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TRUE AND CORRECT STATEMENT

I hereby certify that the statements and information in this catalog are true and correct to the best of my knowledge and belief.

Dexter Brethers

_____

SIGNED BY DIRECTOR

APPROVAL

National Technical Institute (NTI) is approved and regulated by Texas Workforce Commission Career Schools and Colleges since March 26, 2016.

HISTORY

Texas School of Continuing Education and Recruitment (TSCER) was started in 2015 and began offering classes in March 2016. In April 2021 TSCER was sold to Service Education Holdings, Inc. (SEH). SEH is committed to helping educate students in Nevada, Arizona and Texas in the skilled trades; especially in HVAC, Plumbing and Electrical. SEH is managed by three individuals. In 2022 the school name was changed to National Technical Institute (NTI). In 2023 the school moved from Sugar Land, TX to Houston, TX.

DESCRIPTION OF AVAILABLE SPACE, FACILITIES AND EQUIPMENT

NTI completed a build-out in 2023 for the institution. The campus is approximately 12,900 square feet. The campus includes offices, classrooms, labs, breakroom, conference room, and restrooms. NTI is well furnished with furniture, smart lab equipment and conference room type environments. All the computers are ALL IN ONE Desktop HP Series with high bandwidth server and internet connection allowing students, teachers and management to utilize knowledge base and online learning portal optimally.

The building is well maintained with ample car parking (to include handicap specific locations) and 24/7 security.

NTI is an easy commute and bus routes are available to different towns around Houston.

OWNER
Texas School of Continuing Education & Recruitment, LLC dba National Technical Institute is owned by Service Education Holdings Inc.

CORPORATE OFFICERS

Ryan Woodward- Chief Executive Officer, President, Treasurer
David Lee- Chief Operating Officer, Vice President

MANGEMENT, STAFF AND INSTRUCTORS

Mr. Dexter Brethers – Director
Bachelors Business Administration
Over 5-years of proprietary education experience.

Amira Tejani - Representative

Mr Carl Walker – Instructor
Cell phone and tablet repair experience.

Ralph Hunsley - Instructor
Electrician Technician.

Casey Kazee - Instructor
HVAC Technician.

Rickey Huyard - Instructor
Plumbing and HVAC Technician.

HOURS OF OPERATION

The school classrooms and labs are open from 9:00 am to 6:00 pm Monday through Thursday, and from 9:00 am to 5:00 pm on Fridays.

School facilities and equipment are available for student use during all hours of operation.

Administrative offices are generally open from 9:00 am to 6:00 pm, Monday through Thursday and from 8:00 am to 5:00 pm on Fridays. Saturdays are open by appointment.

SCHOOL HOLIDAYS CALENDAR FOR 2023 SCHOOL YEAR

Holiday	Date
New Year's Day	January 2
Martin Luther King Day	January 16
President's' Day	February 20
Good Friday	April 7
Veteran's Day	November 11
Memorial Day	May 29
Independence Day	July 4
Thanksgiving	November 23-24
Christmas/New Year's Holidays	December 18 – January 2, 2024
Lyndon Baines Johnson Day	August 27

ADMISSION REQUIREMENTS

Students can enroll up until the first day of class if space is available

Individuals applying for this course are required to:

a. Interview with a representative
b. Be at least 17 years of age
c. GED or high school diploma / equivalent by agency
d. documentation of passing The Wonderlic Ability to Benefit (ATB) examination with a 200- minimum score in Verbal Skills and a 210- minimum score in Quantitative Skills

CREDIT FOR PREVIOUS EDUCATION, TRAINING, OR EXPERIENCE

Director of NTI will review previous credential credits / experience and based on review will determine whether credit is transferable.

SCHOOL POLICY REGARDING STUDENT CONDUCT

- Students should adhere to discipline standards of school
- academic dishonesty, including plagiarism, cheating or falsification of records
- non-compliance with the directives of school faculty and staff
- theft of any kind and related behaviors such as possessing stolen property
- intentional damage or destruction of school or another student's private property
- disruptive behavior of any kind
- tampering with academic records
- sexual harassment
- presence on campus or at clinical site while impaired by drugs or alcohol
- unsafe actions regarding staff, trainer, student physical health
- No weapons/guns/Knives are allowed under school premise
- NTI doesn't allow any student to harass peers or teachers anyhow with any means
- In case we hear any complain we will do due diligence and give the first soft warning repetition of which might exceed to expel of student from school premise and course.
- In such a case no refund will be issued to the student.

REQUIREMENTS FOR GRADUATION

- To successfully graduate from our courses student must attend minimum 70% of class and labs
- Must qualify 70% and above in class quizzes and surprise test
- Must follow discipline standard of school and should not go in any violation to standard established.

SCHOOL PLACEMENT ASSISTANCE POLICY

- Students will be given training on developing their resume and completing LinkedIn professional profile.
- Admission counsellor will work with student as a mentor to guide student on applying for jobs through various online and offline channels.
- Based on merit ability of students, NTI will try to put students in front of their employers as per job availability.

GRADING POLICY

Grades will be provided to students at the halfway point and at the end of each subject in the course. NTI uses average grade points as they accumulate through each section of study to assess student performance. A percentage grade will be provided for written reports, tests and skill demonstration. Grade percentage will then be translated into a letter grade and grade points for comparative performance evaluation. In the event a student must retake a subject, the most current test grade or course grade will be utilized.
NTI is committed to providing each student with the very best training experience with an emphasis on individual attention.

Grades will be determined using the following scale:

- 91% - 100% tests, quizzes and performance of skills = A (4 Points)

- 81% - 90% tests, quizzes and performance of skills = B (3 Points)
- 71% - 80% tests, quizzes and performance of skills = C (2 Points)
- 61% - 70% tests, quizzes and performance of skills = D (1 Point)
- 0% - 60% tests, quizzes and performance of skills = F (0 Points)

Incomplete = I (0 Grade Points)
Withdrawal = W (0 Grade Points)

Will Use Grade Point – GPA Method to qualify students taking regular test and practice labs. In order to qualify for certificate student must score 70% as cut off threshold.

SATISFACTORY PROGRESS AND ACADEMIC PROBATION

In order to satisfactorily complete any academic course students must

1. Be present in 70% of training classes and labs
2. In case student is not able to make 70% attendance due to health issues or other serious commitment, proper documentation should be submitted to allow necessary arrangement as adequate
3. We strive our best to prepare students for final exam level training. To assist students to register for exam center we will need two weeks intimation.
4. Student should be in no violation with school discipline policies.

ATTENDANCE

Attendance and participation in classes are extremely important and students are expected to attend all class sessions. Attendance requirements for all classes are as follows:

1. Students shall attend 70% of all contact hours for his/her course of instruction.
2. Any hours of missed attendance shall be made up in accordance with Make-up Work Policy.

Upon a student's failure to comply with attendance policies the student's enrollment shall be terminated.
If a student is late to class by 10 or more minutes, the student is considered tardy. Being tardy three times constitutes an absence.

LEAVE OF ABSENCE

NTI does not offer leaves of absence for students wishing to take an extended leave from training. Students wishing to take a leave of absence shall be terminated.

MAKE-UP WORK

Students wanting or needing to make up missed work must contact their instructor to make appropriate arrangements.

Make-up work shall:

(1) account for no more than 5% of the total course time hours for a program;
(2) be supervised by an instructor approved for the class being made up;
(3) require the student to demonstrate substantially the same level of knowledge or competence expected of a student who attended the scheduled class session;
(4) be completed within two weeks of the end of the grading period during which the absence occurred;

(5) be documented by the school as being completed, recording the date, time, duration of the make-up session and the name of the supervising instructor; and
(6) be signed and dated by the student to acknowledge the make-up session.

READMITTANCE

In accordance with Title 40, Texas Administrative Code, §807.243(d), students terminated for violation of the attendance policy may not reenter before the start of the next grading period of the subject they were enrolled in at the time of their termination. This provision does not circumvent approved refund policy. Students entering after being terminated for violation of attendance must complete a personal interview with the School Director at the time of their application for readmission.

STUDENT GRIEVANCES

Students should forward their complaints to Campus Director within a week of issue. Director will review and respond within 72 hours of complaint lodged providing adequate solution.

If still not satisfied you can contact:

Texas Workforce Commission
Career Schools and Colleges, Room 226T
101 East 15th Street
Austin, Texas 78778-0001
Contact: 512.936.3100
www.texasworkforce.org/careerschools

CANCELLATION POLICY

A full refund will be made to any student who cancels the enrollment contract within 72 hours (until midnight of the third day excluding Saturdays, Sundays and legal holidays) after the enrollment contract is signed. If the student is not scheduled for three class days during the first week, a full refund will be made to any student who cancels enrollment within the student's first three scheduled class days, except that the school may retain not more than $100 in any administrative fees charged and items of extra expense that are necessary for the portion of the program attended and stated separately on the enrollment agreement.

REFUND POLICY

1. The student is not required to pay tuition during the first week of the program.
2. Refund computations will be based on scheduled course time of classes through the last documented day of an academically related activity. Leaves of absence, suspensions and school holidays will not be counted as part of the scheduled classes.
3. The effective date of termination for refund purposes will be the earliest of the following:
    a. the date of termination, if the student is terminated by the school;
    b. the date of receipt of written notice from the student; or
    c. the first of the following dates when the student's participation in an academically related activity cannot be documented: at the end of the first week of each academic term, at the end of the first month of each academic term, at the midpoint of each academic term, and at the end of each academic term.

4. If tuition and fees are collected in advance of entrance, and if after expiration of the 72-hour cancellation privilege the student does not enter school, not more than $100 in any administrative fees charged shall be retained by the school for the entire residence program or synchronous distance education course.
5. If a student enters a residence or synchronous distance education program and withdraws or is otherwise terminated, the school or college may retain not more than $100 in administrative fees charged for the entire program. The minimum refund of the remaining tuition and fees will be the pro rata portion of tuition, fees, and other charges that the number of hours remaining in the portion of the course or program for which the student has been charged after the effective date of termination bears to the total number of hours in the portion of the course or program for which the student has been charged, except that a student may not collect a refund if the student has completed 75 percent or more of the total number of hours in the portion of the program for which the student has been charged on the effective date of termination. (*More simply, the refund is based on the precise number of course time hours the student has paid for, but not yet used, at the point of termination, up to the 75% completion mark, after which no refund is due. Career Schools and College for CSC-1040R provides the precise calculation*.)
6. Refunds for items of extra expense to the student, such as books, tools, or other supplies should be handled separately from refund of tuition and other academic fees. The student will not be required to purchase instructional supplies, books and tools until such time as these materials are required. Once these materials are purchased, no refund will be made. For full refunds, the school can withhold costs for these types of items from the refund as long as they were necessary for the portion of the program attended and separately stated in the enrollment agreement. Any such items not required for the portion of the program attended must be included in the refund.
7. A student who withdraws for a reason unrelated to the student's academic status after the 75 percent completion mark and requests a grade at the time of withdrawal shall be given a grade of "incomplete" and permitted to reenroll in the course or program during the 12-month period following the date the student withdrew without payment of additional tuition for that portion of the course or program.
8. A full refund of all tuition and fees is due and refundable in each of the following cases:
    a. an enrollee is not accepted by the school;
    b. if the course of instruction is discontinued by the school and this prevents the student from completing the course; or
    c. if the student's enrollment was procured as a result of any misrepresentation in advertising, promotional materials of the school, or representations by the owner or representatives of the school.

    A full or partial refund may also be due in other circumstances of program deficiencies or violations of requirements for career schools and colleges.

REFUND POLICY FOR STUDENTS CALLED TO ACTIVE MILITARY SERVICE

9. A student of the school or college who withdraws from the school or college as a result of the student being called to active duty in a military service of the United States or the Texas National Guard may elect one of the following options for each program in which the student is enrolled:
    a. if tuition and fees are collected in advance of the withdrawal, a pro rata refund of any tuition, fees, or other charges paid by the student for the program and a cancellation of any unpaid tuition, fees, or other charges owed by the student for the portion of the program the student does not complete following withdrawal;

b. a grade of incomplete with the designation "withdrawn-military" for the courses in the program, other than courses for which the student has previously received a grade on the student's transcript, and the right to re-enroll in the program, or a substantially equivalent program if that program is no longer available, not later than the first anniversary of the date the student is discharged from active military duty without payment of additional tuition, fees, or other charges for the program other than any previously unpaid balance of the original tuition, fees, and charges for books for the program; or
c. the assignment of an appropriate final grade or credit for the courses in the program, but only if the instructor or instructors of the program determine that the student has:
    i. satisfactorily completed at least 90 percent of the required coursework for the program; and
    ii. demonstrated sufficient mastery of the program material to receive credit for completing the program.

10. The payment of refunds will be totally completed such that the refund instrument has been negotiated or credited into the proper account(s) within 60 days after the effective date of termination.

PROGRAMS AND COSTS

Diploma in Digital Marketing & Search Engine Optimization

Program Description

Students will be able to work as Social Media Managers and Search Engine Optimization specialist for small businesses and corporations. In this course they will be able to go through basic and advanced web analytics and social channel training on how to increase online footprint for businesses.

They will be able to study web analytics Google and Bing, identify search keywords which can bring customers finding their website online and benefit business by growing their online footprint.

Program will comprise of complete channel marketing from Search engine optimization, to social media, pay per click campaigns and email marketing to benefit new and repeat customers.

Program Outline:

	MODULE	LECTURE	LAB	EXT	TOT
DG101	Introduction to Digital Marketing Web Analytics	6	2	0	8
DG102	Search Engine Optimization, Digital Display Advertising	6	2	0	8
DG103	Pay Per Click Marketing	6	2	0	8
DG104	Email Marketing	6	2	0	8
DG105	Mobile Marketing	6	2	0	8
DG106	Social Media Marketing	6	2	0	8
DG107	Affiliate Marketing	6	2	0	8
DG108	SMS Marketing	6	2	0	8

	Total	48	12	0	64

License for different social media and search engine optimization tools will be for class lab only during the duration of the class.

The approximate time required to complete this program is four weeks upon successful completion of the program; the student will receive a Diploma in **Digital Marketing & Search Engine Optimization**.

Subject Descriptions

Subject Hours	Introduction to Digital Marketing Web Analytics DG101 6/2/0/8
Prerequisites	None
Subject Description	Students will be able to get understanding about digital marketing and how it helps small businesses and corporations increase sale through online footprint

Subject Hours	Search Engine Optimization, Digital Display Advertising DG102 6/2/0/8
Prerequisites	None
Subject Description	Students in this course will learn about what is SEO. How does search engine work and tips and tricks to optimize onsite and offsite algorithms They will also learn about digital advertising and will be able to create different organic and paid advertising of keywords to bring in customers traffic to company's website.

Subject Hours	Pay Per Click Marketing DG103 6/2/0/8
Prerequisites	SEO DG102
Subject Description	Students in this course will learn how to use Google Adword tool and Scrapebox software and research low cost keywords to develop effective ROI strategies for company.

	They will be able to setup Google PPC and Bing PPC campaigns

Subject Hours	Email Marketing DG104 6/2/0/8
Prerequisites	SEO DG102
Subject Description	Students will be able to learn about how to setup email marketing. Rules of SPAM. What to avoid and how to Opt-in customers and engage them through regular email offers. They will use different tools like Mail Chimp, Constant contact to learn email marketing.

Subject Hours	Mobile Marketing DG105 6/2/0/8
Prerequisites	SEO DG102, Pay Per Click Marketing DG103
Subject Description	Students will learn how to check if their websites are mobile friendly. See in Google Analytics how many customers are coming through mobile or cellular phones and tablets. Develop a streamlined strategy and if required to develop requirements for Apple or Android applications for company hiring required vendor.

Subject Hours	Social Media Marketing DG 106 6/2/0/8
Prerequisites	SEO DG102, Pay Per Click Marketing DG103
Subject Description	Students will learn different types of social media available. What kind of audience are present their and what to share in what frequency. They will also learn how to set up advertising on social media channels and get free organic engagement with users creating viral campaigns.

