



# TEXAS PREMIER TECHNOLOGY INSTITUTE, INC

TPTI 2023 – 2024 School Catalog

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## About Us

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Texas Premier Technology Institute, Inc., (TPTI) is a Texas Non-Profit Corporation – Licensed Career School of Texas (S4597) established to prepare students for the burgeoning Information Technology industry.

TPTI's integrated instruction and programs prepare students to excel in the competitive world of technology. Upon completion, TPTI students are also prepared to take exams offered by our partners: Microsoft IT Academy, Cisco Net Academy and CompTIA. TPTI students can work toward a wide range of certifications as they are guided and taught by our certified instructors, all of whom are experienced subject matter experts.

TPTI is equipped with state-of-the-art Technology and Lab equipment. As a supplement to classroom learning we also offer Distant Learning Courses where students can log in remotely and attend classes from home, at work or even at play. We call these courses Distance Learning, but in reality, they bring education to you. Texas Premier Technology Institute has Certified Trainers & Professionals who are at the top of their game. We are dedicated to helping our students achieve professional success through hands-on, job specific training.

Our training programs are designed to prepare our students for real world scenarios and to land jobs upon completion. Our training programs emphasize experiential, interactive learning activities – that means you will do the job before you take the job. At TPTI we believe your training should teach you what's expected on the job. Discover how our flexible learning options can help you maintain your current lifestyle while continuing to stay abreast of today's ever-changing world of Technology.

## Our learning paths:

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### **Classroom Learning:**

This learning method, students are taught a comprehensive curriculum covering core IT subjects, engage in hands-on labs and projects, and collaborate with peers. Experienced instructors guide them through real-world case studies, preparing students for careers in areas like programming, cybersecurity, and IT Support. Assessments, internships, and job placement services are integral to ensuring students are well-equipped for the IT industry. This structured approach fosters practical skills, critical thinking, and industry certifications, preparing graduates for success in the ever-evolving world of information technology.

### **Distant Learning:**

This learning method eliminates the need for traveling to classes, yet it still offers access to live, instructor-led training courses. And since the best way to learn is by doing, you'll have access to virtual hands-on labs. Some of the latest advancements in Technology make this method possible by allowing screen sharing and interactive communications between the instructor and the students. This learning path allows you to earn your training/certification from the comfort of your own home.

### **Lab Learning:**

This learning methodology allows our students to execute what they have learned in the course. It offers the ability to have your own virtualized environment, whereby students get to perform/demonstrate real world

exercises. What an experience to be able to stand-up your own virtualized environment. This is what we mean when we say at TPTI - you will do the job before you take the job.

*Each Program encompasses multiple learning paths. These unique learning paths provide Students multiple options of attaining course instruction.*

## Facility Description

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Our Arlington, TX facilities offer versatile spaces designed to meet both administrative and educational requirements. In support of our Hybrid Learning Institution model, our premises include offices for counseling, recruitment, and enrollment staff, as well as well-appointed conference rooms for group sessions, workshops, and meetings. Our modern classrooms are equipped with advanced technology systems and lab environments, catering to the unique learning needs of our students. Ample parking is available, and the building is fully accessible to individuals with disabilities. Our facility is fully compliant with federal, state, and local regulations, ensuring safety and health standards are met.

## Hours of Operation

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<b>Monday – Friday</b>	<b>Breaks</b>	<b>Lunch</b>
8:00am – 9:00pm	10:30am – 10:45am 2:50pm – 3:05pm 7:00pm – 7:15pm	11:50am-12:50pm
<b>Saturday</b>	<b>Breaks</b>	<b>Lunch</b>
8:00am – 5:30pm	10:30am – 10:45am 2:50pm – 3:05pm	11:50am-12:50pm

\*Breaks/Lunches may vary depending on instructor and class.

## School Calendar

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### Holiday Observance

Martin Luther King Day	January 20th
Good Friday	April 18th
Memorial Day	May 26th
Independence Day	July 4th
Labor Day	September 1st
Thanksgiving	Wednesday thru Friday November 26-28
Christmas Eve	December 24th
Christmas Day	December 25th
New Year's Eve	December 31st

## Enrollment Period

Enrollment for classes is ongoing. Class ranges differ per class.

