MBIT

MIDDLE BUCKS
INSTITUTE OF TECHNOLOGY

"Preparing tomorrow's workforce today"

www.mbit.org

2023- 2024

Course Descriptions
Fall 2023

ADULT EDUCATION PROGRAMS

Evening Course Descriptions

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Jamison, PA 18929
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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. Students who are working on their own project are expected to purchase the materials needed for this project, including paint, sandpaper, and other supplies. Instructor will provide guidance on what materials are needed and where to purchase.

Small Engine Repair- Landscape & Power Sport Engines

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. Also applicable for recreational power sports engines such as ATVs and wave runners. 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.

PA 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 5th night)

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

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.

COMPUTERS & MEDIA

Create Online Newsletters in a Snap!

Learn to use Smore to easily design newsletters, updates, and announcements that will gain your audience's attention. This cost-effective tool for school districts, non-profits, and businesses provides you with easy-to-use templates for use in social media, videos, and presentations. Go beyond the online tutorials to see how this program can save you time and money while integrating your communications to meet the needs of your students, parents, and customers. Act 48 hours available for school employees. Prerequisite: Basic computer skills. Please have a Smore and Canva account set up prior to first class.

Create Online Graphics in a Snap!

Learn to use Canva to easily create graphics, videos, and animation to be imported into your newsletters, social media posts, presentations, and more. This tool allows school districts, non-profits, and businesses to create stunning graphics with no more copyright headaches. Go beyond the online tutorials to see the best ways to use Canva templates and elements to quickly create unique graphics for your organization. Act 48 hours available for school employees. Prerequisite: Basic computer skills Please have a Canva account set up prior to first class.

Drones- Programming and Flying

Learn to program and fly a recreational drone in this emerging industry used for surveying, security, photography, deliveries or as a fun and profitable hobby. Begin with the critical thinking skills used in programming flight missions, from launch, to maneuvering, mid-flight changes, to safely landing. Using the Python programming language, we'll focus on the precision needed to conduct flight operations, including site surveys, planning, risk assessment, and completion. Students will take the Recreational UAS Safety Test, an online test with certificate of completion during class. Leave class with your own entry level hobby drone.

IT Fundamentals

This introduction to computers course will cover all the avenues of the Information Technology industry, from programming, to networking, to cyber security and more. This course will provide you with fundamental computer skills, including computer hardware, operating systems, software, network technologies, system maintenance and security. Learn the principles of installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, and preventative maintenance on desktop and laptop computers. Students will be able to demonstrate baseline security skills, configure operating systems and cloud computing, virtulization, problem solve and apply best practices for documentation, support basic IT networking, configure device hardware, and implement data recovery and storage. At the end of the course, students will be able to take the Fundamentals of IT exam through CompTIA. Course fee includes e-book, computer workbook, and cost of in-house proctored exam.

Photography

This hands-on course on photography will cover the camera functions you need to take creative photos or to lead to a professional photography career. We will also discuss creative techniques, composition, and photo editing including Lightroom and Photoshop. This is a highly interactive class that includes photo assignments and constructive critique designed to enhance your photography. Class size is limited to ensure individual attention.

CONSTRUCTION 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 on safety, tool use, materials, and varied construction techniques as well as how to find information on zoning and building permits.

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. No experience is required.

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.

Residential Landscape Design- Basic

Residential Landscaping will teach homeowners the basics of landscape design and installation using their own homes as design examples. The premise of this class will be to allow individuals to learn professional design and installation techniques with a focus on sustainable landscaping, hardscaping, maintenance, ecological design, and drainage solutions to meet the new state stormwater mandates. Take the opportunity to increase the aesthetics and value of your home, all while learning the professional steps to do it yourself!

Residential Ceramic Tile and Backsplash- Basic

Learn to install ceramic tile flooring and decorative backsplashes in this hands-on course. Incorporates safety, tools and materials and cutting with a wet saw and manual tile cutter. Planning aspects of layout and spacing, balancing floors, and preparation will be covered. Installation of underlayment, membranes, and spacers.

Woodworking/Furniture Making- Introduction

This is a hands-on course to learn the basics of woodworking and finishing, including shop safety, proper use of table and miter saws, and use of hand and power tools. Each student will build a beautiful hardwood end table, learning dado, rabbet, and dovetail joints, as well as sanding and varnishing from a master craftsman. Leave class with an end table that you created in class.

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.

WELDING & DRAFTING DESIGN

Welding – Stick and Oxy-Fuel Cutting

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 – TIG and MIG Welding

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.

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.

HEATH CAREERS

Dental Assisting and Oral 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. 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.

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

Attire: Medical scrubs or other loose-fitting clothing recommended.

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 on their own for use in the last half of the course. It is available from Amazon for purchase or rental.   (ISBN 978-1-4377-1162-2).

Attire: Medical scrubs or other loose-fitting clothing recommended.

Medical Insurance Billing

The goal of the course is to understand the medical insurance billing system. Designed for those entering the medical field as well as professionals currently in medical reception offices who want to move up to billing and coding. This class will cover medical terminology, anatomy and physiology basics, medical coding formats, health insurance classifications, Medicare and Medicaid, and insurance reimbursement. Taught by the author of "Medical Insurance in a Flash!" students will have the opportunity to ask questions and conduct practice exercises. Students are required to purchase a CPT coding book of their choice available on Amazon and other retailers for $29 - $121.

HUMAN SERVICES

Eyelash Extensions

Eyelash extensions refer to the procedure where a trained professional applies a single eyelash extension to a person's natural eyelash. With the use of adhesive, the extensions are applied one at a time, without touching the skin or sticking to other eyelashes. To successfully complete the course requires that you demonstrate comprehension of the key concepts and theory of lash extensions and that you can consistently perform the application technique safely and within the given time frame. Our paramount objective is consumer safety. *Starter Kit is included in cost.*

ON-LINE COURSES

Middle Bucks Institute of Technology is pleased to offer on-line courses through Education to Go.   Our instructor-facilitated 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.

Constructionclasses.com

Middle Bucks Institute of Technology offers online construction industry courses through Constructionclasses.com. These high quality, interactive online construction education courses are designed for construction students who want to advance their careers. Visit www.constructionclasses.com and click "register" then MBIT to select the classes that meet best your needs.

General Information

Admission Requirements

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

Course Fees

All fees must be paid in full upon registration.

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 s*tudents 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 for the course of your choice.

Smoking Policy

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

Photography/Recording Policy

Under MBIT School Board Policy 200 Pupils, Code 237- Electronic Devices, prohibits the use of electronic devices to take photographs or to record or livestream audio or video at any time during class. Please refrain from taking photos or recording any content in class.

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 for more information.