FEE TABLE BREAK DOWN

(8.a.) Tuition	$7500.00
(8.b.) Registration, Lab, License, Books	$500.00
(8.c.) Total Cost	$8000.00

Note: * Students will only be getting license for lab work only based on duration of the class.

Business Analysis IT Professional

Program Description

After this course students will be able to get hired as business analyst with corporations and small businesses whose role is to review business procedures and analyze creating business liaison between the non-technical users and the technical solution providers/vendors.

This course provides proactive, introductory coverage of the knowledge and skills essential to business analysts today and the foreseeable future and helps student get associate level jobs entering their career working as intermediates between business strategic and technology people.

WHO SHOULD ATTEND

- New business analysts
- Experienced business analysts looking to update their skills and understanding of their role
- Project managers who incorporate business analysis roles in their projects
- Managers that have business analysts on their staff
- Individuals with a general understanding of database concepts and programming and systems development

Program Outline:

	MODULE	LECTURE	LAB	EXT	TOT
BA101	BUSINESS ANALYSIS OVERVIEW AND METHODOLOGY	5	0	0	5
BA102	BUSINESS REQUIREMENT COLLECTION & GATHERING	4	4	0	8
BA103	BA MODELING	2	5	0	7
BA104	BA TESTING	3	10	0	13
BA105	TEMPLATE ADAPTION	5	3	0	8

BA106	APPLICATION SESSION AND MOCKS ON BA SCENARIOS	1	10	0	11
	Total	20	32	0	52

The approximate time required to complete this program is eight weeks upon successful completion of the program; the student will receive a Certificate of Business Analysis for IT Professional

Subject Description

Subject Hours	BUSINESS ANALYSIS OVERVIEW AND METHODOLOGY BA101 5/0/0/5
Prerequisites	NONE
Subject Description	Students will be taught about responsibilities and job description of Business Analyst. They will be taught about different modes of communication to ensure within a company, outsource vendors or alliance team distributing information as required. Also how to document business strategy and plan out action.

Subject Hours	BUSINESS REQUIREMENT COLLECTION & GATHERING - BA102 4/4/0/8
Prerequisites	None
Subject Description	Students in this subject will be taught about how to gather requirements of project. Checking out needs vs wants to get project in line with budget. Techniques on how to gather requirements interviewing client and business heads. They will also learn how to prototype cases and break down work structure for streamlines business analysis.

Subject Hours	BA MODELING - BA103

	2/5/0/7
Prerequisites	None
Subject Description	In this subject, students will learn about Business Process Analysis. How to implement BPI and BPR - Business Process Improvements and Reengineering within an organization. How to offset data modeling and learn fundamentals of relationship diagram.

Subject Hours	BA TESTING BA104 3/10/0/13
Prerequisites	None
Subject Description	In this subject, students will be taught about how to test strategy. Ensuring project is developed according to quality standards and acceptable benchmarks. Students will be trained on how to evaluate and test scripts for pilot and massive executions

Subject Hours	TEMPLATE ADAPTION - BA105 5/3/0/8
Prerequisites	None
Subject Description	In this subject, students will be trained on how to do software requirements gathering and outlining. Developing case and test templates for business plan.

Subject Hours	APPLICATION SESSION AND MOCKS ON BA SCENARIOS - BA106 1/10/0/11
Prerequisites	None
Subject Description	In this subject, students will be trained to interview project sponsor, gather requirements and do project break down. Understand high level requirements and relationship diagram concept to initiate project creating a business process model. They will learn and understand how to handle different cases and communicate effectively for project completion.

FEE TABLE BREAK DOWN

(8.a.) Tuition	$7500.00
(8.b.) Registration, Lab, License, Books	$500.00
(8.c.) Total Cost	$8000.00

Note: * Students will only be getting license for lab work only based on duration of the class.

SAP HCM

Program Description

After completing this SAP HCM course student will get ability to get employed with corporate, medium sized businesses helping them manage their HR functions as SAP HCM Analyst, SAP HCM Managers with ability to manage different functions like performing Payroll, Creating Human Resource hiring plans, candidates scheduling, time management, CAT and other ERP systems with high profile demand driven expertise included in this basic to advance level hands on training approach

Program Outline:

	MODULE	LECTURE	LAB	EXT	TOT
SAP101	Introduction ERP & SAP	3	5	0	8
SAP102	Info types in OM	2	4	0	6
SAP103	HR Master data	2	4	0	6
SAP104	Time Management:	3	3	0	6
SAP105	CATS	2	4	0	6
SAP106	Mapping of Benefits with Payroll	4	4	0	8

SAP107	Factoring	4	8	0	12
SAP108	Planning	5	7	0	12
	Total	25	39	0	64

Subject Description

Subject Hours	Introduction ERP & SAP - SAP101 3/5/0/8
Prerequisites	None
Subject Description	Students in this subject will learn about SAP introduction and ERP basis. Different kind of prototypes inside SAP HCM including Structures, Objects, Relationships, Using Simple versus Expert mode maintenance. • Introduction ERP & SAP • Overview on SAP HR sub modules • System Landscape – Three tier Architecture • ASAP Methodology • System navigation. • Implementation road map • Organization Management: • Introduction about Organizational Management • Structures in SAP HCM • Objects • Relationships • Creation of Organizational structure Methods. • Expert mode • Simple maintenance • Organizational and Staffing • Info types in OM

Subject Hours	Info types in OM - SAP102 2/4/0/6
Prerequisites	None

Subject Description	Students in this subject will be trained on using evaluation path and exporting reports for higher management. How to develop and assign structures inside implementation mode Developing from scratch new company, personal area and sub areas using available template and integration with OM and PA functions. ● Plan version ● Evaluation path ● Reports ● Personnel Administration: ● Enterprise structure Assignment ● Company, Company code, Personnel area, Personnel sub area ● Personnel structure Assignment ● Employee group, Employee sub group, Payroll accounting area ● Integration settings with OM & PA ● HR Master data

Subject Hours	HR Master data - SAP103 2/4/0/6
Prerequisites	None
Subject Description	Students in this subject will learn different global settings which varies country wise as per their time zone and tax rates/currency factors. They will learn how to change fiscal year settings and create employee attributes. They will also be trained to control record and administrative settings. Using date modifiers to customize procedures. ● Accounting global settings ● Period Parameters ● Fiscal year setting ● Posting periods ● Employee Attributes ● Info types in PA ● Features ● Info type Ranges in HR ● Number Ranges for Employee personnel numbers ● Reports ● Customizing user Procedures ● Configuration of Personnel Actions – Info group – Action menu ● Dynamic Actions

	• Administration Group • Payroll Area • Control record • Period Parameters • Date Modifiers • Payroll Period • Pay scale structure • Pay scale area, Pay scale type, Pay scale groups & Levels, Employee sub group for CAP

Subject Hours	Time Management - SAP104 3/3/0/6
Prerequisites	None
Subject Description	Students in this module will learn how to use time management function, use factory calendar and create break schedules for employees. Manage their attendance and absence quotes and creating daily work schedule and pay basis accordingly. • Time Management Info types • Public holidays • Holiday Calendar • Factory Calendar • Work Schedules • Break Schedules • Daily work Schedules • Period work schedules • Work schedule rules • Absences & Attendances • Absence types • Absence Quotas & Attendance Quotas • Generate Absence Quotas • Time Evaluation

Subject Hours	CATS - SAP105 2/4/0/6
Prerequisites	None
Subject Description	Students will learn in this subject about handling different functions and operation features creating plan, areas, providers and parameters setting up different cost variants related to employee eligibility

	• Features • Functions & Operations • PCR’s • Schemas • Benefits: • Info types in Benefits • Benefit Plans • Benefit areas • Benefit Providers • Benefit Parameters • Setting up of plans • Plan details and options • Dependent details with coverage details • Cost grouping and cost variants • Mapping of plan types with relevant plans • Flexible Administration • Benefit Adjustment • Employee eligibility

Subject Hours	Mapping of Benefits with Payroll SAP 106 4/4/0/8
Prerequisites	None

Subject Description	Students in this subject will be trained on using date modifiers like payroll period, pay scale structures, scale area, types and group levels to assign CAP functions. ● Features ● Payroll: ● Payroll Info types ● Payroll Area ● Control record ● Period Parameters ● Date Modifiers ● Payroll Period ● Pay scale structure ● Pay scale area ● Pay scale type ● Pay scale groups & Levels ● Employee subgroup grouping for CAP ● Creation of Wage types ● Primary wage types, Technical / Secondary wage types, Customer wage types ● Indirect evaluation mode ● Wage type characteristics ● Wage type models ● Payments & Deductions ● Garnishments

Subject Hours	Factoring - SAP 107 4/8/0/12
Prerequisites	None
Subject Description	Students in this subject will be trained on recruitment and advertising module. How to advertise ad and hire / interview candidates finalizing to employment in system back hand. ● Off – Cycle payroll ● Posting to Financial Accounting (Symbolic Accounts) ● Recruitment: ● Info types ● Work force requirement & Advertisement ● Applicant Administration ● Applicant selection ● Applicant data ● Transferring of applicant data to Personnel Administration ● Training & Event Management: ● Info types ● Training & event interdiction

	• Training requirement • Defining cost of Training • Location for the Training or business event • Business event group • Business event type • Maintaining employee data for business event type • Personnel Development:

Subject Hours	Planning - SAP108 5/7/0/12
Prerequisites	None
Subject Description	In this subject, students will learn planning and appraisal event creation. They will learn how to setup steps in ESS and MSS modules. Conduct salary surveys and assign budget types. • Setting up of Qualifications catalog • Setting up of rating scales • Appraisals • Old Appraisals • Appraisal catalog • Appraisal system • Employee Appraisal • Employee Self Service / Manager Self Service (ESS/MSS): • Introduction about ESS & MSS • Use of ESS in different HR modules • Configuration of ESS from Functional perspective • Involvement of other module consultants • Use of MSS • Compensation Management: • Use of Compensation Management • Job Pricing • Salary surveys • Budget types

The approximate time required to complete this program is eight weeks upon successful completion of the program; the student will receive a Certificate in SAP HCM

FEE TABLE BREAK DOWN

(8.a.) Tuition $6000.00
(8.b.) Registration, Lab, License, Books 0
(8.c.) Total Cost $6000.00

Note: * Students will only be getting license for lab work only based on duration of the class.

Comprehensive Mobile Repair Certification

Program Description

Students after completing this course can be hired as Cell phone repair technicians with branded and unbranded stores. They can also open up their small businesses and repair kiosk in malls.

They will be trained in this course through hands on approach from very basic on advance on types of cell phones. Apple and Android phones and tablets. How to unlock and factory reset them. Replacing screens, IC changes, Soldering and Desoldering along with provision of advance repair kits for their use and practice.

Program Outline:

	MODULE	LECTURE	LAB	EXT	TOT
CPR101	CHIP LEVEL BASIC ELECTRONICS	3	12	0	15
CPR102	LAB MOBILE PHONE TECHNOLOGY & CODING	2	17	0	19
CPR103	CHIP LEVEL PRACTICAL TRAINING	2	14	0	16
CPR104	TRACING (FAULT FIND OUT)	3	5	0	8
CPR105	SOFTWARE TRAINING MODULE	2	4	0	6
	Total	12	52	0	64

Subject Description

Subject Hours	**CHIP LEVEL BASIC ELECTRONICS CPR101** 3/12/0/15
Prerequisites	None
Subject Description	In this subject, students will learn about basics of phones and their chip technologies. They will also learn how to use multimeter and test phones. ● Introduction of basic electronics. ● Mobile components identification & knowledge. ● Mobile phone components working. ● Uses of multimeter. ● Mobile components testing & checking. ● Practical testing of components by multimeter.

Subject Hours	**LAB MOBILE PHONE TECHNOLOGY & CODING CPR102** 2/17/0/19
Prerequisites	None
Subject Description	In this subject, students will learn about mobile technology and work principals like Bluetooth, gprs, infrared, removing software codes and unlocking phones. ● Introduction of mobile phone technology. ● Type of mobile phone technology. ● Working principal of mobile phone. ● Features of mobile phone. (Bluetooth, g.p.r.s., infrared etc.) ● Removing software problem by codes. ● Unlocking codes for g.s.m. mobile. ● Unlocking codes for c.d.m.a. Mobile.

Subject Hours	**CHIP LEVEL PRACTICAL TRAINING CPR 103** 2/14/0/16
Prerequisites	None
Subject Description	In this subject, students will learn about soldering and desoldering phones, chip component. Replacing jumper and antennas. Changing Ics. ● Soldering & desoldering practice. ● Chip component removing & replacing. ● Jumper practice. (antina switch jumper,track breakage. ● Jumper, display cont.jumper etc.)

	• driver ic jumper • i.c removing practice.

Subject Hours	**TRACING (FAULT FIND OUT) - CPR104** 3/5/0/8
Prerequisites	None
Subject Description	In this subject, students will learn about how to identify and trace fault. See if the phone repaired has still some traced errors. Tracing errors and final delivery to customers

Subject Hours	**SOFTWARE TRAINING MODULE - CPR105** 2/4/0/06
Prerequisites	None
Subject Description	In this subject, students will learn basics of computer mobile software to unlock and see how different unlocking work. • basic computer knowledge. • u.f.s repairing box training. • new mx key hti high-tech interface repairing. • micro box training (for latest multimedia sets) • infinity box training) • et+ box cdma, gsm & Chinese model flashing, unlocking & • Imei rebuild training.

The approximate time required to complete this program is eight weeks upon successful completion of the program; the student will receive a Certificate in Comprehensive Mobile Repair Certification.

FEE TABLE BREAK DOWN

(8.a.) Tuition $5500.00
(8.b.) Registration, License, Books $500.00
(8.c.) Total Cost $6500.00

Note: *Students will only be getting license to software for lab work only based on duration of the class. While they can keep books and advance repair kit provided for their future use.

ASP MVC Web Developer

Program Description:

Students will learn from basic to advance level C# and MVC programming language and will learn how to do Web Development using both. Using ASP Web Programming and advance MVC controllers they can develop secure web portals faster in efficient way for small businesses and big companies and can be hired as Web Developers. Advance Web Engineers, ASP Developer. By Oil & Gas corporations, Software firms, startups and IT corps.

Program Outline:

Subject #	Name	Theory	Lab	EXT	TOT
ASP101	SQL	2	3	0	5
ASP102	Arrays	2	6	0	8
ASP103	Classes	2	6	0	8
ASP104	Principles	2	6	0	8
ASP105	MVC	2	9	0	11
ASP106	Data Layer	2	6	0	8
ASP107	Interfaces	2	6	0	8
ASP108	Modules	2	6	0	8
	TOTAL	16	48	0	64

Subject Descriptions

Subject Hours	**SQL -** ASP 101 2/3/0/05
Prerequisites	None

Subject Description	In this subject, students will learn about basics of SQL and ASP framework. How to update and install SQL and issues pertaining to configuration. ● An introduction to the course and what we will be learning ● An overview of the e-commerce project that we will be building throughout the course ● How to get and install Visual Studio. Kind of important ● Installing SQL ● Issues when updating to SQL

Subject Hours	**Array -** ASP 102: 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn basics of Array, will create first structure array project in C#, Understand about variables and info types. Go through program flow in detail. ● A brief introduction about this section of the course - C# Basics - and what we will be covering ● Click the resources tab and download the code for the Hello World Project ● Structure of a C# Project ● Variables and Types Code ● Arrays and Collections ● Program Flow

Subject Hours	**Classes -** ASP 103 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about debugging, Object oriented programming OOP and classes distribution. Also understand how access modifier works in principle. ● Debugging ● OOP & Classes ● Classes & Libraries ● Access Modifiers ● Single Responsibility Principle

Subject Hours	**Principle -** ASP 104 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about SRP Single Responsibility Principle and Substitution principle. Testing of Solid principles of ASP and C# ● Single Responsibility Principle ● Substitution Principle ● Interface Segregation Principle ● Test how well you understand SOLID Principles

Subject Hours	**MVC -** ASP 105 2/9/0/11
Prerequisites	None
Subject Description	In this subject, students will learn about MVC, ITS overview and start project creation. ● MVC Overview ● MVC Partial Views ● MVC Starter Project

Subject Hours	**Data Layer-** ASP 106 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about building data layers, framework and creating interfaces in an entity. ● Building the Data Layer ● Entity Framework and the Repository Pattern ● Using Entity Framework Migrations ● Using Interfaces ● Dependency Injection with Unity

Subject Hours	**Interfaces -** ASP 107 2/6/0/08

Prerequisites	None
Subject Description	In this subject, students will learn about Working UI and how to add and edit Product page and browse in detail • Working on UI • The Add/Edit Product Page • The Product Browse & Details Pages

Subject Hours	**Modules -** ASP 108 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about creating module and consuming module doing HTML and Java scripting. • Creating a module • Consuming a module • Finishing Off with some HTML and JavaScript libraries

The approximate time required to complete this program is eight weeks upon successful completion of the program; the student will receive a Certificate of ASP MVC Web Developer

FEE TABLE BREAK DOWN

(8.a.) Tuition	7500
(8.b.) Registration, Lab, License, Books	$500.00
(8.c.) Total Cost	$8000.00

Note: * Students will only be getting license to software for lab work only based on duration of the class.

