

# <u>www.mbit.org</u> 2019-2020

# **Course Descriptions**

# ADULT EDUCATION PROGRAMS

Evening Course Descriptions

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# **AUTOMOTIVE TECHNOLOGY**

# Auto Body Repair and Paint Technology

In this course you will learn the basics of auto body repair in a hands-on, instructor- guided environment. Included are techniques in small dent repair to sheet metal panel alignment/replacement, instruction in the basic steps to prepare a vehicle for refinishing, application of primers and paint, and use of shop tools and equipment. This course is for the car enthusiast who would like to learn more about what goes into auto body repair. If you have a part from a project car you may bring it in; however fully intact cars cannot be accommodated.

### Safety Inspection Mechanic Training Program (S.I.)

Receive training and testing as required by the PA Department of Transportation for Safety Inspection Certification. 12 hours (4 nights plus tactile test is 5<sup>th</sup> night)

Category I – Passenger / Light Truck Category II – Motorcycle Category III – Heavy Truck Category IV-Enhanced Safety Vehicle Inspector Prerequisite: Previous automotive mechanical experience and knowledge is required. (2 weeks includes written test) Tactile Testing I, II, III - As scheduled (1 week)

# Enhanced Safety Inspection Certification (Category IV)

Testing for reconstructed, specially constructed, and flood vehicles required by Penn DOT. Training available for inspectors and document reviewers. Prerequisite: Current PA Inspection License

# **Enhanced Emissions Inspector Certification (E.E.I.C.)**

Learn to perform vehicle inspections in accordance with PA Enhanced Emissions requirements. (8+ hours)

Please note: If you cannot present a valid driver's license you will not be admitted to class. Students are responsible for bringing any training materials that was sent by MBIT or training materials that were purchased through PennDOT. Students are responsible for reading all materials before instruction begins.

### **Small Engine Repair**

This is a class to learn the theory of how outdoor power equipment engines operate and are maintained. Students will learn to diagnose, repair and do preventive maintenance on 2 and 4 cycle engines such as leaf blowers, trimmers and weed-whackers. Learn engine overhaul procedures and completely tear down and rebuild this type of equipment. This class is for the do-it-yourselfer looking to service his or her own outdoor power equipment or the landscaper trying to save down time and save a few dollars. The class will be a combination of demonstration, lecture and most of all hands on learning.

# **COMPUTER & TECHNOLOGY**

# CompTIA A+ Core (220-1001) – Fall Only

This course prepares the student to take the CompTIA A+ 220-1001 certification exam. CompTIA A+ is an essential IT certification for establishing an IT career. A+ establishes best practices in troubleshooting, networking and security across a variety of devices to set the stage for IT careers. Through a combination of theory and the hands on skills, students will learn the essential principles of installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, and preventative maintenance on desktop and laptop computers. Price includes workbook, online testing resources for one year and voucher for certification exam.

Students who sign up for both sections receive a 10% discount.

Prerequisite: Basic computer and operating system knowledge including file management in a Windows environment.

# CompTIA A+ Core (220-1002) – Spring Only

This course prepares the student to take the CompTIA A+ 220-1002 certification exam. CompTIA A+ is an essential IT certification for establishing an IT career. A+ establishes best practices in troubleshooting, networking and security across a variety of devices to set the stage for IT careers. Through a combination of theory and the hands on skills, students will learn the essential principles of installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, and preventative maintenance on desktop and laptop computers. Price includes workbook, online testing resources for one year and voucher for certification exam.

Students who sign up for both sections receive a 10% discount.

Prerequisite: Basic computer and operating system knowledge including file management in a Windows environment.

#### **Smartphone Photo & Social Media**

Discover how to use social media to drive presence in a variety of platforms. Participants will gain an understanding of camera usage, composition, lighting, editing and filtering photos. Popular social media platforms will be explored with the context of editing, captioning, posting and sharing content. Students will also learn how to create relevant visual and written content for their audience, and techniques for streamlining their social media time

### Web Design Using WordPress

WordPress is a platform used to power over 25% of all websites. This course will teach you how to create and update your own website using this powerful tool. No coding knowledge is necessary. Students will create their own web site during this course. No prior web design knowledge is required.

#### **Microsoft Office Suite**

Acquire essential skills for producing professional work with Microsoft Office Suite. This course will cover Word, Excel, PowerPoint, Publisher and Outlook. This course will also include Mail Merge. Basic computer skills are a requirement of this class.

# Introduction to MS Excel

This basic course will introduce the terms used for spreadsheets, basic formatting, how to enter and edit data, move and copy data, use simple functions and formulas, create and modify charts, and save and retrieve data. Students will learn how to customize spreadsheets to meet their specific needs.

