500, Boston, MA 02114, Tel. (617) 727-9961, issues MA RN license <http://www.state.ma.us/reg/boards/htm>.

* Note: A Vocational Technical Education Framework in practical nursing has not been developed.

Programming & Web Development – Professional Vocational Technical Teacher License

Possession of current Preliminary Vocational Technical Teacher license in programming & web development

Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education

Completion of at least three full years of teaching in the programming & web development^{*} program with the Preliminary Vocational Technical Teacher license in programming & web development or a related field

Completion of a school district sponsored one-year induction program

^{*} The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Radio & Television Broadcasting – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in radio & television broadcasting
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the radio & television broadcasting* program with the Preliminary Vocational Technical Teacher license in radio & television broadcasting or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Sheet Metalworking – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in sheet metal working
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the sheet metalworking* program with the Preliminary Vocational Technical Teacher license in sheet metalworking
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Stationary Engineering – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in stationary engineering
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the stationary engineering* program with the Preliminary Vocational Technical Teacher license in stationary engineering
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current MA First, Second or Third Class Boiler Engineer license

MA Boiler Engineer licenses are issued by the MA Department of Public Safety, 1 Ashburton Place, Room 1301 Boston, MA 02108-1618, Tel. (617) 727-3200
<http://www.state.ma.us/dps/ENGINEER.HTM>.

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Telecommunications – Fiber Optics – Professional Vocational Technical Teacher License

<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in telecommunications - fiber optics*
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the telecommunications – fiber optics* program with the Preliminary Vocational Technical Teacher license in telecommunications - fiber optics or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

Welding – Professional Vocational Technical Teacher License	
<input type="checkbox"/>	Possession of current Preliminary Vocational Technical Teacher license in welding
<input type="checkbox"/>	Completion of 39 college degree credits in courses designated by the Department of Elementary and Secondary Education
<input type="checkbox"/>	Completion of at least three full years of teaching in the welding* program with the Preliminary Vocational Technical Teacher license in welding or a related field
<input type="checkbox"/>	Completion of a school district sponsored one-year induction program
<input type="checkbox"/>	Possession of current national welding certification

National Welding Certification is issued by the American Welding Society (AWS), 550 NW LeJeune Rd., Miami, FL 33126, Tel. (800) 443-9353 <http://www.aws.org>

* The Vocational Technical Education Framework for this program is available at <http://www.doe.mass.edu/cte/frameworks/>.

APPENDIX A APPLICATION INSTRUCTIONS – Professional Vocational Technical Teacher Licensure

Individuals are encouraged to apply for Vocational Technical Teacher licensure online through the Educator Licensure & Recruitment System (ELAR) at www.doe.mass.edu/educators. Persons may apply for licensure by paper application using the paper application form that may be obtained from the Office of Educator Licensure. In addition to completing and submitting the application form (online or paper) along with the required fee which is \$100 for the primary license field and \$25 for each additional (secondary) license field, applicants for the Professional Vocational Technical Teacher license must send to the Office of Educator Licensure the following:

1. College transcripts for the required courses.
2. Copy of a letter from the superintendent or human resources officer in the school district where the minimum three years of teaching was performed, documenting the teaching experience.
3. Copy of a letter from the superintendent or human resources officer in the school district where the induction program was obtained, documenting that the induction program was completed.
4. If required for the particular license field, a copy of the occupational licenses/certifications must be submitted. Note that they must be current.

Questions may be directed to the Office of Educator Licensure:
Telephone: 781-338-6634 **email** VocEducators@doe.mass.edu.

APPENDIX B REQUIRED COURSES

There are specific college degree credit courses required for the Professional Vocational Technical Teacher license. The Vocational Technical Education Regulations require a total of 39 college degree credits comprised of 21 credits (seven three-credit professional education courses) and 18 credits in certain academic (core subject) courses. The Department worked with UMASS Boston, Fitchburg State College and Westfield State College to develop the seven professional education courses that address the Professional Standards for Vocational Technical Teachers set forth in the Vocational Technical Education Regulations. The following table lists the professional education courses required under the Vocational Technical Education Regulations. It is recommended that the Seminar for the Beginning Vocational Technical Education Teacher be taken first. Note that there is also a requirement for 18 college degree credits in English, mathematics and science under the Vocational Technical Education Regulations (see information on the following page under English, Mathematics and Science Courses.)