Bookkeeping and QuickBooks Accounting

Program Description:

After going through this training trainees will be able to get better jobs requiring bookkeeping or QuickBooks accountant positions with small businesses and corporations. Anyone with prior basic experience in accounting and finance can get into this training. He will be trained on how to do Accounting, Bookkeeping and use QuickBooks software working efficiently for CPAs and finance department in corporations.

After taking this course trainees can be employed as accountants, QuickBooks accountants and associates.

Program Outline:

Subject #	Name	Theory	Lab	EXT	TOT
QB101	Introduction to QB	2	3	0	5
QB102	Working with Lists	2	6	0	8
QB103	Entering & Paying Bills	2	6	0	8
QB104	Receiving Money and making Deposits	2	6	0	8
QB105	Analyzing Financial Data - More with Reports	2	9	0	11
QB106	Working with QuickBooks Inventory	2	6	0	8
QB107	Payroll	2	6	0	8
QB108	Tracking Time / Job Costing	2	6	0	8
	TOTAL	16	48	0	64

Subject Description

Subject Hours	Introduction to QB - QB101 2/3/0/05
Prerequisites	None
Subject Description	In this subject, students will learn about • How to add vendor & customer information into QuickBooks' lists • Learn about custom fields for customers, vendors, and items • Tips for managing lists in QuickBooks: sorting, merging, editing, hiding, and overall cleaning up • Learn how to add to and edit the Chart of Accounts • Learn about subaccounts and how to set them up

Working w/Bank Accts

Subject Hours	Working with Lists - QB102 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • Learn how to work with bank account registers • Learn about entering transactions directly into registers • Learn how to reconcile bank accounts and credit cards easily and quickly • Learn how to locate and correct discrepancies • Learn how to track credit card purchases and reconcile them quickly

Subject Hours	Entering & Paying Bills - QB103 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • Different ways to handle bills in QuickBooks • How to enter bills into Accounts Payable • How to pay bills quickly and efficiently • Learn how to easily take discounts for early payments • How to apply credit memos Entering Sales • Learn about different types of sales forms in QuickBooks

	• How to create invoices • Learn the purpose of and the proper use of the item list • Learn about data entered into the sales forms • How to add items to the item list • How to create reminder statements

Subject Hours	Receiving Money and making Deposits **-** QB104 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • How to record Customer Payments • How to handle partial payments and overpayments • Apply credit memos and discounts easily • How to properly record daily deposits • Understand the purpose of Deposited Funds • Learn about common deposit mistakes and how to correct them Customizing Reports • Learn about Income Statements and Balance Sheets • How to add or delete columns and reposition them on reports • Learn about filtering reports • Practice creating reports and customizing the information and the look • How to save customized reports after designing to company specifications; and memorize into groups

Subject Hours	Analyzing Financial Data - More with Reports **-** QB105 2/9/0/11
Prerequisites	None
Subject Description	In this subject, students will learn about • Discuss the various tools for analyzing financial data • Learn how to get Income Statements from customers and jobs and/or different classes and departments • More in depth look at reports, customizing, exporting to excel, defining and creating your own report Tips, Tricks, Troubleshooting, Tricky Transactions • How to memorize transactions • How to handle prepayments, bounced checks, and other tricky transactions

	• How create special price levels for customers • Password Protection • Closing the period • Analyzing the Audit Trail • Protecting your data

Subject Hours	Working with QuickBooks Inventory **-** QB106 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • Gain an overview of what inventory will and won't do in QuickBooks • Practice using purchase orders and receiving inventory product into your system. • Make inventory adjustments easily and correctly • Gain an understanding of sales tax tracking and how to properly and easily report and pay liabilities • How to properly apply sales tax to a customer and an invoice • Understand the Sales Tax items and groups on the item list

Subject Hours	Payroll **-** QB107 2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • Set up employees and payroll items • Learn about payroll schedules • How to pay employees and remit tax liabilities • How to file tax forms • How to create estimates • Learn how to save time by copying estimates and creating templates to use for future jobs and bids • How to create invoices directly from the estimate: in full, or partially; progress billing • How to display project reports • How to update job and project status

Subject Hours	Tracking Time / Job Costing **-** QB108

	2/6/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • Learn how to track time spent on a project, job, or client • How to invoice a customer for time, expense, or mileage • How to create reports for time and expense tracking • Analyze profitability per job, project, or client/customer • How to track time and pay non-employees or subcontractors for time worked.

The approximate time required to complete this program is eight weeks upon successful completion of the program; the student will receive a Certificate of Bookkeeping and QuickBooks Accounting

FEE TABLE BREAK DOWN

(8.a.) Tuition	$7500.00
(8.b.) Registration, Lab, License, Books	$500.00
(8.c.) Total Cost	$8000.00

Note: * Students will only be getting license to software for lab work only based on duration of the class.

Tax Preparer

Program Description:

In this Tax preparer course, you will learn to prepare tax returns and research tax issues for most Form 1040 individual, non-business taxpayers and small business taxpayers (self-employed/Schedule C).

No prerequisites required. When you complete the Comprehensive Tax Course, you will be qualified for employment or self-employment as a tax professional and ready to start earning money

Program Outline:

Subject #	Name	Theory	Lab	EXT	TOT
TX101	Introduction & Electronic Filing	6	0	0	6

TX102	Exemptions & Dependents	8	0	0	8
TX103	Interest & Dividends	10	0	0	10
TX104	Depreciation	8	0	0	8
TX105	Expenses & Plans / Law Updates	8	0	0	8
	TOTAL	40	0	0	40

Subject Descriptions

Subject Hours	Introduction & Electronic Filing **-** TX101 6/0/0/06
Prerequisites	None
Subject Description	In this subject, students will learn about • Introduction & Electronic Filing • W-2 & 1099 Forms • Form 1040 (1040 EZ/A) • Interview Techniques • Filing Requirements

Subject Hours	Exemptions & Dependents **-** TX102 8/0/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • Filing Status • Exemptions & Dependents • Earned Income Tax Credit • Due Diligence

	• Child Care & Tax Credits

Subject Hours	Interest & Dividends **-** TX103 10/0/0/10
Prerequisites	None
Subject Description	In this subject, students will learn about • Interest & Dividends • Other Income • Adjustments to Income • Itemized Deductions • Employee Business Expenses

Subject Hours	Depreciation **-** TX104 8/0/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • Sale of Real Estate • Depreciation • Self-Employment • Rental Property • Capital Gains & Losses • Alternative Minimum Tax

Subject Hours	Expenses & Plans / Law Updates **-** TX105 8/0/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • Education Expenses & Plans • IRAs & Retirements Plans • Ethics • Kiddie Tax • Tax Saving Ideas • Affordable Care Act

The approximate time required to complete this program is five weeks upon successful completion of the program; the student will receive a Certificate of Tax Preparer

FEE TABLE BREAK DOWN

(8.a.) Tuition	$5000.00
(8.b.) Total Cost	$5000.00

Project Management Professional Certification

Program Description:

Project Management training enables students to work as project managers incorporates and small businesses doing project management in theory and practical roles handling responsibilities of the project manager. It offers a practical approach to managing projects, focusing on organizing, planning, and controlling the efforts of the project. The course is based on the best and most current thinking in the field, particularly the Project Management Institute's (PMI→) approach described in the Guide to the Project Management Body of Knowledge (PMBOK→ Guide). Case studies, active participation in team exercises, and practical information reinforce learning. At the end of the course, attendees will know why project management requires a high degree of professionalism, and how to achieve that end in their future projects.

The course is intended for first time or new project managers, business managers and project team members with little or no formalized project management training. It is also appropriate for experienced project managers, or managers of project managers, who lack knowledge of the structured processes outlined.

Program Outline:

Subject #	Name	Theory	Lab	EXT	TOT
PM101	Project Management Framework	4	6	0	10
PM102	Project Technical Planning	6	4	0	10

PM103	Management Planning – the subsidiary plans	4	4	0	8
PM104	Closing the Project	6	6	0	12
	TOTAL				40

Subject Description:

Subject Hours	Project Management Framework - PMP101 4/6/0/10
Prerequisites	None
Subject Description	In this subject, students will learn about • How to do Project Evaluation • What is management? Principles of project management? • Where do projects come from? What are they? How good are we at them? • The challenges faced by the project manager

Subject Hours	Project Technical Planning - PMP102 6/4/0/10
Prerequisites	None
Subject Description	In this subject, students will learn about • Lifecycles. Standards. Methodologies • The difference between the business and technical management of the project process • PMI and the ANSI Standard • Phases, Process Groups, and Knowledge Areas • The Application Area Process – Building the product • Project Initiation • The Project Charter • Project Stakeholders • Stakeholder Analysis

	• PM Process Flow. The Management components: Organize, Plan, Control

Subject Hours	Management Planning – the subsidiary plans - PMP103 4/4/0/08
Prerequisites	None
Subject Description	In this subject, students will learn about • The project management organization model • The Project Board and the project manager • The PMO (Program Management Office). PMO models, what each does • The project team. • Organizational causes of failure • Organizing for the case study project.

Subject Hours	Closing the Project - PMP104 6/6/0/12
Prerequisites	None
Subject Description	In this subject, students will learn about • How to plan and its linkage to failure. • Types of plans. Product oriented planning versus project management planning • Product/technical oriented plans • Scope, Time, Cost, and Quality plans • Project management plans: • Risk, Communications, Procurement, and Organization and Human Resources

The approximate time required to complete this program is five weeks upon successful completion of the program; the student will receive a Project Management Professional Certification.

FEE TABLE BREAK DOWN

(8.a.) Tuition	$4500.00
(8.b.) Registration, Lab, License, Books	$500.00
(8.c.) Total Cost	$5000.00

Network & System Administrator

Program Description:

This training will prepare students to earn the certification of network and system administrator and will enable them to work and assist IT department working for corporates, small businesses and consulting companies handling networking, routing, switches and other technical support assistance.

The student will be qualified for an entry-level career in as Network or System Administrator, Technician or Support Associate.

- **Network Technician**
- **Network Administrator**
- **Network Engineer**

Program Outline:

Code	Module	Lecture Hours	LAB	EXT	TOT
CCNA1	Network fundamentals and building simple LANs	6	2	0	8
CCNA2	Building a Simple Network	6	2	0	8
CCNA3	Introducing IPv6	6	2	0	8
CCNA4	Cisco Networking Device - Interconnecting Module	6	2	0	8
CCNA5	Configuring Medium Sized LAN and VLANs	6	2	0	8
CCNA6	Scaling Medium Size Networks	6	2	0	8

CCNA7	OSPF and Wide Area Networks	6	2	0	8
CCNA8	Network Security Management	6	2	0	8
					64

Subject Description:

Subject Hours	Network fundamentals and building simple LANs CCNA1 6/2/0/8
Prerequisite	None
Subject Description	· Describe network fundamentals and build simple LANs · Establish Internet connectivity · Manage network device security · Expand small to medium sized networks with WAN connectivity · Describe IPv6 basics · End of Unit Quiz

Subject Hours	Building a Simple Network CCNA2 6/2/0/8
Prerequisite	None
Subject Description	· Building a Simple Network · Building a Medium-Sized Network · Network Device Management and Security · End of Unit Quiz

Subject Hours	Introducing IPv6 CCNA3 6/2/0/8

Prerequisite	None
Subject Description	· Introducing IPv6 · Interconnecting Cisco Networking Devices, Part 1 (ICND1) 3.0 Exam prep · End of Unit Quiz

Subject Hours	Cisco Networking Device - Interconnecting Module CCNA4 6/2/0/8
Prerequisite	None
Subject Description	· Interconnecting Cisco Networking Devices, Part 1 (ICND1) 3.0 Exam prep · Certification Exam for Interconnecting Cisco Networking Devices, Part 1 (ICND1) 3.0

Subject Hours	Configuring Medium Sized LAN and VLANs CCNA5 6/2/0/8
Prerequisite	None
Subject Description	· Operate a medium-sized LAN with multiple switches supporting VLANs, trunking, switch stacking, chassis aggregation and spanning tree protocols · Troubleshoot IP connectivity · Configure and troubleshoot EIGRP and OSPF in IPv4 and IPv6 environments · Define characteristics, functions and components of a WAN · Describe SNMP, Syslog, and manage Cisco device configurations, IOS images and licenses · Understand QoS, virtualization and cloud services, and network programmability related to WAN, access and core segments. · End of unit quiz

Subject Hours	Scaling Medium Size Networks CCNA6 6/2/0/8

Prerequisite	None
Subject Description	· Implement Scalable Medium-Sized Networks · Troubleshooting Basic Connectivity · Module 3: Implementing an EIGRP-Based Solution · End of unit quiz

Subject Hours	OSPF and Wide Area Networks CCNA7 6/2/0/8
Prerequisite	None
Subject Description	· Module 5: Implement a Scalable OSPF-Based Solution · Module 6: Wide-Area Networks · End of unit quiz

Subject Hours	Network Security Management CCNA8 6/2/0/8
Prerequisite	None
Subject Description	· Network Device Management and Security · Interconnecting Cisco Networking Devices, Part 2 (ICND2) 3.0 Exam Prep · Interconnecting Cisco Networking Devices, Part 2 (ICND2) 3.0 Exam Prep · Certification Exam for Interconnecting Cisco Networking Devices, Part 2 (ICND2) 3.0

The approximate time required to complete this program is eight weeks upon successful completion of the program; the student will receive a **Network & System Administrator**.

Fee Table Breakdown:

(8.a.) Tuition	$7500.00
(8.b.) Registration, Lab, License, Books	$500.00
(8.c.) Total Cost	8000.00

A+ Network & Troubleshooting Technician

Program Description:

This course will prepare students for the CompTIA A+ Essentials Exam (220-701) and the A+ Practical Application Certification Exam (220-702), the two exams required. They will gain the knowledge to install, configure and optimize personal computer hardware and operating systems, providing organization with the necessary network and support technician level skills to get employed

Students by the end of course will:

1. Prepare to pass the CompTIA A+ Essentials and A+ Practical Application Certification Exams
2. Identify the fundamental principles, tools and troubleshooting techniques for personal computers
3. Apply best practices for configuration and optimization of personal computers and laptops
4. Explore Windows configuration and upgrading options
5. Analyze the primary components of networks, cabling and networking protocols
6. Recognize computer security techniques to prevent unauthorized access

Student will be qualified for an entry-level career in as Network or System Administrator, Technician or Support Associate.