# Intermediate/Advanced Excel

Learn Excel's intermediate to advanced functions, which most users don't know exist. You will learn how to use conditional formatting as a creative solution to common issues. This course will teach you how to work with large workbooks creating Dashboards and 3D References. It will also introduce you to Pivot Tables and Charts.

Prerequisite: Basic computer skills, Introduction to Excel

# Intermediate/Advanced PowerPoint

Take your PowerPoint presentations to the next level! You can create a PowerPoint, but lose your audience halfway through your presentation? Take it from ordinary to extraordinary!

Prerequisite: Basic computer skills and Basic MS PowerPoint

# Create Digital Newsletter with Microsoft 365 Sway

Microsoft Sway provides a great way to create digital newsletters. In the past, newsletters have typically been paper-copy handouts, until they evolved into becoming emails. Sway, however, allows us to change the game and create dynamic newsletters that are visually attractive as well as interactive for the user.

Prerequisite: Basic computer skills and Basic MS Office knowledge

# MS Office for the Small Business Owner

Learn how to use MS Office for your small business! Learn to save money doing it yourself by creating customer database, file management, invoice, bids, & marketing materials.

Prerequisite: Basic computer skills

# RESIDENTIAL

# **Residential Carpentry- Basic**

This is a hands-on course incorporating basic residential carpentry skills that the student may be able to apply to home projects or use to apply for entry level work in construction. The class will be adapted to the interest and skill of the students, covering framing, drywall, installing windows and doors, trim, molding, and exterior products. The instructor will provide an introduction to safety, tool use, materials, and varied construction techniques as well as how to find information on zoning and building permits.

# **Residential Carpentry - Intermediate**

This is a hands-on course expanding upon the skills learned in Basic Residential Carpentry that the student may be able to apply to home projects or use to apply for entry level work in construction. Topics covered: the construction of interior and exterior stairs (deck stairs), a drop ceiling and exterior vinyl siding. The instructor will provide a description of tool use, materials, and varied construction techniques.

Prerequisite: Basic Residential Carpentry

# **Residential Electricity- Basic**

This is a practical course in basic residential electricity that will provide students with the knowledge to complete home projects or seek entry level employment in the electrical trade. Students will learn electrical fundamentals while learning to install and repair wiring in a manner consistent with requirements of the National Electrical Code. Hands-on projects will allow the student to apply theory to practice. The use of basic hand tools and equipment, circuit wiring, meters, transformers, and reading electrical blueprints will be covered. Safety procedures will be review and practiced in all projects. After completing this course, the student will be able to: install or replace a three-way switch, install a ceiling fan, replace or install a new circuit breaker, install a new receptacle, and replace a light fixture.

# **Residential Plumbing-Basic**

This course is for homeowners, landlords and anyone who would like to be able to repair or replace their own plumbing fixtures or for those who are interested in working in an entry level position in the plumbing industry. Through a combination of lecture and hands-on lab work, students will learn the basics of plumbing theory as well as the processes and skills needed to safely repair, install and do preventive maintenance on residential plumping equipment. Topics will include the repair or replacement of faucets, toilets, water heaters, garbage disposals and installation of appliances such as dishwashers. The instructor will include topics on safety, use of tools, and how to locate zoning and permitting information. No experience is required.

# WELDING & DRAFTING/DESIGN

#### Welding I

Through a combination of hands-on lab instruction and lecture students can learn basic welding techniques and acquire the proper skills in the safety, set up and operational procedures for Shielded Metal Arc Welding (SMAW), or stick welding, and Oxy-Fuel Cutting (OFC). All training is in accordance with the national standards of the American Welding Society and the American National Standard Institute (ANSI Z49.1)

# Welding II

This advanced class provides theory and hands-on instruction in acquiring the proper skills in the safety, set up, and operation procedures in the Gas Metal Arc Welding (GMAW) MIG welding, Gas Tungsten Arc Welding (GTAW) TIG welding and Plasma Arc Cutting (PAC) processes. All training is to national standards, according to the American Welding Society (AWS) and the American National Standard Institute (ANSI Z49.1), Safety in Welding and Cutting for Welder. Work boots (steel toed preferred), and 100% cotton clothing are required. Safety goggles and earplugs will be provided.

Prerequisite: Welding I or equivalent experience.

# **SolidWorks**

The SolidWorks design software is used to create and analyze parts, assemblies and drawings. This course will cover essential topics, including an intro to 3D CAD, user interface, sketching, modeling, patterning, editing, and design changes. This is an introductory course for those who would like to get started using SolidWorks fundamentals to create and modify 3D models and 2D drawings.

Prerequisite: A working knowledge of PCs and Windows operating system is essential. An understanding of basic drafting skills and mechanical design is helpful.