Professional Education Courses Provided at Fitchburg & Westfield State Colleges & the University of Massachusetts - Boston
Seminar for the Beginning Vocational Technical Education Teacher – three credits
Managing Student Behavior in a Healthy and Safe Environment – three credits
Teaching Methods for Vocational Technical Education - Instructional Strategies – three credits
Addressing the Needs of Students with Disabilities in Vocational Technical Education – three credits
Teaching Methods for Vocational Technical Education - Educating and Assessing the Vocational Technical Education Learner – three credits
Developing and Implementing a Standards-Based Curriculum in Vocational Technical Education – three credits
Teaching Methods for Vocational Technical Education – Using Research-based Practices to Develop Effective Instructional Strategies – three credits

English, Mathematics and Science Courses:

The English, mathematics and science courses required to meet the 18-college degree academic (core subject) course credits (required under the Vocational Technical education Regulations may be obtained at community colleges, other two-year colleges or four-year colleges. The breakdown of the 18 academic (core subject) course credits is below.

three college degree credits English Composition 101 (or a higher level)	3 (required)
three college degree credits in a higher level English (oral communication would also be acceptable)	3 (required)
three college degree credits in college mathematics 100 or a higher level	3 (min)
three college degree credits in college science 100 or a higher level	3 (min)
six college degree credits in higher level college mathematics and/or higher level college science	6
	18 total

A course description for each of the seven professional education courses listed above is provided below.

Seminar for the Beginning Vocational Technical Education Teacher

Course Description

This course is designed to prepare individuals for her/his first teaching assignment. The course will identify the characteristics of an effective teacher, as well as provide some of the tools required by first year teachers to be successful. These include techniques for establishing effective classroom routines and procedures, student instruction and assessment, and for maintaining a positive classroom/shop climate that conveys high expectations. In addition, participants in the Seminar will be able to identify the elements of a course/program curriculum and learn how to develop a lesson plan, assign and grade homework and collaborate with colleagues to improve instruction, assessment and student achievement.

Course Objectives

Upon completion of this course, participants will be able to:

- demonstrate an understanding of the strategies for surviving the first months of teaching
- demonstrate a familiarity of the state and federal laws and regulations that govern schools
- identify effective strategies to collaborate with colleagues to improve instruction, assessment and student achievement
- implement effective classroom/shop routines and procedures that maximize instructional time
- identify the elements of a quality course/program curriculum
- identify the characteristics of an effective teacher
- identify research-based effective instructional strategies and methods for assessing student performance
- demonstrate strategies for reinforcing positive student behavior and mutual respect
- identify strategies for establishing high student expectations

- identify elements of quality homework assignments and the process for evaluating teacher-assigned homework
- plan a unit of study with clear objectives and relevant measurable outcomes
- demonstrate an understanding of his or her moral and legal responsibilities
- use technology, including online resources, as an effective educational tool
- read, comprehend and synthesize quantitative technical education ideas and concepts from a wide variety of sources, both written and electronic
- demonstrate an understanding of the underlying major mathematics concepts of the course acquire knowledge and skills essential for promoting equity and supporting high achievement for all students

Managing Student Behavior in a Healthy and Safe Environment

Course Description

This course is designed to prepare individuals to organize an instructional area that is conducive to high quality learning in a healthy and safe environment. A variety of discipline concepts and strategies will be presented for application in the shop, classroom and cooperative education sites. Current relevant OSHA and child labor law standards will be reviewed and plans for a comprehensive health and safety plan will be developed.

Course Objectives

Upon completion of this course, participants will be able to:

- demonstrate how to establish and manage classroom/shop routines and procedures to maximize learning time
- demonstrate how to establish clearly articulated standards of behavior and consequences for non-compliance
- establish a record keeping process to document students' learning progress and behavior
- articulate and demonstrate an understanding of discipline techniques for addressing student behavior and mutual respect
- convey knowledge of and enthusiasm for his/her discipline to students
- demonstrate strategies that involve parents/guardians in student's learning and how to communicate clearly to them
- demonstrates how to create a safe environment conducive to student learning
- articulate knowledge of OSHA and Child Labor Laws and their implications for managing a safe and healthy learning environment
- demonstrate a knowledge of the critical components of a comprehensive health and safety plan for their shop or classroom
- demonstrate an understanding of legal and ethical issues in the use technology and other resources
- use technology, including online resources, as an effective educational tool
- read, comprehend and synthesize quantitative technical education ideas and concepts from a wide range of sources, both written and electronic
- demonstrate an understanding of the underlying major mathematical concepts of the course
- acquire knowledge and skills essential for promoting equity and supporting high achievement for all students