- **Network Technician**
- **Network Administrator**
- **Network Engineer**

Program Outline:

Code	Module	Lecture Hours	LAB	EXT	TOT
A1	Identifying and Installing Personal Computer Components Microprocessors	6	2	0	8
A2	A+ Exam Overview and Strategies	6	2	0	8
A3	Identifying motherboard components	6	2	0	8

A4	The power supply and display	6	2	0	8
A5	Installing and expanding memory	6	2	0	8
A6	PC communication devices	6	2	0	8
A7	Data storage systems	6	2	0	8
A8	Troubleshooting strategies for PCs	6	2	0	8
					64

Upon graduation, students may be hired to work in best buy, geek squad, radio shack, small businesses and corporates as their network security associate, engineers, support technicians, network administrator.

This will be 8 weeks training and students will be given **A+ Network & Troubleshooting Technician**

Subject Description:

Subject Hours	Identifying and Installing Personal Computer Components Microprocessors A1
Prerequisite	None
Subject Description	• Identifying and Installing Personal Computer Components • Microprocessors 1. Intel 2. Pentium 3. Core 2 Duo 4. AMD 5. Athlon 6. Clock circuits 7. Cache memory • 32 bit vs. 64 bit

Subject Hours	A+ Exam Overview and Strategies A2
Prerequisite	None
Subject Description	· A+ Exam Overview and Strategies 1. Purpose and benefits 2. Basic exam structure

Subject Hours	Identifying motherboard components A3
Prerequisite	None
Subject Description	CPU and Chipset 1. CMOS RAM 2. BIOS Flash EEPROM 3. Memory slots: DIMM, RIMM 4. Integrated I/O connectors

Subject Hours	The power supply and display A4
Prerequisite	None
Subject Description	The power supply and display 1. Testing power supplies 2. Display types: CRT, LCD 3. Display adapter cards: PCI, AGP, PCIe

Subject Hours	Installing and expanding memory A5
Prerequisite	None
Subject Description	Installing and expanding memory 1. RAM device types: SDRAM, DDR/DDR2/DDR3, RAMBUS 2. Packaging formats: DIMM, RIMM, SoDIMM, Micro-DIMM 3. Error checking: Parity, nonparity, ECC

Subject Hours	PC communication devices A6
Prerequisite	None
Subject Description	PC communication devices 1. Parallel: EPP, ECP 2. Serial interfaces 3. USB 2.0 4. Network interface cards 5. IEEE 1394/Firewire

Subject Hours	Data storage systems A7
Prerequisite	None
Subject	· Data storage systems

Description	1. Hard drive types: EIDE, PATA, SATA, eSATA, SCSI 2. Partitioning & formatting hard disks 3. Optical storage devices

Subject Hours	Troubleshooting strategies for PCs A8
Prerequisite	None
Subject Description	1. Printer self-test 2. External cables 3. Printer/scanner interface

Fee Table Breakdown:

(8.a.) Tuition	$7500.00
(8.b.) Registration, Lab, License, Books	$500.00
(8.c.) Total Cost	$8000.00

Big Data Hadoop Certification

Program Description:

The Big Data Hadoop developer course have been designed to impart an in-depth knowledge of Big Data processing using Hadoop. The course is packed with real-life projects and case studies to be executed in the classroom.

As a part of the course, you will be required to execute real-life industry-based projects using classroom. The projects included are in the domains of Banking, Telecommunication, Social media, Insurance, and E-commerce.

Students by the end of course will:

1. Understand the different components of Hadoop ecosystem such as Hadoop 2.7, Yarn, MapReduce, Pig, Hive, Impala, HBase, Sqoop, Flume, and Apache Spark
- Understand Hadoop Distributed File System (HDFS) and YARN as well as their architecture and learn how we can work with resource and storage management.
- Understand MapReduce and its characteristics, and assimilate some advanced MapReduce concepts
- Get an overview of Sqoop and Flume and describe how to ingest data using them

Upon graduation, students may be hired to work in companies as

- Big Data Scientist,
- Hadoop Developer,
- Hadoop Researcher,

- Research Analyst,
- Junior Data Scientist.
- Analytics Professionals

Program Outline:

Code	Module	Lecture Hours	LAB	EXT	TOT
A1	Introduction to Hadoop	3	0	0	3
A2	Parallelizing Program Execution	3	0	0	3
A3	Implementing Real-World MapReduce Jobs	3	0	0	3
A4	Customizing MapReduce	3	0	0	3
A5	Persisting Big Data with Distributed Data Stores	3	0	0	3
A6	Structuring data with HBase	3	0	0	3
A7	Simplifying Data Analysis with Query Languages	3	0	0	3
A8	Managing and Deploying Big Data Solutions	3	0	0	3
		24			24

The approximate time required to complete this program is eight weeks upon successful completion of the program; the student will receive **Big Data Hadoop Certification.**

Subject Description:

Subject Hours	Introduction to Hadoop

	A1 3/0/0/3
Prerequisite	None
Subject Description	Identifying the business benefits of Hadoop • Surveying the Hadoop ecosystem • Selecting a suitable distribution

Subject Hours	Parallelizing Program Execution A2 3/0/0/3
Prerequisite	None
Subject Description	Meeting the challenges of parallel programming • Investigating parallelizable challenges: algorithms, data and information exchange • Estimating the storage and complexity of Big Data Parallel programming with MapReduce • Dividing and conquering large-scale problems • Uncovering jobs suitable for MapReduce • Solving typical business problems

Subject Hours	Implementing Real-World MapReduce Jobs A3 3/0/0/3
Prerequisite	None
Subject Description	Applying the Hadoop MapReduce paradigm • Configuring the development environment • Exploring the Hadoop distribution • Creating the components of MapReduce jobs • Introducing the Hadoop daemons • Analyzing the stages of MapReduce processing: splitting, mapping, shuffling and reducing Building complex MapReduce jobs • Selecting and employing multiple mappers and reducers • Leveraging built-in mappers, reducers, and partitioners • Coordinating jobs with Oozie workflow scheduler • Streaming tasks through various programming languages

Subject Hours	Customizing MapReduce A4 3/0/0/3
Prerequisite	None

Subject Description	Solving common data manipulation problems • Executing algorithms: parallel sorts, joins, and searches • Analyzing log files, social media data, and e-mails Implementing partitioners and combiners • Identifying network bound, CPU bound, and disk I/O bound parallel algorithms • Reducing network traffic with combiners • Dividing the workload efficiently using partitioners • Collecting metrics with counters

Subject Hours	Persisting Big Data with Distributed Data Stores A5 3/0/0/3
Prerequisite	None
Subject Description	Making the case for distributed data • Achieving high performance data throughput • Recovering from media failure through redundancy Interfacing with Hadoop Distributed File System (HDFS) • Breaking down the structure and organization of HDFS • Loading raw data and retrieving results • Reading and writing data programmatically • Partitioning text or binary data • Manipulating Hadoop SequenceFile types

Subject Hours	Structuring data with HBase A6 3/0/0/3
Prerequisite	None
Subject Description	• Migrating from structured to unstructured storage • Applying NoSQL concepts with schema on read • Connecting to HBase from MapReduce jobs • Comparing HBase to other types of NoSQL data stores

Subject Hours	Simplifying Data Analysis with Query Languages A7 3/0/0/3
Prerequisite	None
Subject Description	Unleashing the power of SQL with Hive • Structuring data with the Hive MetaStore • Extracting, Transforming and Loading (ETL) data • Querying with HiveQL • Accessing Hive servers through JDBC • Extending HiveQL with User-Defined Functions (UDF) Executing workflows with Pig

	• Developing Pig Latin scripts to consolidate workflows • Integrating Pig queries with Java • Interacting with data through the grunt console • Extending Pig with User-Defined Functions (UDF)

Subject Hours	Managing and Deploying Big Data Solutions A8 3/0/0/3
Prerequisite	None
Subject Description	Testing and debugging Hadoop code • Logging significant events for auditing and debugging • Debugging in local mode • Validating requirements with MRUnit Deploying, monitoring and tuning performance • Deploying to a production cluster • Optimizing performance with administrative tools • Monitoring job execution through web user interfaces

Fee Table Breakdown:

(8.a.) Tuition	$7500
(8.b.) Total Cost	$7500

Note: * Students will only be getting license to software for lab work only based on duration of the class.

Medical Record & Health Information Technician

Program Description:

Students will be able to work as Medical Records Technicians, Coders, Health Information Clerks, Medical Records Clerks and Medical Records Technicians. In this course they will be able to

obtain basic and functional skill training on how to compile, process and maintain medical records of hospital and clinical patients in a manner consistent with medical, administrative, ethical, legal and regulatory requirements of the health care system.

They will be able to study medical terminology and Human anatomy & Physiology to apply common medical verbiage to job functions, medical insurance regulations and ethics for insurance diagnostic and billing, business communication strategies as well as keyboarding skill development.

Program will comprise of complete medical records specializing scope from word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.

Program Outline:

Code	Module	Lecture Hours	LAB	EXT	TOT
MRS01	Introduction to Business Computing, Business Editing, Keyboarding Skill Development Powerful Strategies for the Office Team	2	1		3
MRS02	Medical Terminology Communication Technologies	3	0		3
MRS03	Medical Terminology II Medical Office Procedures	3	0		3
MRS04	Medical Coding I - ICD-10-CM English Composition	3	0		3
MRS05	Business Communications Survey of Body Systems	3	0		3
MRS06	Hospital Administrative Procedures Medical Coding II: Procedural Coding	2	1		3
MRS07	Essentials of Human Anatomy and Physiology I	2	1		3

	Healthcare Documentation				
MRS08	Understanding Medical Insurance Beginning Algebra II	2	1		3
MRS09	Introduction to Electronic Health Records Technology Essentials of Human Anatomy and Physiology II	2	1		3
MRS10	Records and Information Management Electronic Calculator and 10-Key	2	1		3
MRS11	Operations Diversity and Healthcare Medical Law and Ethics Patient Advocate for Medical Insurance	2	1		3
MRS12	Building a Professional Resume Pharmacology and Disease Processes for Medical Office Occupations	2	1		3
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The approximate time required to complete this program is eight weeks upon successful completion of the program; the student will receive **Diploma in Medical Record & Health Information Technician**

Subject Description:

Subject Hours	Introduction to Business Computing Business Editing, Keyboarding Skill Development, Powerful Strategies for the Office Team MRS01
Prerequisite	None
Subject Description	Students gain knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming in lab. Students will obtain various keyboarding development skills and office team strategies.

Subject Hours	Medical Terminology, Communication Technologies MRS02
Prerequisite	None
Subject Description	Students will describe medical terminology, including disease processes and pharmacology and differentiate verbal and nonverbal communication, including gender differences, cultural awareness and sensitivity, and the elements of speaking and listening.

Subject Hours	Medical Terminology II, Medical Office Procedures MRS03
Prerequisite	None
Subject Description	Students will describe medical terminology, including disease processes and pharmacology and discuss the roles of the healthcare team members, elements of successful leadership and problem-solving strategies.

Subject Hours	Medical Coding I - ICD-10-CM, English Composition MRS04
Prerequisite	None
Subject Description	Students will gain knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar. Students will also learn Medical procedure coding.

Subject Hours	Business Communications, Survey of Body Systems MRS05
Prerequisite	None
Subject Description	Students will learn principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Subject Hours	Hospital Administrative Procedures, Medical Coding II: Procedural Coding MRS06
Prerequisite	None
Subject Description	Students will learn hospital administrative procedures such as the ability to protect the security of medical records to ensure that confidentiality is maintained. Review records for completeness,

	accuracy, and compliance with regulations. Retrieve patient medical records for physicians, technicians, or other medical personnel. Assign the patient to diagnosis-related groups (DRGs), using appropriate computer software. Process patient admission or discharge documents. Students will be re-introduced to Medical procedure coding in lab.

Subject Hours	Essentials of Human Anatomy and Physiology I, Healthcare Documentation MRS07
Prerequisite	None
Subject Description	Students will describe the structure and operation of one's individual body in lab. Students will learn how to enter, transcribe, record, store, and/or maintain information in written or electronic/magnetic form.

Subject Hours	Understanding Medical Insurance, Beginning Algebra II MRS08
Prerequisite	None
Subject Description	Students will learn healthcare insurance ethics, regulations and procedures. Students demonstrate calculations of data in lab.

Subject Hours	Introduction to Electronic Health Records Technology, Essentials of Human Anatomy and Physiology II MRS09
Prerequisite	None
Subject Description	Students will utilize computers systems (including hardware and software) to program, write software, set up functions, enter data, or process information. Students will describe the structure and operation of one's individual body in lab.

Subject Hours	Records and Information Management, Electronic Calculator and 10-Key MRS10
Prerequisite	None
Subject Description	Students will learn process information skills by compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information

	or data. Calculations will be demonstrated in lab.

Subject Hours	Operations Diversity and Healthcare, Medical Law and Ethics, Patient Advocate for Medical Insurance MRS11
Prerequisite	None
Subject Description	Differentiate verbal and nonverbal communication, including gender differences, law awareness and sensitivity. Students will gain knowledge in medical law and ethics.

Subject Hours	Building a Professional Resume, Pharmacology and Disease Processes for Medical Office Occupations MRS12
Prerequisite	None
Subject Description	Students will complete a professional resume and describe medical terminology, including disease processes and pharmacology. Resumes will be constructed in lab.

Fee Table Breakdown:

(8.a.) Tuition	$5500.00
(8.b.) Registration, Lab, License, Books	$500.00
(8.c.) Total Cost	$6000.00

Seminars

Business Analysis IT Professional Training Seminar

Cost: $2500

Number of contact hours: 24 hours

Seminar's objective (what students will learn to do):

After this course students Business Analysis skills will be enhanced and better perform functions of understanding and implementing BABOK framework and quality assurance.

This course provides proactive, introductory coverage of the knowledge and skills essential to business analysts today and the foreseeable future as intermediates between business strategic and technology people.

Admission requirements:

• Experienced business analysts looking to update their skills and understanding of their role
• Project managers who incorporate business analysis roles in their projects
• Managers that have business analysts on their staff
• Individuals with a general understanding of database concepts and programming and systems development

Seminar Outline:

	MODULE	LECTURE	LAB	EXT	TOT
BA101	Business Analysis Overview And Methodology	2	2	0	4
BA102	Business Requirement Collection & Gathering	2	2	0	4
BA103	BA Modeling	2	2	0	4
BA104	BA Testing	2	2	0	4
BA105	Template Adaption	2	2	0	4
BA106	Application Session and Mocks on BA Scenarios	2	2	0	4
	Total	12	12	0	24

Textbook's title and the price:

Business Analysis Methodology Book Kindle Edition
by Emrah Yayici $13.00

QuickBooks Training Seminar

Cost: $2500

Number of contact hours: 24 hours

Seminar's objective (what students will learn to do):

After going through this training students will perform better using automated QuickBooks accounting tools in their present jobs with small businesses and corporations. Anyone with prior basic experience in accounting and finance can get into this training. They will be trained on how to do Accounting, bookkeeping and use QuickBooks software.

Admission requirements:

- Experienced accounting experience candidates
- Having prior experience in handling basic bookkeeping or accounting from primary experience as interns, assistants or handling virtual jobs

Seminar Outline:

	Module	Lecture Hours	LAB	EXT	TOT
QB101	Introduction to QB	1	2	0	3
QB102	Working with Lists	1	2	0	3
QB103	Entering & Paying Bills	1	2	0	3
QB104	Receiving Money and making Deposits	1	2	0	3
QB105	Analyzing Financial Data - More with Reports	1	2	0	3
QB106	Working with QuickBooks Inventory	1	2	0	3
QB107	Payroll	1	2	0	3
QB108	Tracking Time / Job Costing	1	2	0	3
	TOTAL	8	16	0	24

Textbook's title and the price:

QuickBooks 2016: The Missing Manual: The Official Intuit Guide to QuickBooks 2016 1st Edition, Kindle Edition
by Bonnie Biafore (Author)

QuickBooks 2020 For Dummies 1st Edition

Price $26.99

Comprehensive Mobile Repair Training Seminar

Cost: $2500

Number of contact hours: 24 hours

Seminar's objective (what students will learn to do):

Students after completing this course can also start to offer advance repair services in Android and Apple phones as well as tablets. They will acquire highly boosted learning advance strategies and troubleshooting skills.