## Schedule

DAY	DAY
8:30 – 9:30am	Lab
9:30 – 10:30am	Day Lecture
10:30 – 10:45am	Break
10:45 - 11:40am	Day Lecture
11:50 – 12:50pm	Lunch
12:50 – 1:50pm	Lab
1:50 – 2:50pm	Day Lecture
2:50 – 3:05pm	Break
3:05 –5:30pm	Lab
Evening	Evening
6:00pm – 7:00pm	Lab
7:00 – 9:00pm	Evening Lecture

## Financial

### Statement of Financial Obligation

A student who has applied, is accepted, and has begun classes at Texas Premier Technology Institute assumes a definite financial obligation. Each student is responsible for his or her own education expenses for the period of enrollment. A student who is enrolled and has made payments in full or completed other financial arrangements and is current with those obligations, is entitled to all privileges of attending classes, accessing E-Learning portals, Labs, Examinations, and receiving grade reports.

Any student who is delinquent in a financial obligation to the school, or educational financial obligation to any third party, including damage to school property, payment of tuition and fees, is subject to exclusion from any or all the usual privileges of the school. TPTI may in its sole discretion take disciplinary action on the basis, including suspension or termination of enrollment.

#### *TUITION AND FEES*

Tuition and fee information can be found in the “Tuition and Fees” section in this catalog. The Enrollment Agreement obligates the student and the school for the entire program of instruction. Students may make payments by cash or by the following accepted credit cards: Visa, MasterCard, American Express or Discover.

#### *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. A full refund will also 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, as well as items of extra expense that are necessary for the portion of the program attended and stated separately on the enrollment agreement.

## *CANCELLATION AND REFUNDS FOR PROGRAMS*

1. Refund computations will be based on scheduled course time of class attendance through the last date of attendance. Leaves of absence, suspensions and school holidays will not be counted as part of the scheduled class attendance.
  2. The effective date of termination for refund purposes will be the earliest of the following:
    - (a) The last day of attendance if the student is terminated by the school.
    - (b) The date of receipt of written notice from the student; or
    - (c) Ten school days following the last date of attendance.
  3. 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.
  4. If a student enters a residence or synchronous distance education program and withdraws or is otherwise terminated after the cancellation period, the school or college may retain not more than \$100 in any 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.<sup>1</sup>
  5. Refunds for items of extra expense to the student, such as books, tools, or other supplies are to 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.
  6. 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 re-enroll 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.
  7. A full refund of all tuition and fees is due and refundable in each of the following cases:

An enrollee is not accepted by the school.

If the course of instruction is discontinued by the school and this prevents the student from completing the course; or
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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.

8. REFUND POLICY FOR STUDENTS CALLED TO ACTIVE MILITARY SERVICE.

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:

1. satisfactorily completed at least 90 percent of the required coursework for the program; and
  2. Demonstrated sufficient mastery of the program material to receive credit for completing the program.
9. 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.

## ADMISSIONS

### REQUIREMENTS

A student may be admitted into Texas Premier Technology Institute, Inc. upon satisfying all of the following requirements:

- A student must be 18 years of age and have completed their Secondary Education (HS Diploma or GED) Students who are 17 years of age must have written consent from Parent or Legal Gaudian before admission can be approved.
  - *In the event the applicant is unable to provide proof of secondary education, applicant must achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210)*
- The student must have a consultation with a TPTI Guidance Counselor to evaluate skill/experience levels and identify education and career paths.



- The student must complete and sign the TPTI “Student Enrollment Agreement.” One copy will be retained in the student’s file.
- A payment method must be established and agreed upon by the student and TPTI Admissions.
- The student must be at least 18 years of age and must provide proof of the individual prerequisites listed for the program chosen by providing a current resume to student services prior to enrollment.

## CREDIT FOR PREVIOUS EDUCATION

Students who have been officially accepted in our programs may request in writing a transfer of credit in accordance with TPTI’s Transfer of Credit Policy outlined below. It is noted that TPTI does not guarantee transfer credit. Students intending to transfer out of our programs should research the schools they plan to transfer their credits. Completion of a program at TPTI neither implies nor guarantees that educational requirements of another school have been met. For this reason, any student who expects to transfer to another institution is advised to contact the specific department that handles these types of requests.

TPTI will evaluate courses taken from another school or prior vendor certifications. An evaluation must be conducted prior to enrollment.

There’s no fee for requesting a transfer of credit.

The following criteria apply for a transfer of credit into TPTI:

1. Students must currently hold a valid industry certification or be able to pass the related practice exam to be administered at TPTI’s authorized testing center.
2. Students must produce documentation including but not limited to official transcripts, catalog, syllabi, or course outlines for review.
3. Tuition and fees will be adjusted for courses that are accepted.
4. If the request is declined, students may request an appeal in writing within 5 days of receiving notice from TPTI.