Teaching Methods for Vocational Technical Education - Instructional Strategies

Course Description

This course is designed to provide individuals with a wide variety of researched-based teaching methods and instructional strategies. Participants in this course will learn how to develop a unit of study and how learning styles, motivation, and expectations influence instructional choices made by the teacher. Participants will learn how to integrate technical and academic content by using a balanced instructional approach.

Course Objectives

Upon completion of this course, participants will be able to:

- acquire knowledge and skills essential for promoting equity and supporting high achievement for all students
- develop instructional units and lessons based on standards and performance indicators of the Certificate of Occupational Proficiency
- demonstrate an understanding and ability to align Vocational Technical Education Framework standards with the English Language Arts, Mathematics, Science and Technology/Engineering, History and Social Science, Arts and Comprehensive Health Curriculum Frameworks
- demonstrate the ability to plan units of study with clear objectives and outcomes
- demonstrate the ability to plan pedagogy appropriate to the specific discipline and the age, cognitive level and learning styles of students in the classroom and shop
- demonstrate how to include integrated technical and academic knowledge and skills in lesson plans and curriculum
- demonstrate a variety of methods for creating an effective classroom and shop learning environment
- articulate an understanding of various student academic and technical assessment methods and relevant feedback
- demonstrate the ability to use information in Individual Education Programs (IEP) to plan instructional strategies
- design effective homework assignments and the process for evaluating them
- convey knowledge of and enthusiasm for his/her discipline to students
- demonstrate how to partner with postsecondary institutions and registered apprenticeship programs for program development and articulation
- demonstrate how career/vocational technical student organizations can be used to improve student learning and develop student leadership skills
- demonstrate a knowledge of the elements of a professional development plan
- use technology, including online resources, as an effective educational tool
- read, comprehend and synthesize quantitative technical education ideas and concepts from a wide range of sources, both written and electronic.
- demonstrate an understanding of the underlying major mathematical concepts of the course

Addressing the Needs of Students with Disabilities in Vocational Technical Education

Course Description

This course is designed to provide individuals with an overview of the Federal and State Special Education Laws and Regulations and how they are implemented in schools in Massachusetts. Participants will learn about the elements of an Individualized Education Program (IEP) and the roles of special and general educators. Participants will also learn how to design curriculum and instruction using the information on the IEP and how modify their related classrooms and shops to accommodate students with disabilities.

Course Objectives

Upon completion of the course, participants will be able to:

- demonstrate knowledge of state and federal laws and regulations governing special education in Massachusetts.
- demonstrate an understanding of the Education Reform Act
- demonstrate the skills needed to provide instructional supports to all students in their classrooms and shops with diverse learning needs
- demonstrate the essential teaching skills needed to promote equity and supporting high achievement for all students
- demonstrate knowledge of the IEP process, required forms and the roles of special and general educators
- demonstrate the collaborative skills and effective co-teaching strategies needed by special and general educators to successfully educate students with disabilities in the least restrictive environment in technical settings
- demonstrate appropriate curriculum design, instruction and classroom assessments using the individualized information on the IEPs of the students
- demonstrate the effective utilization of a full range of behavior management strategies
- demonstrate appropriate assistive technology and its use in related classrooms and shops
- demonstrate skills necessary to successfully communicate with parents and educators regarding students with disabilities in their classrooms and shops
- use technology, including online resources, as an effective educational tool
- read, comprehend and synthesize quantitative technical education ideas and concepts from a wide range of sources, both written and electronic.
- demonstrate an understanding of the underlying major mathematical concepts of the course

Teaching Methods for Vocational Technical Education - Educating and Assessing the Vocational Technical Education Learner

Course Description

This course is designed to provide individuals with the knowledge and tools to teach and assess the technical, academic and employability knowledge/skills of students that are enrolled in vocational technical education programs. Participants in this course will be able to identify, develop, and model appropriate learning activities and assessments for the vastly divergent student population in vocational technical education.