They will be trained in this course through hands on approach from variants /types of cell phones. Apple and Android phones and tablets. How to unlock and factory reset them. Replacing screens, IC changes, Soldering and Desoldering along with provision of advance repair kits for their use and practice

Admission Requirements:

- Should have hands on with basic troubleshooting experience
- Ability to operate basics of computational software

Seminar Outline:

	MODULE	LECTURE	LAB	EXT	TOT
CPR101	Chip Level and Phone inside training identification	2	2	0	4
CPR102	Phone fault tracing	2	2	0	4
CPR103	Identifying soldering, desoldering, screen replacement	2	2	0	4
CPR104	Phone hardware fault tracing fixing speaker, internal accessories, gadgets	2	2	0	4
CPR105	Software tuning	2	2	0	4
CPR105	Carrier Unlocking of Phones	2	2	0	4

	Total	12	12	0	24

Textbook's title and the price:

iFixit Essential Electronics Toolkit
by iFixit

$ 24.99

Network Administrator & IT Support Technician Seminar

Cost: $2500

Number of contact hours: 24 hours

Seminar's objective (what students will learn to do):

In this module students will be learning on how to repair computer hardware and software troubleshooting serving technician related services working in an organization. They will learn how to handle network related router and server configurations, along with management and installation of CCTV cameras.

This training will prepare students to earn the certification of network and system administrator and will learn to handling networking, routing, switches and other technical support assistance.

Seminar Outline:

	Module	Lecture Hours	LAB	EXT	TOT
NA1	Network fundamentals and building simple LANs	2	2	0	4
NA2	Building a Simple Network	2	2	0	4
NA3	Introducing IPv6	2	2	0	4
NA4	Cisco Networking Device - Interconnecting Module	2	2	0	4

NA5	Configuring Medium Sized LAN and VLANs	2	2	0	4
NA6	Scaling Medium Size Networks	2	2	0	4
NA7	OSPF and Wide Area Networks	2	2	0	4
NA8	Network Security Management	2	2	0	4
		12	12		24

Textbook's title and the price:

CompTIA Network+ Certification All-in-One Exam Guide, Seventh Edition (Exam N10-007) 7th Edition,
by Mike Meyers

Price $34.99

Course

CERTIFICATE OF CLOUD SECURITY PROFESSIONAL
PROGRAM DESCRIPTION:

This course is the most comprehensive review of cloud security concepts and industry best practices covering the six domains of the (ISC)2 Common Body of Knowledge. You will gain knowledge in identifying the types of controls necessary to administer various levels of confidentiality, integrity, and availability, with regard to securing data in the cloud. You will identify the virtual and physical components of the cloud infrastructure with regard to risk management analysis, including tools and techniques necessary for maintaining a secure cloud infrastructure. You will gain an understanding in cloud software assurance and validation, utilizing secure software, and the controls necessary for developing secure cloud environments. You will identify privacy issues and audit processes utilized within a cloud environment, including auditing controls, assurance issues, and the specific reporting attributes.

Students by the end of course will :

1. Prepare to pass the CompTIA Security+ Certification Exams
2. Identify the fundamental principles, tools and troubleshooting techniques for personal computers security management

3. Apply best practices for configuration and optimization of personal computers and laptops
4. Explore Windows configuration and cloud network open holes
5. Analyze the primary components of networks, cabling and networking protocols
6. Recognize computer security techniques to prevent unauthorized access

Students will be qualified for an entry-level career as Network or System Administrator, Technician or Support Associate.

- **Network Security Technician**
- **Network Security Specialist**
- **Security Cloud Engineer**

PROGRAM OUTLINE

Code	**Module**	**Lecture Hours**	**LAB**	**EXT**	**TOT**
C1	Module 1: Architecture Concepts and Design Requirements	**6**	**2**	**0**	**8**
C2	Cloud Data Security	**6**	**2**	**0**	**8**
C3	Design and Implement Data Rights Management	**6**	**2**	**0**	**8**
C4	Cloud Platform and Infrastructure	**6**	**2**	**0**	**8**

C5	*Planning Security Controls*	**6**	**2**	**0**	**8**
C6	Cloud Application Security Need for Training	**6**	**2**	**0**	**8**
C7	Software Development Life-Cycle (SDLC) Process	**6**	**2**	**0**	**8**
C8	Operations Support the Planning Process for the Data Center Design	**6**	**2**	**0**	**8**
					64

Upon graduation, students can apply in places like best buy, geek squad, radio shack, small businesses and corporates as their network security associate, engineers, support technicians, network administrator applying for jobs.

This will be 8 weeks training and students will be given **Certificate of Cloud Security Professional.**

Fee Table Breakdown:

(8.a.) Tuition $7500.00
(8.b.) Registration, Lab, License, Books $500.00
(8.c.) Total Cost $8000.00

2022 Course Calendars- HVAC/Plumbing/Electrical

Entry Level HVAC/Installation Technician Fusion Model	
Start Date	Graduation Date
6/7/2022	9/26/2022
7/21/2022	11/3/2022
8/10/2022	11/30/2022
9/27/2022	1/24/2023
10/10/2022	2/20/2023
11/10/2022	3/9/2023
12/7/2022	3/29/2023

Entry Level HVAC/Installation Technician Traditional Model	
Start Date	Graduation Date
6/27/2022	9/16/2022
9/26/2022	12/16/2022

Entry Level HVAC Technician Immersion Model	
Start Date	Graduation Date
6/27/2022	6/30/2022
7/25/2022	7/28/2022
8/29/2022	9/1/2022
9/26/2022	9/29/2022
10/24/2022	10/27/2022
11/28/2022	12/1/2022
12/12/2022	12/15/2022

Entry Level Plumbing Technician Fusion Model	
Start Date	Graduation Date
6/8/2022	9/21/2022
7/14/2022	10/27/2022
8/8/2022	11/28/2022
9/6/2022	12/20/2022
10/5/2022	2/1/2023
11/3/2022	3/2/2023
12/5/2022	4/25/2023

Entry Level Plumbing Technician Traditional Model	
Start Date	Graduation Date
8/15/2022	11/4/2022
11/14/2022	2/9/2023

Entry Level Electrical Technician Fusion Model	
Start Date	Graduation Date
6/9/2022	9/22/2022
7/25/2022	11/7/2022
8/2/2022	11/15/2022
9/7/2022	12/21/2022
10/6/2022	2/2/2023
11/14/2022	3/13/2023
12/6/2022	4/26/2023

Entry Level Electrical Technician Traditional Model	
Start Date	Graduation Date
6/27/2022	9/16/2022
9/26/2022	12/16/2022

Program Title
Entry Level HVAC/Installation Technician (Traditional Model)

Program Description
Upon successful completion of Entry Level HVAC/Installation Technician (Traditional Model) program, the graduate will be prepared with the necessary skills for entry level employment as a residential HVAC service technician and install helper. Over 70% of this program will be "hands on" with the student taking an active role in wiring, trouble shooting and installing residential HVAC equipment. Students will work on actual residential equipment and have the opportunity to diagnose, evaluate, install and repair actual HVAC unit. Graduates will also prepare for and take the EPA 608 certification test. Graduates may pursue careers as HVAC service technicians, install helper or assistants, rough-in installer and start-up technicians.

Admissions Requirements
A student must provide proof of High School graduation, high school equivalency, or documentation of passing The Wonderlic Ability to Benefit (ATB) examination with a 200-minimum score in Verbal Skills and a 210- minimum score in Quantitative Skills; and be at least 17 years of age. No industry experience is required.

Program Outline

Subject Number	**Subject Title**	**Contact Hours Lecture/Lab/Total Contact Hours**
HVACTM101	Air Conditioning and Refrigeration Fundamentals	10/30/40
HVACTM102	Electrical I – Basic Electrical Theory	6/18/24
HVACTM103	Electrical II – Electrical Application	6/18/24
HVACTM104	Troubleshooting	8/24/32
HVACTM105	Heat Pump Seminar	2/6/8
HVACTM106	Gas Heating Seminar	4/12/16
HVACTM107	Advanced Air Conditioning	8/24/32
HVACTM108	EPA Certification Seminar and Examination	16/0/16
	Total Hours	**60/132/192**

The approximate time required to complete the Entry Level HVAC/Installation Technician (Traditional Model) Program:

- Day Program: 12 weeks/3 months (Monday-Thursday)
- Night Program: 12 weeks/3 month (Monday-Thursday)

Subject Description

HVACTM101 Air Conditioning & Refrigeration Fundamentals

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 30 hours of lab) 40 contact hours:

Refrigeration History, Refrigeration Theory, Thermal Laws, Components of a Refrigeration System, Refrigeration Cycle, Refrigerant Properties, Compressor Types, ARI Standards. Refrigeration Tool Usage, including Gauges, TP Chart, Soldering, Brazing. Safety will be emphasized.

OBJECTIVE:
Students will understand the basic refrigeration cycle, the components that are common to refrigeration systems and the physical laws that apply. Upon completion the student will be able to competently Solder and Braze copper refrigeration fittings.

PREREQUISITE:
None

HVACTM102 Electrical I - Basic Electrical Theory

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 18 hours of lab) 24 contact hours:

Electron Theory, Basic Electrical Math, Ohm's Law, Basic Electrical Circuits, Series and Parallel Circuits, Schematics and Diagrams, Electrical Testing Instruments, Electric Motors and Electrical Safety.

OBJECTIVE:
Students will become familiar with basic electrical theory and fundamentals. The use of electrical testing equipment and basic hand tools will be covered and practiced. Circuit wiring will be studied and practiced in a lab environment.

PREREQUISITE:
Successful completion of HVACTM101.

HVACTM103 Electrical II - Electrical Application

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 18 hours of lab) 24 contact hours:

Industrial Control Circuits, Motor Controls, Starting and Running Circuits and Motor Protection. An emphasis will be placed on understanding and wiring control circuits. Electrical Safety will be emphasized.

OBJECTIVE:
Students will become familiar with electrical components. Each student will build and test circuits used in HVAC equipment and industrial controls. The use of hand tools and electrical test equipment will be studied and practiced in a lab environment.

PREREQUISITE:
Successful completion of HVACTM102.

HVACTM104 Troubleshooting

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 24 hours of lab) 32 contact hours:

Troubleshooting concepts and techniques, review of control circuits, review of refrigeration cycle. Lab practice on commercial and residential package and split units covering a wide variety of HVAC problems.

OBJECTIVE:
To provide students with the knowledge and skills to successfully troubleshoot any type of problem associated with commercial and residential package or split HVAC systems.

PREREQUISITE:
Successful completion of HVACTM103.

HVACTM105 Heat Pump

FORMAT: Lecture and Lab STUDY TO INCLUDE (2 hours of lecture, 6 hours of lab) 8 contact hours:

Heat Pump Theory, Design and Components and Troubleshooting Heat Pump systems. Safety will be emphasized.

OBJECTIVE:
Students will learn the fundamentals of Heat Pump operation and system components and troubleshooting techniques unique to Heat Pump systems will be covered.

PREREQUISITE:
Successful completion of HVACTM104.

HVACTM106 Gas Heating

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 12 hours of lab) 16 contact hours:

Introduction to Gas Heating, Ignition Theory, Combustion Theory, Operational Controls and Safety Controls, Furnace Types. Safety will be emphasized.

OBJECTIVE:
Students will learn the fundamentals of gas heating systems and components. Troubleshooting techniques will be studied and practiced in a lab environment. Safety practices will be covered.

PREREQUISITE:
Successful completion of HVACTM105.

HVACTM107 Advanced Air Conditioning

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 24 hours of lab) 32 contact hours:

Review of Refrigeration Systems, Introduction to Duct Systems and Airflow, Refrigerant Controls, Electrical Controls, Air Conditioning Troubleshooting, Recovery, Evacuation and Recharge, Superheat and Sub-cool. Safety will be emphasized.

OBJECTIVE:
Students will understand the use of test equipment and will comprehend superheat, sub-cooling and airflow, and how to use these key indicators of system performance in the troubleshooting process.

PREREQUISITE:
Successful completion of HVACTM106.

HVACTM108 EPA Certification Seminar & Examination

FORMAT: Lecture STUDY TO INCLUDE (16 hours of lecture) 16 contact hours:

Students will become familiar with the E.P.A. Rule 608 40-CFR, part 82 subpart (f). Students will become familiar with types of certification, theory on ozone loss, legal requirements regarding use and disposal of refrigerants containing CFC's. Proper recycling techniques, recovery techniques and refrigerant disposal will be covered.

OBJECTIVE:
Students will prepare to complete the EPA 608 Universal Certification exam, which will be given at the end of the EPA course.

NOTE:
ESCO Testing Fee: $25.00; Tuition includes taking the EPA Exam one time; Exam "retake" fee (if necessary) $25.00.

PREREQUISITE:
Successful completion of HVAC107.

Total Contact Hours: 192 Hours
Length of Time for Completion: 12 Weeks/3 Months (Monday-Thursday)
Fee Breakdown:

- **Tuition:** **$8,970.00**
- **Book/Materials:** **$175.00**
- **EPA Test Fee:** **$25.00**
- **Total Cost:** **$9,170.00**

2022 Class Schedules

Morning Sessions: 10:00am-2:00pm	
10:00am-11:45am	**Class time**
11:50am-12:00pm	10 min break
12:00pm-2:00pm	**Class time**

Night Sessions: 6:00pm-10:00pm	
6:00pm-7:45pm	**Class time**
7:50pm-8:00pm	10 min break
8:00pm-10:00pm	**Class time**

Program Title
Entry Level HVAC/Installation Technician (Fusion Model)

Program Description
Upon successful completion of Entry Level HVAC/Installation Technician (Fusion Model) program, the graduate will be prepared with the necessary skills for entry level employment as a residential HVAC service technician and install helper. More than half of this program will be "hands on" with the student taking an active role in wiring, trouble shooting and installing residential HVAC equipment. Students will work on actual residential equipment and have the opportunity to diagnose, evaluate, install and repair actual HVAC unit. Graduates will also prepare for and take the EPA 608 certification test. Graduates may pursue careers as HVAC service technicians, install helper or assistants, rough-in installer and start-up technicians.

Admissions Requirements
A student must provide proof of High School graduation, high school equivalency, or documentation of passing The Wonderlic Ability to Benefit (ATB) examination with a 200-minimum score in Verbal Skills and a 210- minimum score in Quantitative Skills; and be at least 17 years of age. No industry experience is required.

Program Outline

Subject Number	Subject Title	Contact Hours Lecture/Lab/Total Contact Hours
HVACFM101	Air Conditioning and Refrigeration Fundamentals	14/12/26
HVACFM102	Electrical I – Basic Electrical Theory	7/8/15
HVACFM103	Electrical II – Electrical Application	7/8/15
HVACFM104	Troubleshooting	10/12/22
HVACFM105	Heat Pump Seminar	1/4/5
HVACFM106	Gas Heating Seminar	6/4/10
HVACFM107	Advanced Air Conditioning	5/16/21
HVACFM108	EPA Certification Seminar and Examination	10/0/10
	Total Hours	**60/64/124**

The approximate time required to complete the Entry Level HVAC/Installation Technician (Fusion Model) Program:

- Day Program: 16 weeks/4 months
- Night Program: 16 weeks/4 month

Subject Description

HVACFM101 Air Conditioning & Refrigeration Fundamentals

FORMAT: Lecture and Lab STUDY TO INCLUDE (14 hours of lecture, 12 hours of lab) 26 contact hours:

Refrigeration History, Refrigeration Theory, Thermal Laws, Components of a Refrigeration System, Refrigeration Cycle, Refrigerant Properties, Compressor Types, ARI Standards. Refrigeration Tool Usage, including Gauges, TP Chart, Soldering, Brazing. Safety will be emphasized.