# **HUMAN SERVICES & CULINARY**

#### **Dental Assisting and Radiology Test Preparation**

The first seven weeks of this program will give you the basic knowledge of dental assisting skills, preparing you for employment in a dental office. You will master skills such as taking impressions, making models, chair side procedures, dental record charting, proper sterilization techniques & infection control, mixing dental materials, and processing x-rays. At the completion of this program you will be prepared for entry level employment.

The second seven weeks of this course helps the student to prepare for the Radiology Licensing Test. There you will learn procedures for dental radiology, including placement, exposure, infection control, equipment maintenance, taking and exposing films. At the completion of the course you will be prepared to sit for the Radiology Test. (Test fee extra). The dental assisting materials and study guides are included. Students will be required to purchase a text for the radiology test prep course.

# **Dental Assisting addition:**

# Textbooks:

Essentials of Dental Assisting 6<sup>th</sup> Edition– Robinson and Bird: Included with cost Dental Radiology, Principles and Techniques 5<sup>th</sup> Edition – Iannucci: Cost not included

# **Introduction to Oral Radiology and Test Preparation**

(This is the second half of the course above. Enrollment to this portion is open to current trained Dental Assistants who wish to pursue the radiology portion.)

In this course you will learn procedures for dental radiology, including placement, exposure, infection control, equipment maintenance, taking and exposing films. At the completion of the course you will be prepared to sit for the Radiology Licensing Test. (Test fee extra). Students will be required to purchase Dental Radiology 5th edition (ISBN 978-1-4377-1162-2) on their own.

# **Professional Cooking for Home Chef**

This course is geared toward the beginning cook or more experienced cook who wants to learn the correct methods for executing basic cooking techniques. Each week a recipe will be introduced and used as a template for teaching various culinary fundamentals. The course begins with soups and salads, moves to appetizers and entrees and desserts are taught on the last night. Also discussed will be best practices for stocking and managing a home kitchen. Students will leave with their creations every night.

# **Decadent Desserts – Stack Cakes**

This course is geared toward the sweet enthusiast. This course will cover cake baking, including recipe understanding, measurements, and proper baking techniques. The second class will go over icing and assembly of cakes. Students will leave with their stack cake at the completion of this two-night class.

# Holiday Desserts – Cookies & Sweets

This course is geared toward traditional holiday sweets. This course will cover cookie and sweet making, including recipe understanding, measurements, and proper baking techniques. Students will leave with their sweet treats at the completion of this two-night class.

# HVAC

# NATE Certification Test

North American Technician Excellence, Inc. (NATE) is the leading certification program for technicians in the heating, ventilation, air-conditioning, and refrigeration (HVAC/R) industry and is the only test supported by the entire industry. Certification provides assurance that a technician excels in the knowledge and skills necessary to be among the best in the heating and cooling industry. Scheduled by appointment only.

# Introduction to Air Conditioning and Heat Pumps (Spring Only)

This course is for homeowners, landlords and anyone who would like to be able to fix their own air conditioning system or for those who are interested in working in an entry level position in the heating and air conditioning industry. Through a combination of lecture and hands-on lab work, this course covers the

basics of air conditioning theory as well as the processes and skills needed to safely install and do preventive maintenance service of residential HVAC equipment. Students will be instructed in the physics of heat energy, the basic operation of a heat pump system and the refrigeration process and defrost cycle. Also basic electricity will be covered such as basic electric motors and automatic controls such as thermostats, contactors, limit switches and pressures switches.

## Introduction to Heat Systems—Oil, Gas, & Heat Pumps (Fall Only)

This course is for homeowners, landlords and anyone who would like to be able to fix their own heat system or for those who are interested in working in an entry level position in the heating and air conditioning industry. Through a combination of lecture and hands-on lab work, students will learn the basics of HVAC theory as well as the processes and skills needed to safely install and do preventive maintenance service of residential HVAC equipment. Students will be instructed in the physics of heat energy, the basic operation of a heat pump system, and the workings of gas and oil heat. Also basic electricity will be covered such as basic electric motors and automatic controls such as thermostats, contactors, limit switches and pressures switches.

# LANDSCAPE & FLORAL DESIGN

# Terrarium

This course is geared toward those who have a green thumb, or those that want to learn to have one. This course will cover slow growing perennials and other plants enclosed in a glass terrarium. Students will leave with their beautiful creations at the completion of this one-night class.

Some information about the project: A terrarium is like an aquarium, but for plants instead of fish. It is made in just about any glass container. It is planted to look like a miniature garden or forest enclosed in its own little world. You can easily make a beautiful terrarium yourself during this one-night class.

#### Fall Container for the Door Step

This course is geared toward those who enjoy a living and festive door step or outdoor arrangement during the fall. This course will cover potting, and planting a variety of plants in a container that is festive for the fall holidays. Students will leave with their beautiful creations at the completion of this one-night class.