Course Objectives

Upon completion of the course, participants will be able to:

- communicate high standards and expectations when evaluating student learning
- learn how to encourage all students to believe that effort is a key to achievement and be able to promote the concept that all students can achieve without exception
- demonstrate how assessment can be used to improve student achievement
- develop and implement student evaluations and assessments based on standards and performance indicators of the Certificate of Occupational Proficiency
- demonstrate the ability to plan student activities that include research, documentation, task performance, record keeping and evaluation of performance
- develop a wide range of written assessments to evaluate student performance and use the results to plan further instruction
- draw on the results of informal and formal assessments as well as knowledge of human development and student learning styles to plan learning activities appropriate for the full range of students within a classroom and shop setting
- employ appropriate sheltered English or subject matter instructional strategies for English Language Learners (ELL)
- demonstrate the ability to provide ongoing feedback to students and their parents or guardians on student achievement
- translate evaluations of student work into a record keeping system that accurately conveys the level of student achievement
- develop lesson plans that incorporate student career-decision making and employability skills
- use work-based activities to enhance student learning
- model leadership and sound personal, social and civic values and ethics
- use technology, including online resources, as an effective educational tool
- read, comprehend and synthesize quantitative technical education ideas and concepts from a wide range of sources, both written and electronic
- demonstrate an understanding of the underlying major mathematical concepts of the course

Developing and Implementing a Standards-based Curriculum in Vocational Technical Education

Course Description

This course is designed to provide participants with the knowledge of the elements of a quality curriculum. Participants will learn how to develop a curriculum and a competency-based reporting system that incorporates the standards and performance indicators of the Vocational Technical Education Frameworks and the English Language Arts, Mathematics, Science and Technology/Engineering, History and Social Science, Arts and Comprehensive Health Curriculum Frameworks.

Course Objectives

Upon completion of the course, participants will be able to:

- demonstrate an understanding of the elements of a quality course and program curriculum
- demonstrate an understanding of the Certificate of Occupational Proficiency system including the Vocational Technical Education Frameworks
- demonstrate an understanding of the English Language Arts, Mathematics and Science and Technology/ Engineering Curriculum Frameworks

- demonstrate the ability to align the Vocational Technical Education Frameworks standards with the English Language Arts, Mathematics, Science and Technology/Engineering, History and Social Science, Arts and Comprehensive Health Curriculum Frameworks
- demonstrate high expectations for student learning through curriculum development
- develop a quality curriculum that includes the following components:
 - ♦ *title page that includes a course title and number based on a Program of Study, and CIP code*
 - ♦ *course philosophy that is consistent with a school's instruction philosophy and is made up of 6 – 8 goals to be achieved*
 - ♦ *description that includes a brief narrative of scope and sequence, topics covered and outcomes expected, licenses, certifications available to students, articulation agreements if applicable*
 - ♦ *syllabus that includes a course summary, instructional philosophy, major course projects and activities, assessment plan, and timelines*
 - ♦ *occupational analysis that includes a narrative of the occupation and related industries, education qualifications for pathways, future trends and salary projections*
 - ♦ *competency validation that includes a description of the validation process, Certificate of Occupational Proficiency standards and National and State Industry and Licensure Standards*
 - ♦ *performance standards/indicators which include a description of measurable characteristics and that lists conditions of performance and performance criteria*
 - ♦ *competency reporting system which includes a process for periodic reporting to students and their parents guardians*
 - ♦ *instructional activities and needed resources*
- use technology, including online resources, as an effective educational tool
- read, comprehend and synthesize quantitative technical education ideas and concepts from a wide range of sources, both written and electronic
- demonstrate an understanding of the underlying major mathematical concepts of the course
- acquire knowledge and skills essential for promoting equity and supporting high achievement for all students

Teaching Methods for Vocational Technical Education – Using Research-based Practices to Develop Effective Instructional Strategies

Course Description

This course is designed to provide individuals with an understanding of how learning styles impact instruction and learning. Participants will learn how to develop a teaching unit that focuses on readiness assessment, use of learning styles, attention to whole-brain teaching, interpersonal skills, knowledge and skill assessment.