OBJECTIVE:
Students will understand the basic refrigeration cycle, the components that are common to refrigeration systems and the physical laws that apply. Upon completion the student will be able to competently Solder and Braze copper refrigeration fittings.

PREREQUISITE:
None

HVACFM102 Electrical I - Basic Electrical Theory

FORMAT: Lecture and Lab STUDY TO INCLUDE (7 hours of lecture, 8 hours of lab) 15 contact hours:

Electron Theory, Basic Electrical Math, Ohm's Law, Basic Electrical Circuits, Series and Parallel Circuits, Schematics and Diagrams, Electrical Testing Instruments, Electric Motors and Electrical Safety.

OBJECTIVE:
Students will become familiar with basic electrical theory and fundamentals. The use of electrical testing equipment and basic hand tools will be covered and practiced. Circuit wiring will be studied and practiced in a lab environment.

PREREQUISITE:
Successful completion of HVACFM101.

HVACFM103 Electrical II - Electrical Application

FORMAT: Lecture and Lab STUDY TO INCLUDE (7 hours of lecture, 8 hours of lab) 15 contact hours:

Industrial Control Circuits, Motor Controls, Starting and Running Circuits and Motor Protection. An emphasis will be placed on understanding and wiring control circuits. Electrical Safety will be emphasized.

OBJECTIVE:
Students will become familiar with electrical components. Each student will build and test circuits used in HVAC equipment and industrial controls. The use of hand tools and electrical test equipment will be studied and practiced in a lab environment.

PREREQUISITE:
Successful completion of HVACFM102.

HVACFM104 Troubleshooting

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 12 hours of lab) 22 contact hours:

Troubleshooting concepts and techniques, review of control circuits, review of refrigeration cycle. Lab practice on commercial and residential package and split units covering a wide variety of HVAC problems.

OBJECTIVE:
To provide students with the knowledge and skills to successfully troubleshoot any type of problem associated with commercial and residential package or split HVAC systems.

PREREQUISITE:
Successful completion of HVACFM103.

HVAC105 Heat Pump

FORMAT: Lecture and Lab STUDY TO INCLUDE (1 hour of lecture, 4 hours of lab) 5 contact hours:

Heat Pump Theory, Design and Components and Troubleshooting Heat Pump systems. Safety will be emphasized.

OBJECTIVE:
Students will learn the fundamentals of Heat Pump operation and system components, and troubleshooting techniques unique to Heat Pump systems will be covered.

PREREQUISITE:
Successful completion of HVACFM104.

HVACFM106 Gas Heating

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 4 hours of lab) 10 contact hours:

Introduction to Gas Heating, Ignition Theory, Combustion Theory, Operational Controls and Safety Controls, Furnace Types. Safety will be emphasized.

OBJECTIVE:

Students will learn the fundamentals of gas heating systems and components. Troubleshooting techniques will be studied and practiced in a lab environment. Safety practices will be covered.

PREREQUISITE:
Successful completion of HVACFM105.

HVACFM107 Advanced Air Conditioning

FORMAT: Lecture and Lab STUDY TO INCLUDE (5 hours of lecture, 16 hours of lab) 21 contact hours:

Review of Refrigeration Systems, Introduction to Duct Systems and Airflow, Refrigerant Controls, Electrical Controls, Air Conditioning Troubleshooting, Recovery, Evacuation and Recharge, Superheat and Sub-cool. Safety will be emphasized.

OBJECTIVE:
Students will understand the use of test equipment and will comprehend superheat, sub-cooling and airflow, and how to use these key indicators of system performance in the troubleshooting process.

PREREQUISITE:
Successful completion of HVACFM106.

HVACFM108 EPA Certification Seminar & Examination

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 0 hours of lab) 10 contact hours:

Students will become familiar with the E.P.A. Rule 608 40-CFR, part 82 subpart (f). Students will become familiar with types of certification, theory on ozone loss, legal requirements regarding use and disposal of refrigerants containing CFC's. Proper recycling techniques, recovery techniques and refrigerant disposal will be covered.

OBJECTIVE:
Students will prepare to complete the EPA 608 Universal Certification exam, which will be given during class.

NOTE:
ESCO Testing Fee: $25.00; Tuition includes taking the EPA Exam one time; Exam "retake" fee (if necessary) $25.00

PREREQUISITE:
Successful completion of HVACFM107.

Total Contact Hours: 124 Hours
Length of Time for Completion: 16 Weeks/4 Months
Fee Breakdown:

Tuition:	**$6,695.00**
Books/Materials:	**$175.00**
EPA Test Fee:	**$25.00**
Total Cost	**$6,895.00**

2022 Class Schedules

Morning Sessions: 10:00am-2:00pm	
10:00am-11:45am	**Class time**
11:50am-12:00pm	10 min break

Night Sessions: 6:00pm-10:00pm	
6:00pm-7:45pm	**Class time**
7:50pm-8:00pm	10 min break

12:00pm-2:00pm	**Class time**	**8:00pm-10:00pm**	**Class time**

Program Title
Entry Level HVAC Technician (Immersion Model)

Program Description
Upon successful completion of Entry Level HVAC Technician (Immersion Model) program, the graduate will be prepared with the necessary skills for entry level employment as a residential HVAC service and repair technician. Close to half of this program will be "hands on" with the student taking an active role in wiring, trouble shooting and repairing residential HVAC equipment. Students will work on actual residential equipment and have the opportunity to diagnose, evaluate and repair actual HVAC units. Graduates will also prepare for and take the EPA 608 certification test. Graduates may pursue careers as HVAC service technicians, repair helper or assistants and start-up technicians.

The Entry Level HVAC (Immersion Model) Program includes video lecture series with hands-on lab classroom hours. Students will complete homework, lectures and quizzes online and attend 40 hours of in class hands-on labs for four 10-hour days.

Admissions Requirements
A student must provide proof of High School graduation, high school equivalency, or documentation of passing The Wonderlic Ability to Benefit (ATB) examination with a 200-minimum score in Verbal Skills and a 210- minimum score in Quantitative Skills; and be at least 17 years of age. No industry experience is required.

Program Outline

Subject Number	**Subject Title**	**Contact Hours Lecture/Lab/Total Contact Hours**
HVACIM101	Air Conditioning and Refrigeration Fundamentals	10/6/16
HVACIM102	Electrical I – Basic Electrical Theory	8/6/14
HVACIM103	Electrical II – Electrical Application	8/6/14
HVACIM104	Troubleshooting	10/10/20
HVACIM105	Heat Pump	2/2/4
HVACIM106	Gas Heating	4/2/6
HVACIM107	Advanced Air Conditioning	8/8/16
HVACIM108	EPA Certification Seminar and Examination	10/0/10
	Total Hours	**60/40/100**

The approximate time required to complete the Entry Level HVAC Technician (Immersion Model) Program:

- 1 forty-hour lab week (after completion of video/lecture/quiz series).

Subject Description

HVACIM101 Air Conditioning & Refrigeration Fundamentals

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 6 hours of lab) 16 contact hours:

Refrigeration History, Refrigeration Theory, Thermal Laws, Components of a Refrigeration System, Refrigeration Cycle, Refrigerant Properties, Compressor Types, ARI Standards. Refrigeration Tool Usage, including Gauges, TP Chart, Soldering, Brazing. Safety will be emphasized.

OBJECTIVE:
Students will understand the basic refrigeration cycle, the components that are common to refrigeration systems and the physical laws that apply. Upon completion the student will be able to competently Solder and Braze copper refrigeration fittings.

PREREQUISITE: None

HVACIM102 Electrical I - Basic Electrical Theory

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 6 hours of lab) 14 contact hours:

Electron Theory, Basic Electrical Math, Ohm's Law, Basic Electrical Circuits, Series and Parallel Circuits, Schematics and Diagrams, Electrical Testing Instruments, Electric Motors and Electrical Safety.

OBJECTIVE:
Students will become familiar with basic electrical theory and fundamentals. The use of electrical testing equipment and basic hand tools will be covered and practiced. Circuit wiring will be studied and practiced in a lab environment.

PREREQUISITE:
Successful completion of HVACIM101.

HVACIM103 Electrical II - Electrical Application

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 6 hours of lab) 14 contact hours:

Control Circuits, Motor Controls, Starting and Running Circuits and Motor Protection. An emphasis will be placed on understanding and wiring control circuits. Electrical Safety will be emphasized.

OBJECTIVE:
Students will become familiar with electrical components. Each student will build and test circuits used in HVAC equipment and controls. The use of hand tools and electrical test equipment will be studied and practiced in a lab environment.

PREREQUISITE:
Successful completion of HVACIM102.

HVACIM104 Troubleshooting

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 10 hours of lab) 20 contact hours:

Troubleshooting concepts and techniques, review of control circuits, review of refrigeration cycle. Lab practice on commercial and residential package and split units covering a wide variety of HVAC problems.

OBJECTIVE:
To provide students with the knowledge and skills to successfully troubleshoot any type of problem associated with commercial and residential package or split HVAC systems.

PREREQUISITE:
Successful completion of HVACIM103.

HVACIM105 Heat Pump

FORMAT: Lecture and Lab STUDY TO INCLUDE (2 hours of lecture, 2 hours of lab) 4 contact hours:

Heat Pump Theory, Design and Components and Troubleshooting Heat Pump systems. Safety will be emphasized.

OBJECTIVE:
Students will learn the fundamentals of Heat Pump operation and system components, and troubleshooting techniques unique to Heat Pump systems will be covered.

PREREQUISITE:
Successful completion of HVACIM104.

HVACIM106 Gas Heating

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 2 hours of lab) 6 contact hours:

Introduction to Gas Heating, Ignition Theory, Combustion Theory, Operational Controls and Safety Controls, Furnace Types. Safety will be emphasized.

OBJECTIVE:
Students will learn the fundamentals of gas heating systems and components. Troubleshooting techniques will be studied and practiced in a lab environment. Safety practices will be covered.

PREREQUISITE:
Successful completion of HVACIM105.

HVACIM107 Advanced Air Conditioning

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 8 hours of lab) 16 contact hours:

Review of Refrigeration Systems, Introduction to Duct Systems and Airflow, Refrigerant Controls, Electrical Controls, Air Conditioning Troubleshooting, Recovery, Evacuation and Recharge, Superheat and Sub-cool. Safety will be emphasized.

OBJECTIVE:
Students will understand the use of test equipment and will comprehend superheat, sub-cooling and airflow, and how to use these key indicators of system performance in the troubleshooting process.

PREREQUISITE:
Successful completion of HVACIM106.

HVACIM108 EPA Certification Seminar & Examination

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 0 hours of lab) 10 contact hours:

Students will become familiar with the E.P.A. Rule 608 40-CFR, part 82 subpart (f). Students will become familiar with types of certification, theory on ozone loss, legal requirements regarding use and disposal of refrigerants containing CFC's. Proper recycling techniques, recovery techniques and refrigerant disposal will be covered.

OBJECTIVE:
Students will prepare to complete the EPA 608 Universal Certification exam, which will be given during the class.

NOTE:
ESCO Testing Fee: $25.00; Tuition includes taking the EPA Exam one time; Exam "retake" fee (if necessary) $25.00

PREREQUISITE:
Successful completion of HVACIM107.

Total Contact Hours: 100 Hours
Length of Time for Completion: 1 Week/40 hours of hands-on lab
Fee Breakdown:

Tuition:	**$4,895.00**
Books/Materials:	**$175.00**
EPA Test Fee:	**$25.00**
Travel	**$1,000.00**
Room	**$400.00**
Food	**$400.00**
Total Cost	**$6,895.00**

Immersion Sessions Mon-Thurs: 8:00am-7:20pm	
8:00am-10:50am	**Class time**
10:50am-11:00am	15 min break
11:00am-1:00pm	**Class time**
1:00pm-1:30pm	Lunch break
1:30pm-3:30pm	**Class time**
3:30pm-3:40pm	10 min break
3:40pm-5:20pm	**Class time**
5:20pm-5:30pm	10 min break
5:30pm-7:20pm	**Class time**

Program Title
Entry Level Electrical Technician (Traditional Model)

Program Description
Upon successful completion of the Entry Level Electrical Technician (Traditional Model)
program, a graduate will be prepared with the necessary skills for entry level employment in the residential electrical trade. More than half of this program will be "hands on" with the student taking an active role in acquiring a basic understanding of the materials, tools and processes used by electrical professionals to complete residential electrical jobs. Students will work on actual equipment and tools and have the opportunity to diagnose, evaluate, read blueprints, install and repair electrical fixtures in our residential simulated labs and all up to current National Electrical Code (NEC). Upon successful completion of the Entry Level Electrical Technician (Traditional Model) program, graduates may pursue careers as an entry level electrician, electrician helper, entry level traveling electrician, interior residential electrician; to name a few.

Admissions Requirements

A student must provide proof of High School graduation, high school equivalency, or documentation of passing The Wonderlic Ability to Benefit (ATB) examination with a 200-minimum score in Verbal Skills and a 210- minimum score in Quantitative Skills; and be at least 17 years of age. No industry experience is required.

Program Outline

Subject Number	Subject Title	Contact Hours Lecture/Lab/Total Contact Hours
ETM101	Electrical Career and Trade	4/12/16
ETM102	Electrical Safety	4/12/16
ETM103	Electrical Mathematics and Metric System	3/9/12
ETM104	Electrical Concepts and Theory	7/21/28
ETM105	Introduction to National Electric Codes	3/9/12
ETM106	Grounding – Theory and Safety	3/9/12
ETM107	Electrician Tools and Proper Usage	3/9/12
ETM108	Wiring – Overview	3/9/12
ETM109	Wiring – Devices	3/9/12
ETM110	Wiring – Methods	3/9/12
ETM111	Wiring – Calculations	3/9/12
ETM112	Electrical Industry in Today's Green Technology	5/15/20
ETM113	Electrical Job Search and Soft Skills	4/12/16
	Total Hours	**48/144/192**

The approximate time required to complete the Entry Level Electrical Technician (Traditional Model) Program:

- Day Program: 12 weeks/3 months (Monday-Thursday)
- Night Program: 12 weeks/3 month (Monday-Thursday)

Subject Description

ETM101 Electrical Career and Trade

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 12 hours of lab) 16 contact hours:

Description of the electrical industry and expectations in this career, various career paths in the trade, upper-level positions and roles, requirements for a Master's License. Value of on-the-job training. Study Techniques.

OBJECTIVE:
Students will become familiar with the electrical industry, various career paths, upper -level positions and descriptions of roles. Understanding of the requirements to eventually obtain a mater plumbers license and the value of on-the-job training. Techniques and methods to study.

PREREQUISITE:
None.

ETM102 Electrical Safety

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 12 hours of lab) 16 contact hours:

Description of the general safety rules in the electrical industry both on the job and for the public. Understand various health hazards. OSHA regulations. Personal protective equipment (PPE), proper procedures for use of ladder and scaffolding.

OBJECTIVE:

Students will become familiar with the safety related practices used in the electrical industry including: health hazards, how current affects the body. Understanding of OSHA regulations and other safety rules including lockout and tagout procedures. The three types of personal protective equipment (PPE). The proper procedures for use of ladder and scaffolding.

PREREQUISITE:
Successful completion of ETM101.

ETM103 Electrical Mathematics and Metric System

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 9 hours of lab) 12 contact hours:

Introduction and usage of basic math used in the electrical industry. Introduction to metric system of measurement and how to read and use a tape measure.

OBJECTIVE:
Students will be able to solve math problems using fractions, percentages, decimals. Perform correct calculations and measurements using measuring tape.

PREREQUISITE:
Successful completion of ETM102.

ETM104 Electrical Concepts and Theory

FORMAT: Lecture and Lab STUDY TO INCLUDE (7 hours of lecture, 21 hours of lab) 28 contact hours:

Introduction to electrical concepts and principles. Principal parts of an atom, law of charges and the importance of current flow, magnetic terms. Define ampere, volt, ohm and watt. Complete circuit in series, parallel and series-parallel and solve for circuit values.