Some information about the project: This course will cover arrangement of pansies, mums, cabbages & kale in a container. Understanding the plant structure, growing conditions and care, as well as contrasting textures, and use of color will be some of introduced theory. You can easily make a beautiful living outdoor décor piece yourself during this one-night class.

# Living Wreaths

This course is geared toward those who have a green thumb, or those that want to learn to have one. This course will cover living wreaths to decorate your home, and are a great way to add color and texture to your home's entryway or even inside. Students will leave with their beautiful creations at the completion of this two-night class.

Some information about the project: A living wreath is a fragrant and fresh way to decorate your home. Choose from a variety of succulents to create a unique wreath to dress up any entrance way in or outside your home. Learn how to properly care for and maintain your decorative wreath from season to season.

# **ON-LINE COURSES**

Middle Bucks Institute of Technology is pleased to offer on-line courses through Education to Go. Our instructorfacilitated online courses are informative, fun, convenient, and highly interactive. Our instructors are famous for their ability to create warm and supportive communities of learners. We have two educational offerings on-line at this time.

# **Online Career Training Programs**

Online courses and career training programs prepare you for a new career, or help you advance within your current occupation. Learn new skills and prepare for industry-recognized certifications. Some areas you can explore include Arts and Design, Business, Computer Applications, Computer Programming, Construction and Trades, Health and Fitness, Hospitality, Information Technology, Language, Legal, Teacher Professional Development, and Writing. In most cases, all you need to get started is internet access, an e-mail address, and a web browser. Additional requirements, if any, will be listed with the course description. For more information, go to: www.careertraining.ed2go.com/mbit.

# **Online Fundamentals Courses**

Most courses run for six weeks (with a two-week grace period at the end). Courses are project-oriented and include lessons, quizzes, hands-on assignments, discussion areas, supplementary links, and more. You can complete any of these courses entirely from your home or office and at any time of the day or night. Read your lessons and ask questions of your instructor at the times most convenient to you. In most cases, all you need to get started is internet access, an e-mail address, and a web browser. Additional requirements, if any, will be listed with the course description. For more information, go to http://www.ed2go.com/mbit. Tuition for on-line fundamentals courses starts at \$100 per course.

# How to Get started:

1. Visit our Online Instruction Center:

www.ed2go.com/mbit [Online Fundamentals Courses]

OR

www.careertraining.ed2go.com/mbit [Online Career Training Programs]

- 2. Click the Orientation link and follow the instructions to enroll and pay for your course. During orientation, you will learn important information about your course. You will also be provided an opportunity to choose the name and password you will use to access your course.
- 3. When your course starts, return to our Online Instruction Center and click the Classroom link. To begin your studies, simply log in with the name and password you selected during orientation.

# **Requirements:**

All courses require Internet access, e-mail, and Chrome, or Microsoft Internet Explorer. Some courses may have additional requirements. Please visit our Online Instruction Center for more information.

# **General Information**

# **Admission Requirements**

Adults, out-of-school youths, and students at least 16 years of age and in the 11th grade may attend MBIT Adult Education classes.

#### **Course Fees**

All fees must be paid in full upon registration with the exception of the Dental course. Call 215-343-2480 X 108 or 218 for Dental payment options.

#### **Book and Material Fees**

The cost of textbooks and materials is included in the class fee unless otherwise noted.

#### **Class Cancellation**

MBIT reserves the right to cancel, postpone, or reschedule any class due to insufficient enrollment or unforeseen circumstances. All students will be notified via phone, website, or email of class cancellations.

# **Class Confirmation**

*Confirmations will be sent one week prior to classes only to students who supply an email at registration. All students should report to class on the first scheduled night.* 

**Refund Policy** A full refund will be provided if the course is cancelled due to insufficient enrollment. Please allow four to six weeks to process a refund. 100% Refund – Cancellation or Withdrawal 48 hours prior to the first night of class. (Subject to a \$25 cancellation fee). 80% Refund – Withdrawal during first week of instruction.

# Registrations

Registrations are accepted on a first come, first served basis. Register early to guarantee a space in the course of your choice.

# **Smoking Policy**

MBIT is a smoke free campus. Please refrain from using tobacco products on campus.

#### Accommodations

MBIT recognizes the diversity of our adult population and intends to provide reasonable accommodations to students enrolling in PA registered vocational-technical programs for the purpose of developing or upgrading occupational skills. The Administrative Director or designee will process requests for specific accommodations on an individual basis and determine how these services will be provided.

# Certificates

Certificates will be issued to all students attending at least 80% of scheduled class hours except in the following courses: NATE, EPA, Safety Inspection Mechanic Training Program, Enhanced Emissions Inspector Certification (E.E.I.C.), which require 100% attendance.

# **Industry Training**

MBIT also offers Customized Industry Training programs, at MBIT or on-site. Please call the Adult Education Department at 215-343-2480 x 108 or 218 for more information.