Course Objectives:

Upon completion of this course, participants will be able to:

- demonstrate an understanding of current learning style/brain research and its implications for teaching and learning
- demonstrate the ability to assess individual learning styles and profile a class of students including students with disabilities
- demonstrate the ability to construct a lesson plan and teach a lesson that addresses the learning style strengths of a student/class

- demonstrate the ability to prepare and apply assessment instruments that address all learning styles
- articulate an understanding Howard Gardener's multiple intelligence theory
- articulate an understanding of the "Triune Brain Theory"
- plan and provide instruction that is competency-based and is a balance between manipulative skills and technical knowledge
- demonstrate how to translate evaluations of student work into a record keeping system that accurately conveys the level of student achievement
- use technology, including online resources, as an effective educational tool
- read, comprehend and synthesize quantitative technical education ideas and concepts from a wide range of sources, both written and electronic
- demonstrate an understanding of the underlying major mathematical concepts of the course
- acquire knowledge and skills essential for promoting equity and supporting high achievement for all students.

APPENDIX C

INDUCTION/MENTORING PROGRAMS

The Education Reform Act and the educator licensure regulations 603 CMR 4.00 and 7.00 require school districts to provide systems of support for beginning educators. Induction programs offer this system of support through various components including an orientation, a mentoring relationship, a support team, opportunities for classroom observation and other mentoring activities. These programs help beginning educators refine practice, understand professional roles and responsibilities, and, ultimately, positively affect student achievement. Listed below are the Standards for Induction Programs for Teachers.

The Department of Elementary and Secondary Education published the document titled Guidelines for Induction Programs in October 2001. It is available at <http://www.doe.mass.edu/eq/mentor/induct.pdf>. In addition, several other resources on induction programs and mentoring for districts and individual educators are available at <http://search.doe.mass.edu/default.asp?q=induction+programs>.

Standards for Induction Programs for Teachers

- (1) Application. All school districts are required to provide an induction program for teachers in their first year of practice.
- (2) Standards. All induction programs shall meet the following requirements:
 - (a) an orientation program for beginning teachers and all other incoming teachers
 - (b) assignment of all beginning teachers to a trained mentor within the first two weeks of teaching
 - (c) assignment of a support team that shall consist of, but not be limited to, the mentor and an administrator qualified to evaluate teachers
 - (d) release time for the mentor and beginning teacher to engage in regular classroom observations and other mentoring activities
- (3) Additional Requirements. All programs shall submit an annual report to the Department that includes information on:
 - (a) program activities
 - (b) number and complete list of beginning teachers served
 - (c) number and complete list of trained mentors
 - (d) number of classroom observations made by mentors
 - (e) number of hours that mentors and beginning teachers spend with each other
 - (f) hiring and retention rates for beginning teachers
 - (g) participant satisfaction
 - (h) partnerships developed with other districts, professional associations, and institutions of higher education to support the beginning teacher induction program

APPENDIX D

QUESTIONS and ANSWERS

Additional Q's and A's will be added. Please submit any questions to careertech@doe.mass.edu.

1Q Are all school districts required to have induction programs with a trained mentor for all new core subject (academic) and technical teachers? *Yes. The requirements and standards for induction programs are the same for all teachers.*

2Q If a teacher with Provisional Vocational Teacher Approval (Preliminary license) is unable to complete the professional education courses within the required time frame because he/she was called to active military duty, will they be allowed additional time to complete the coursework? *Yes*

3Q Sue has a BA in History and 12 years experience in commercial design. Does she have to take the English, mathematics and science courses required for the Professional license to teach commercial design, or will the English, mathematics and science courses she took in college toward her BA suffice? *They will suffice.*

4Q Can I get credit for the professional education college courses I took in California? *Maybe. You would have your official transcript submitted to the Office of Educator Licensure along with a copy of the college catalog in which they are described. The Office of Educator Licensure may request that you crosswalk the course competencies to the Professional Standards for Vocational Technical Teachers in order to assist in determining if they meet the requirements.*

5Q If a person doesn't complete all 39 course credits required for the Professional Vocational Technical Teacher license, could they renew their Preliminary license in order to complete the coursework and obtain a Professional license? *They may, subject to the approval of the Commissioner of Education, get an extension if there are extenuating, catastrophic circumstance such as serious illness that were beyond the control of the educator.*