OBJECTIVE:
Students will be able to describe the three principle parts of an atom. Understand the laws of charges and describe its importance to current flow. Explain electron current flow and contrast direct and alternating current. Students will be able to explain and define Ohm's Law, using formula chart. Be able to define ampere, volt, ohm and watts. Learn and understand basic additional electrical theory and principles.

PREREQUISITE:
Successful completion of ETM103.

ETM105 Introduction to National Electrical Codes

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 9 hours of lab) 12 contact hours:

Understanding the history of the National Electrical Code, how codes are formed, importance and the intent of the Code. Summarization and how to locate information in the code book.

OBJECTIVE:
After completing this course, the students will be able to describe the history of the National Electrical Code, explain how codes are formed, the importance and intent of the code, the process of changing codes and how to locate information in the code book.

PREREQUISITE:
Successful completion of ETM104.

ETM106 Grounding—Theory and Safety

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 9 hours of lab) 12 contact hours:

Learning service grounding for a single-family dwelling, learn the consequences of incorrect grounding or lack of ground. Understand GFCI (ground fault circuit interrupter) requirements and application for a single-family dwelling.

OBJECTIVE:
Students will have an understanding of grounding and bonding along with the consequences of improper or lack of grounding. Students will also gain knowledge of NEC requirements for bonding of wiring devices to outlet boxes and have an understanding of GFCI (ground fault circuit interrupter).

PREREQUISITE:
Successful completion of ETM105.

ETM107 Electrician Tools and Proper Usage

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 9 hours of lab) 12 contact hours:

Introduction and usage of basic tools used in the electrical industry.

OBJECTIVE:
Students will be able to describe and use typical standard tools used in the electrical trade. Including: Basic hand tools, power tools and specialtytools.

PREREQUISITE:
Successful completion of ETM106.

ETM108 Wiring Overview

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 9 hours of lab) 12 contact hours:

Introduction to how specifications are used in making electrical installations. Understanding of symbols and notations used in electrical drawings and explain how they are used. Basic types of fuses and circuit breakers.

OBJECTIVE:
Students will understand how specifications are used in making electrical installations. Understand which symbols and notations are used in electrical drawings and how they are applied in electrical work.

PREREQUISITE:
Successful completion of ETM107.

ETM109 Wiring—Devices

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 9 hours of lab) 12 contact hours:

Introduction to wiring-devices: Identify marking on single and duplex receptacles and the operation of each, operation of single pole, three way, and four way toggle switches. Operation of dimmers, fuse, circuit breaker and GFCI (ground fault circuit interrupter) and AFCI (arc-fault circuit interrupters.

OBJECTIVE:
Students will learn and understand wiring devices which include: Receptacles, switches, dimmer controls devices, fuses, circuit breakers, GFCI's and AFCI's.

PREREQUISITE:

Successful completion of ETM108.

ETM110 Wiring—Methods

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 9 hours of lab) 12 contact hours:

Descriptions of NEC requirements for installation of NMC, MC cable, UF cable, and EMT. The correct wiring methods and identification of correct wiring connections for single-pole, three-way, and four-way switching as per NEC requirements.

OBJECTIVE:
Students will learn and understand the NEC requirements for installation of NMC, MC cable, UF cable, and EMT. Understand correct wiring methods and identification of correct wiring connections for single-pole, three-way, and four-way switching as per NEC requirements.

PREREQUISITE:
Successful completion of ETM109.

ETM111 Wiring—Calculations

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 9 hours of lab) 12 contact hours:

How to determine the fundamental NEC requirements for calculating branch-circuit sizing and loading. Perform conduit fill calculations as per NEC requirements. Calculate box fill and choose the correct size box. Describe the proper size conductor and over current device for a circuit, given a receptacle or switch.

OBJECTIVE:
Students will learn and understand how to determine the fundamental NEC requirements for calculating branch-circuit sizing and loading, perform conduit fill calculations as per NEC requirements, calculate box fill and choose the correct size box and describe the proper size conductor and over-current device for a circuit, given a receptacle or switch.

PREREQUISITE:
Successful completion of ETM110.

ETM112 Electrical Industry in Today's Green Technology

FORMAT: Lecture and Lab STUDY TO INCLUDE (5 hours of lecture, 15 hours of lab) 20 contact hours:

Introduction to Green Technology, solar and wind technologies, U.S. Green Building Council, Leadership in Energy and Environmental Design's (LEED)Green Building Rating System. Employment opportunities for electricians in green technology.

OBJECTIVE:
Students will be able to define green technology and know the four major goals of this developing technology. Students will have an understanding solar and wind technologies, U.S. Green Building Council, Leadership in Energy and Environmental Design's (LEED). Students will also learn and discover employment opportunities for electricians in green technology.

PREREQUISITE:
Successful completion of ETM111.

ETM113 Electrical Job Search and Soft Skills

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 12 hours of lab) 16 contact hours:

Introduction to different ways of seeking employment in the electrical trades. Understanding the hiring process.

Completing the job application and interviewing successfully.

OBJECTIVE:
Students will learn job search techniques, completion of applications and how to prepare for interviews. Students will also build cover letters and resumes. Practice for interviews. Learn behaviors that will make a positive impression during the job interview.

PREREQUISITE:
Successful completion of ETM112.

Total Contact Hours: 192 Hours
Length of Time for Completion: 16 Weeks/4 Months
Fee Breakdown:

Tuition:	**$8,995.00**
Books/Materials:	**$175.00**
Total Cost	**$9,170.00**

2022 Class Schedules

Morning Sessions: 10:00am-2:00pm	
10:00am-11:45am	**Class time**
11:50am-12:00pm	10 min break
12:00pm-2:00pm	**Class time**

Night Sessions: 6:00pm-10:00pm	
6:00pm-7:45pm	**Class time**
7:50pm-8:00pm	10 min break
8:00pm-10:00pm	**Class time**

Program Title
Entry Level Electrical Technician (Fusion Model)

Program Description
Upon successful completion of the Entry Level Electrical Technician (Fusion Model) program, a graduate will be prepared with the necessary skills for entry level employment in the residential electrical trade. More than half of this program will be "hands on" with the student taking an active role in acquiring a basic understanding of the materials, tools and processes used by electrical professionals to complete residential electrical jobs. Students will work on actual equipment and tools and have the opportunity to diagnose, evaluate, read blueprints, install and repair actual electrical fixtures in our residential simulated labs and all up to current National Electrical Code (NEC). Upon successful completion of the Entry Level Electrical Technician (Fusion Model) program, graduates may pursue careers as entry level electrician, electrician helper, entry level traveling electrician, interior residential electrician; to name a few.

Admissions Requirements
A student must provide proof of High School graduation, high school equivalency, or documentation of passing The Wonderlic Ability to Benefit (ATB) examination with a 200-minimum score in Verbal Skills and a 210- minimum score in Quantitative Skills; and be at least 17 years of age. No industry experience is required.

Program Outline

Subject Number	**Subject Title**	**Contact Hours Lecture/Lab/Total Contact Hours**

EFM101	Electrical Career and Trade	6/2/8
EFM102	Electrical Safety	4/8/12
EFM103	Electrical Mathematics and Metric System	4/2/6
EFM104	Electrical Concepts and Theory	12/8/20
EFM105	Introduction to National Electric Codes	4/4/8
EFM106	Grounding – Theory and Safety	4/4/8
EFM107	Electrician Tools and Proper Usage	2/6/8
EFM108	Wiring – Overview	2/6/8
EFM109	Wiring – Devices	2/6/8
EFM110	Wiring – Methods	2/6/8
EFM111	Wiring – Calculations	4/4/8
EFM112	Electrical Industry in Today's Green Technology	6/6/12
EFM113	Electrical Job Search and Soft Skills	8/2/10
	Total Hours	**60/64/124**

The approximate time required to complete the Entry Level Electrical Technician (Fusion Model) Program:

- Day Program: 16 weeks/4 months
- Night Program: 16 weeks/4 month

EFM101 Electrical Career and Trade

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 2 hours of lab) 8 contact hours:

Description of the electrical industry and expectations in this career, various career paths in the trade, upper-level positions and roles, requirements for a Master's License. Value of on-the-job training. Study Techniques.

OBJECTIVE:
Students will become familiar with the electrical industry, various career paths, upper -level positions and descriptions of roles. Understanding of the requirements to eventually obtain a mater plumbers license and the value of on-the-job training. Techniques and methods to study.

PREREQUISITE:
None.

EFM102 Electrical Safety

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 8 hours of lab) 12 contact hours:

Description of the general safety rules in the electrical industry both on the job and for the public. Understand various health hazards. OSHA regulations. Personal protective equipment (PPE), proper procedures for use of ladder and scaffolding.

OBJECTIVE:
Students will become familiar with the safety related practices used in the electrical industry including: health hazards, how current affects the body. Understanding of OSHA regulations and other safety rules including lockout and tagout procedures. The three types of personal protective equipment (PPE). The proper procedures for use of ladder and scaffolding.

PREREQUISITE:
Successful completion of EFM101.

EFM103 Electrical Mathematics and Metric System

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 2 hours of lab) 6 contact hours:

Introduction and usage of basic math used in the electrical industry. Introduction to metric system of measurement and how to read and use a tape measure.

OBJECTIVE:
Students will be able to solve math problems using fractions, percentages, decimals. Perform correct calculations and measurements using measuring tape.

PREREQUISITE:
Successful completion of EFM102.

EFM104 Electrical Concepts and Theory

FORMAT: Lecture and Lab STUDY TO INCLUDE (12 hours of lecture, 8 hours of lab) 20 contact hours:

Introduction to electrical concepts and principles. Principal parts of an atom, law of charges and the importance of current flow, magnetic terms. Define ampere, volt, ohm and watt. Complete circuit in series, parallel and series-parallel and solve for circuit values.

OBJECTIVE:
Students will be able to describe the three principle parts of an atom. Understand the laws of charges and describe its importance to current flow. Explain electron current flow and contrast direct and alternating current. Students will be able to explain and define Ohm's Law, using formula chart. Be able to define ampere, volt, ohm and watts. Learn and understand basic additional electrical theory and principles.

PREREQUISITE:
Successful completion of EFM103.

EFM105 Introduction to National Electrical Codes

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 4 hours of lab) 8 contact hours:

Understanding the history of the National Electrical Code, how codes are formed, importance and the intent of the Code. Summarization and how to locate information in the code book.

OBJECTIVE:
After completing this course, the students will be able to describe the history of the National Electrical Code, explain how codes are formed, the importance and intent of the code, the process of changing codes and how to locate information in the code book.

PREREQUISITE:
Successful completion of EFM104.

EFM106 Grounding—Theory and Safety

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 4 hours of lab) 8 contact hours:

Learning service grounding for a single-family dwelling, learn the consequences of incorrect grounding or lack of ground. Understand GFCI (ground fault circuit interrupter) requirements and application for a single-family dwelling.

OBJECTIVE:
Students will have an understanding of grounding and bonding along with the consequences of improper or lack of grounding. Students will also gain knowledge of NEC requirements for bonding of wiring devices to outlet boxes and have an understanding of GFCI (ground fault circuit interrupter).

PREREQUISITE:
Successful completion of EFM105.

EFM107 Electrician Tools and Proper Usage

FORMAT: Lecture and Lab STUDY TO INCLUDE (2 hours of lecture, 6 hours of lab) 8 contact hours:

Introduction and usage of basic tools used in the electrical industry.

OBJECTIVE:
Students will be able to describe and use typical standard tools used in the electrical trade. Including: Basic hand tools, power tools and specialtytools.

PREREQUISITE:
Successful completion of EFM106.

EFM108 Wiring Overview

FORMAT: Lecture and Lab STUDY TO INCLUDE (2 hours of lecture, 6 hours of lab) 8 contact hours:

Introduction to how specifications are used in making electrical installations. Understanding of symbols and notations used in electrical drawings and explain how they are used. Basic types of fuses and circuit breakers.

OBJECTIVE:
Students will understand how specifications are used in making electrical installations. Understand which symbols and notations are used in electrical drawings and how they are applied in electrical work.

PREREQUISITE:
Successful completion of EFM107.

EFM109 Wiring—Devices

FORMAT: Lecture and Lab STUDY TO INCLUDE (2 hours of lecture, 6 hours of lab) 8 contact hours:

Introduction to wiring-devices: Identify marking on single and duplex receptacles and the operation of each, operation of single pole, three way, and four way toggle switches. Operation of dimmers, fuse, circuit breaker and GFCI (ground fault circuit interrupter) and AFCI (arc-fault circuit interrupters.

OBJECTIVE:
Students will learn and understand wiring devices which include: Receptacles, switches, dimmer controls devices, fuses, circuit breakers, GFCI's andAFCI's.

PREREQUISITE:
Successful completion of EFM108.

EFM110 Wiring—Methods

FORMAT: Lecture and Lab STUDY TO INCLUDE (2 hours of lecture, 6 hours of lab) 8 contact hours:

Descriptions of NEC requirements for installation of NMC, MC cable, UF cable, and EMT. The correct wiring methods and identification of correct wiring connections for single-pole, three-way, and four-way switching as per NEC requirements.

OBJECTIVE:
Students will learn and understand the NEC requirements for installation of NMC, MC cable, UF cable, and EMT. Understand correct wiring methods and identification of correct wiring connections for single-pole, three-way,

and four-way switching as per NEC requirements.

PREREQUISITE:
Successful completion of EFM109.

EFM111 Wiring—Calculations

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 4 hours of lab) 8 contact hours:

How to determine the fundamental NEC requirements for calculating branch-circuit sizing and loading. Perform conduit fill calculations as per NEC requirements. Calculate box fill and choose the correct size box. Describe the proper size conductor and over current device for a circuit, given a receptacle or switch.

OBJECTIVE:
Students will learn and understand how to determine the fundamental NEC requirements for calculating branch-circuit sizing and loading, perform conduit fill calculations as per NEC requirements, calculate box fill and choose the correct size box and describe the proper size conductor and over-current device for a circuit, given a receptacle or switch.

PREREQUISITE:
Successful completion of EFM110.

EFM112 Electrical Industry in Today's Green Technology

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 6 hours of lab) 12 contact hours:

Introduction to Green Technology, solar and wind technologies, U.S. Green Building Council, Leadership in Energy and Environmental Design's (LEED)Green Building Rating System. Employment opportunities for electricians in green technology.

OBJECTIVE:
Students will be able to define green technology and know the four major goals of this developing technology. Students will have an understanding solar and wind technologies, U.S. Green Building Council, Leadership in Energy and Environmental Design's (LEED). Students will also learn and discover employment opportunities for electricians in green technology.

PREREQUISITE:
Successful completion of EFM111.

EFM113 Electrical Job Search and Soft Skills

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 2 hours of lab) 10 contact hours:

Introduction to different ways of seeking employment in the electrical trades. Understanding the hiring process. Completing the job application and interviewing successfully.

OBJECTIVE:
Students will learn job search techniques, completion of applications and how to prepare for interviews. Students will also build cover letters and resumes. Practice for interviews. Learn behaviors that will make a positive impression during the job interview.

PREREQUISITE:
Successful completion of EFM112.

Total Contact Hours: 124 Hours
Length of Time for Completion: 16 Weeks/4 Months
Fee Breakdown:

Tuition:	**$6,720.00**
Books/Materials:	**$175.00**
Total Cost	**$6,895.00**

2022 Class Schedules

Morning Sessions: 10:00am-2:00pm	
10:00am-11:45am	**Class time**
11:50am-12:00pm	10 min break
12:00pm-2:00pm	**Class time**

Night Sessions: 6:00pm-10:00pm	
6:00pm-7:45pm	**Class time**
7:50pm-8:00pm	10 min break
8:00pm-10:00pm	**Class time**

Program Title
Entry Level Plumbing Technician (Traditional Model)

Program Description
Upon successful completion of the Entry Level Plumbing Technician (Traditional Model) program, a graduate will be prepared with the necessary skills for entry level employment in the residential and light commercial plumber trade. More than half of this program will be "hands on" with the student taking an active role in acquiring a basic understanding of the materials, tools and processes used by plumbing professionals to complete residential and light-commercial plumbing jobs. Students will work on actual equipment and fixtures and have the opportunity to diagnose, evaluate, read maps, install and repair plumbing parts in our residential simulated labs. Upon successful completion of the Entry Level Plumbing Technician (Traditional Model) program, graduates may pursue careers as entry level residential service and repair plumbers, drain installation technicians, plumbing maintenance technicians and pre-fab plumber/laborer; to name a few.

Admissions Requirements
A student must provide proof of High School graduation, high school equivalency, or documentation of passing The Wonderlic Ability to Benefit (ATB) examination with a 200-minimum score in Verbal Skills and a 210- minimum score in Quantitative Skills; and be at least 17 years of age. No industry experience is required.

Program Outline

Subject Number	**Subject Title**	**Contact Hours Lecture/Lab/Total Contact Hours**
PTM101	What is Plumbing and the History of Plumbing	4/0/4
PTM 102	First Aid and Safety and Ensuring the Health and Safety of the Public	6/18/24
PTM 103	Tools of the Plumbing and Basic Math for Plumbing	8/22/30
PTM 104	Water Supply, Waste Disposal and Sewage Disposal	8/24/32
PTM 105	First Mechanical Properties and Piping Materials Joining Methods for DMB and Pressure Pipe	10/32/42
PTM 106	Plumbing Fixtures and Faucets	6/18/24
PTM 107	Water Heaters	6/18/24
PTM 108	Building Plans and Print Reading	2/4/6
PTM 109	Drawings and Sketching	2/4/6
	Total Hours	**52/140/192**

The approximate time required to complete the Entry Level Plumbing Technician (Traditional Model) Program:

- Day Program: 12 weeks/3 months (Monday-Thursday)
- Night Program: 12 weeks/3 month (Monday-Thursday)

Subject Description

PTM101 What is Plumbing and the History of Plumbing

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 0 hours of lab) 4 contact hours:

Description of the plumbing industry and expectations in this career, various career paths in the trade, upper level positions and roles, requirements for a Masters License, and the value of on-the-job training.

OBJECTIVE:
Students will become familiar with the plumbing industry and its history, various career paths, upper level positions and descriptions of roles. Understanding of the requirements to eventually obtain a mater plumbers license and the value of on-the-job training.

PREREQUISITE:
None

PTM102 First Aid and Safety and Ensuring the Health and Safety of the Public

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 18 hours of lab) 24 contact hours:

Description of the safety related hazards in the plumbing industry both on the job and for the public. Understand various health hazards. Understanding of licenses, permits and inspection requirements. Safety techniques.

OBJECTIVE:
Students will become familiar with the safety related practices used in the plumbing industry including: hazards on the job and for the public along with safety techniques. Also, the student will become aware of codes you will need to adhere to, licenses, permits and inspections used on the job.

PREREQUISITE:
Successful completion of PTM101.

PTM103 Tools of the Plumbing Trade and Basic Math for Plumbing

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 22 hours of lab) 30 contact hours:

Introduction and usage of basic tools used in the plumbing industry. Basic math used in everyday plumbing.

OBJECTIVE:
Students will be able to describe and use typical standard tools used in the plumbing trade: Including: Torch kits, pipe wrenches, pipe cutters, tape measurers and other common tools. Students will also be taught basic math problem solving principles used in the plumbing trade including: Solving problems using fractions, percentages, decimals.

PREREQUISITE:
Successful completion of PTM102.

PTM104 Water Supply, Waste Disposal and Sewage Disposal

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 24 hours of lab) 32 contact hours:

Introduction to Water Supply, Waste and Sewage Disposal. Principal waste hazards, health implications of plumbing.

OBJECTIVE:
Students will be able to describe water hazards such as cross connections, how to prevent back- siphonage problems and principal waste hazards. Proper usage of fixture traps. Students will also have an understanding of water sources such as: municipal water supplies, private systems, surface water, gray water etc. Cases of contamination.

PREREQUISITE:
Successful completion of PTM103.

PTM105 First Mechanical Properties and Piping materials and Joining Methods for DMV and Pressure Pipe

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 32 hours of lab) 42 contact hours:

Understanding Mechanical properties such as compression, tension; shear and stress lines. Learn how to work with beams and columns. How to attach to structural loads. Proper use of pipe hangers and support.

OBEJCTIVE:
Students will have an understanding and work with vitrified clay pipe, steel pipe, concrete pipe. Students will perform Solder and Brazing. Usage of copper fitting and tubing. Cast iron cutting and joining and many other mechanical properties.

PREREQUISITE:
Successful completion of PTM104.

PTM106 Plumbing Fixtures and Faucets

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 18 hours of lab) 24 contact hours:

Introduction to standard plumbing fixtures and parts used in every day plumbing installs in both residential and commercial settings.

OBJECTIVE:
Students will have an understanding and install, fabricate and usage of water closets flush types; flushometer, dual flush, materials and finishes, flushing cycle, water closet rough in, water closet configurations, urinals and flushing methods, bidets, sink types, mounting faucets, water coolers and drinking fountains and more.

PREREQUISITE:
Successful completion of PTM105.

PTM107 Water Heaters

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 18 hours of lab) 24 contact hours:

Introduction to standard install and repair of electric and gas water heaters.

OBJECTIVE:
Students will perform water heater installation and other heating devices. Students will also learn about jacket and insulation, dip tubes, thermostats for both electric and gas devices and temperature and relief valves.

PREREQUISITE:
Successful completion of PTM106.

PTM108 Building Plans and Print Reading

FORMAT: Lecture and Lab STUDY TO INCLUDE (2hours of lecture, 4 hours of lab) 6 contact hours:

Introduction to standard planning and project designs.

OBJECTIVE:
Students will understand the fundamentals of construction drawing and how to read drawings and how scales are used in planning.

PREREQUISITE:
Successful completion of PTM107.

PTM109 Drawing and Sketching

FORMAT: Lecture and Lab STUDY TO INCLUDE (2hours of lecture, 4 hours of lab) 6 contact hours:

Introduction to standard drawing terms in the construction industry.

OBJECTIVE:
Students will understand drawing terms, working drawings, freehand sketching, sketching with drawing aids and symbols for detailed sketching.

PREREQUISITE:
Successful completion of PTM108.

Total Contact Hours: 192 Hours
Length of Time for Completion: 12 Weeks/3 Months (Monday-Thursday)
Fee Breakdown:

Tuition:	**$8,995.00**
Books/Materials:	**$175.00**
Total Cost	**$9,170.00**

2022 Class Schedules

Morning Sessions: 10:00am-2:00pm	
10:00am-11:45am	**Class time**
11:50am-12:00pm	10 min break
12:00pm-2:00pm	**Class time**

Night Sessions: 6:00pm-10:00pm	
6:00pm-7:45pm	**Class time**
7:50pm-8:00pm	10 min break
8:00pm-10:00pm	**Class time**

Program Title
Entry Level Plumbing Technician (Fusion Model)

Program Description
Upon successful completion of the Entry Level Plumbing Technician (Fusion Model) program, a graduate will be prepared with the necessary skills for entry level employment in the residential and light commercial plumber trade. More than half of this program will be “hands on” with the student taking an active role in acquiring a basic understanding of the materials, tools and processes used by plumbing professionals to complete residential and light-commercial plumbing jobs. Students will work on actual equipment and fixtures and have the opportunity to diagnose, evaluate, read maps, install and repair actual plumbing parts in our residential simulated labs. Upon successful

completion of the Entry Level Plumbing Technician (Fusion Model) program, graduates may pursue careers as entry level residential service and repair plumbers, drain installation technicians, plumbing maintenance technicians and pre-fab plumber/laborer; to name a few.

Admissions Requirements

A student must provide proof of High School graduation, high school equivalency, or documentation of passing The Wonderlic Ability to Benefit (ATB) examination with a 200-minimum score in Verbal Skills and a 210- minimum score in Quantitative Skills; and be at least 17 years of age. No industry experience is required.

Program Outline

Subject Number	**Subject Title**	**Contact Hours Lecture/Lab/Total Contact Hours**
PFM101	What is Plumbing and the History of Plumbing	4/0/4
PFM102	First Aid and Safety and Ensuring the Health and Safety of the Public	10/4/14
PFM103	Tools of the Plumbing and Basic Math for Plumbing	10/10/20
PFM104	Water Supply, Waste Disposal and Sewage Disposal	8/10/18
PFM105	First Mechanical Properties and Piping Materials Joining Methods for DMB and Pressure Pipe	10/14/24
PFM106	Plumbing Fixtures and Faucets	6/10/16
PFM107	Water Heaters	6/10/16
PFM108	Building Plans and Print Reading	3/3/6
PFM109	Drawings and Sketching	3/3/6
	Total Hours	**60/64/124**

The approximate time required to complete the Entry Level Plumbing Technician (Fusion Model) Program:

- Day Program: 16 weeks/4 months
- Night Program: 16 weeks/4 month

Subject Description

PFM101 What is Plumbing and the History of Plumbing

FORMAT: Lecture and Lab STUDY TO INCLUDE (4 hours of lecture, 0 hours of lab) 4 contact hours:

Description of the plumbing industry and expectations in this career, various career paths in the trade, upper-level positions and roles, requirements for a Masters License, and the value of on-the-job training.

OBJECTIVE:
Students will become familiar with the plumbing industry and its history, various career paths, upper-level positions and descriptions of roles. Understanding of the requirements to eventually obtain a mater plumbers license and the value of on-the-job training.

PREREQUISITE:
None

PFM102 First Aid and Safety and Ensuring the Health and Safety of the Public

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 4 hours of lab) 14 contact hours:

Description of the safety related hazards in the plumbing industry both on the job and for the public. Understand various health hazards. Understanding of licenses, permits and inspection requirements. Safety techniques.

OBJECTIVE:
Students will become familiar with the safety related practices used in the plumbing industry including: hazards on the job and for the public along with safety techniques. Also, the student will become aware of codes you will need to adhere to, licenses, permits and inspections used on the job.

PREREQUISITE:
Successful completion of PFM101.

PFM103 Tools of the Plumbing Trade and Basic Math for Plumbing

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 10 hours of lab) 20 contact hours:

Introduction and usage of basic tools used in the plumbing industry. Basic math used in everyday plumbing.

OBJECTIVE:
Students will be able to describe and use typical standard tools used in the plumbing trade: Including: Torch kits, pipe wrenches, pipe cutters, tape measurers and other common tools. Students will also be taught basic math problem solving principles used in the plumbing trade including: Solving problems using fractions, percentages, decimals.

PREREQUISITE:
Successful completion of PFM102.

PFM104 Water Supply, Waste Disposal and Sewage Disposal

FORMAT: Lecture and Lab STUDY TO INCLUDE (8 hours of lecture, 10 hours of lab) 18 contact hours:

Introduction to Water Supply, Waste and Sewage Disposal. Principal waste hazards, health implications of plumbing.

OBJECTIVE:
Students will be able to describe water hazards such as cross connections, how to prevent back- siphonage problems and principal waste hazards. Proper usage of fixture traps. Students will also have an understanding of water sources such as: municipal water supplies, private systems, surface water, gray water etc. Cases of contamination.

PREREQUISITE:
Successful completion of PFM103.

PFM105 First Mechanical Properties and Piping materials and Joining Methods for DMV and Pressure Pipe

FORMAT: Lecture and Lab STUDY TO INCLUDE (10 hours of lecture, 14 hours of lab) 24 contact hours:

Understanding Mechanical properties such as compression, tension; shear and stress lines. Learn how to work with beams and columns. How to attach to structural loads. Proper use of pipe hangers and support.

OBEJCTIVE:
Students will have an understanding and work with vitrified clay pipe, steel pipe, concrete pipe. Students will perform Solder and Brazing. Usage of copper fitting and tubing. Cast iron cutting and joining and many other mechanical properties.

PREREQUISITE:
Successful completion of PFM104.

PFM106 Plumbing Fixtures and Faucets

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 10 hours of lab) 16 contact hours:

Introduction to standard plumbing fixtures and parts used in every day plumbing installs in both residential and commercial settings.

OBJECTIVE:
Students will have an understanding and install, fabricate and usage of water closets flush types; flushometer, dual flush, materials and finishes, flushing cycle, water closet rough in, water closet configurations, urinals and flushing methods, bidets, sink types, mounting faucets, water coolers and drinking fountains and more.

PREREQUISITE:
Successful completion of PFM105.

PFM107 Water Heaters

FORMAT: Lecture and Lab STUDY TO INCLUDE (6 hours of lecture, 10 hours of lab) 16 contact hours:

Introduction to standard install and repair of electric and gas water heaters.

OBJECTIVE:
Students will perform water heater installation and other heating devices. Students will also learn about jacket and insulation, dip tubes, thermostats for both electric and gas devices and temperature and relief valves.

PREREQUISITE:
Successful completion of PFM106.

PFM108 Building Plans and Print Reading

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 3 hours of lab) 6 contact hours:

Introduction to standard planning and project designs.

OBJECTIVE:
Students will understand the fundamentals of construction drawing and how to read drawings and how scales are used in planning.

PREREQUISITE:
Successful completion of PFM107.

PFM109 Drawing and Sketching

FORMAT: Lecture and Lab STUDY TO INCLUDE (3 hours of lecture, 3 hours of lab) 6 contact hours:

Introduction to standard drawing terms in the construction industry.

OBJECTIVE:
Students will understand drawing terms, working drawings, freehand sketching, sketching with drawing aids and symbols for detailed sketching.

PREREQUISITE:
Successful completion of PFM108.

Total Contact Hours: 124 Hours

Length of Time for Completion: 16 Weeks/4 Months
Fee Breakdown:

Tuition:	**$6,720.00**
Books/Materials:	**$175.00**
Total Cost	**$6,895.00**

2022 Class Schedules

Morning Sessions: 10:00am-2:00pm	
10:00am-11:45am	**Class time**
11:50am-12:00pm	10 min break
12:00pm-2:00pm	**Class time**

Night Sessions: 6:00pm-10:00pm	
6:00pm-7:45pm	**Class time**
7:50pm-8:00pm	10 min break
8:00pm-10:00pm	**Class time**

Attendance Sheet
Student Name:
Student ID:
Course Name:

Date(s)	Time	Student Signature

NATIONAL TECHNICAL INSTITUTE

ADDENDUM to catalog Volume 2022-2

Price changes effective 1-1-2023

Entry Level HVAC/Installation Technician (Traditional Model)
Tuition: $9,495.00
Book/Materials: $475.00
EPA Test Fee: $25.00
Total Cost: $9,995.00

Entry Level HVAC/Installation Technician (Fusion Model)
Tuition: $7,220.00
Book/Materials: $550.00
EPA Test Fee: $25.00
Total Cost: $7,795.00

Entry Level HVAC Technician (Immersion Model)
*Tuition: $5,895.00
Book/Materials: $475.00
EPA Test Fee: $25.00
Total Cost: $6,395.00
*Includes Hotel accommodations if necessary & Meals during lab sessions

Entry Level Electrical Technician (Traditional Model)
Tuition: $9,495.00
Book/Materials: $500.00
Total Cost: $9,995.00

Entry Level Electrical Technician (Fusion Model)
Tuition: $7,220.00
Book/Materials: $575.00
Total Cost: $7,795.00

Entry Level Plumbing Technician (Traditional Model)
Tuition: $9,495.00
Book/Materials: $500.00
Total Cost: $9,995.00

Entry Level Plumbing Technician (Fusion Model)
Tuition: $7,220.00
Book/Materials: $575.00
Total Cost: $7,795.00

TRUE AND CORRECT STATEMENT

I hereby certify that the statements and information in this catalog are true and correct to the best of my knowledge and belief.

Derek McSmith
SIGNED BY DIRECTOR