6Q When will the "Seminar for the Beginning Vocational Technical Educator" be offered? *It is recommended that it be taken during the first year of teaching in conjunction with the school district sponsored induction program at UMASS Boston, Fitchburg and Westfield State Colleges will have this 3-credit seminar available in the fall 2005.*

7Q May a candidate for a Professional Vocational Technical Teacher license who obtained a college credit fifteen or more years ago use the credits obtained in English language arts, mathematics and science to meet the requirement for this coursework contained in the 2003 regulations? *Yes.*

8Q I received Full Approval as a vocational teacher on September 4, 2001. The 1991 vocational education regulations state, " All fully approved vocational technical education teachers hired after January 1, 1991 must obtain an additional 12 semester hours of credit at an accredited collegiate institution, or the equivalent thereof, in courses designated by the Division. Such personnel must fulfill this requirement within two years of having achieved full approval status and shall concurrently have satisfied the biennial professional improvement requirement for that period." I have completed nine semester hours and am wondering if I have to complete the additional 3 now that there are new regulations in effect? *On September 1, 2003 the 1991 vocational educational regulations were replaced by the "2003" vocational technical education regulations. On September 1, 2003 your Full Vocational Teacher Approval became a*

Professional Vocational Technical Teacher license and therefore is subject to the 2003 vocational technical education regulations that do not include the provision for completion of 12 semester hours in two years. Therefore you do not have to complete the three semester hours as far as your license is concerned. Your professional license is renewable in five years during which time you must complete 150 professional development points (PDPs). You should seriously consider proposing in your professional development plan the completion of the three semester hours as they would count as 45 PDPs and could perhaps count toward a degree. It goes without saying that they are valuable as professional development, so much so, that much of their content is being infused in the new courses new teachers will be required to take.

9Q How will I know if the required English, mathematics and science courses (18 college degree credits) will count toward the requirements for a professional license? *College course catalogs use 100 and above for codes of courses that carry college degree credit. The regulations require six college degree credits in English to include three college degree credits in English Composition 101 or a higher level and three additional college degree credits in higher level English and twelve college degree credits in mathematics and science to include a minimum of three college degree credits of college mathematics and a minimum of three college degree credits of college science. The remaining six college degree credits may be earned in college mathematics and/or science. Developmental courses or courses which do not carry degree credits cannot be counted toward the 18-college degree credits requirement for the professional license. College course catalogs use 100 and above for codes of courses that carry college degree credit. The courses must be approved through the college’s English, Mathematics and Science departments. College course catalogs prefix the course numbers with ENG, M and SCI or similar codes for English, mathematics and science courses, respectively.*

The list below of college degree credit courses is illustrative of those that would be counted. It is not intended to limit course selections. It is incumbent upon the candidate for licensure to retain a copy of the college catalog that describes the academic courses in the event that there is additional information need by the Department when reviewing the application for licensure.

three college degree credits English Composition 101 or a higher level	3 (required)
three college degree credits in a higher level English (oral communication would be acceptable) in a higher level English such as English Composition 102, Technical Writing, Report Writing, Business Writing, Writing in the Professions, Advanced Writing, Current Themes in Literature. A higher-level English course that is based on the Massachusetts English Language Arts Curriculum Framework may be counted.	3 (required)
three college degree credits in college mathematics 100 or a higher level (required) such as Mathematics 104, College Algebra I, Pre Calculus, Analytical Geometry I, Math for Engineering Technologies, Statistics I.	3 (min)
three college degree credits in college science 100 or a higher level (required) such as Biology I and II, Microbiology, Plant Science, Botany, Zoology, Soil Science, Ecology, Human Health, Anatomy and Physiology I and II, Chemistry, Nutrition, Physics.	3 (min)
three college degree credits in higher level college mathematics and/or higher-level college science such as college Algebra II, Biology II, Calculus. Higher-level mathematics and science courses that are based on the Massachusetts Mathematics Curriculum Framework and the Massachusetts Science & Technology/Engineering Curriculum Framework may be counted. Computer Science courses may be counted toward three of the six college degree credits in science and/or mathematics when a direct correlation exists between the course and the area of vocational technical teacher licensure, and this correlation is clearly evident through the course description.	6
	18 total