## Policies

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### GRADES

Upon successful completion (attending at least 80%) of an instructor-led course, you will receive a Certificate of Completion and a grade from the instructor. Grades for each course within a program will be averaged to determine your overall grade point average. A grade point average of 2.0 is required for graduation and/or program/course certification.

#### Grading System

A	4.0	Excellent	90% to 100%
B	3.0	Good	80% to 89%
C	2.0	Satisfactory	79% to 70%
D	1.0	Unsatisfactory	69% to 60%
F	0.0	Failing	0% to 69%
I		Incomplete	

If you fail to complete at least 60% of a course, you will receive an “I” (Incomplete) for that course and will be placed on academic probation for the next course of instruction. You will have one opportunity to repeat and complete the course. If you fail to successfully complete the course the second time you will be removed from the program, and no graduation or certification certificate will be issued.

### SATISFACTORY PROGRESS

TPTI will evaluate progress at the end of each grading period. A grading period is six weeks in length. If the student’s cumulative GPA is unsatisfactory at the end of a progress evaluation period, the student will be placed on academic probation for the next progress evaluation period (six weeks). At the end of the next progress evaluation period, TPTI will:

- Initiate a second probationary period if the student has made satisfactory progress for the evaluation period but the cumulative GPA remains unsatisfactory.
- Remove the student from academic probation if the cumulative GPA is satisfactory.
- Terminate the enrollment if the student continues to make unsatisfactory progress.

### PROGRAMS PROGRESS

(A.) For programs with a course time of 40 hours or less, a final exam will be given at the end of the program to determine whether the student has sufficient knowledge to warrant a certificate of completion, in lieu of a progress evaluation.

(B.) For programs with course times of 41 to 200 hours, the student’s grades will be recorded at the midpoint and end of each progress evaluation period. A student NOT making satisfactory progress at the midpoint shall be placed on academic probation for the remainder of the progress evaluation period. If the student does NOT achieve satisfactory progress by the end of the probationary period, the student’s enrollment shall be terminated. (*Texas Education Code, Sec. 132.055 Title 40 Texas Administrative Code, Sec. 807.175 (a) (11)*)

### PROGRESS REPORTS

The student’s final grade for each course or module is determined by the average of the tests, homework, class participation, special assignments and any other criteria indicated in the grading section of the syllabus for the course or module. Final grades are reported at the completion of each grading term and are provided to each student. If mailed, they are sent to the student’s home address.

### INCOMPLETE POLICY

Under *TEC, Sec. 132.061 (f)*; a student who is obligated for the full tuition may request a grade of “incomplete” if the student withdraws for an appropriate reason unrelated to the student’s academic status. The policy must allow a student receiving a grade of incomplete to reenroll in the program during the 12-month period following the date the student withdraws and complete those incomplete subjects without payment of additional tuition. (*Texas Education Code, Sec. 132.055 Title 40, TX Admin. Code, Sec. 807.221 (d)*)

### ACADEMIC PROBATION

When a student’s overall grade point average falls below 2.0, the student is automatically placed on academic probation for the next course of instruction. If the student is able to achieve a satisfactory *cumulative* GPA by the end of the second probationary period, the student will be removed from academic probation. If the student fails to achieve a satisfactory *cumulative* GPA by the end of the second probationary period, the student must be terminated for one grading period (six weeks). If the student re-

enrolls after termination, they will be on academic probation for the first grading period after re-enrollment. If the cumulative GPA is unsatisfactory after this grading period, the student MUST be terminated again.

### MAKE-UP WORK

No more than 5% of the total clock hours for a program may be made up. The student must show good cause for needing to make up the work missed. The school fully understands that circumstances arise that might cause the student to fail to complete assignments (i.e., illness, death in the family, family crisis). Determination will be made on a case-by-case basis.

The Texas Administrative Code, Title 40, Part 20, Chapter 807, 807.244 states:

Make-up work shall:

1. be supervised by an instructor approved for the subject being made up.
2. require the student to demonstrate substantially the same level of knowledge or competence expected of a student who attended the scheduled class session.
3. be completed within two weeks of the end of the grading period during which the absence occurred.
4. 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 be signed and dated by the student to acknowledge the make-up session.

### Graduation and Certification

Students will receive a Certificate of Completion AFTER the successful completion of each course. Students will also receive a certificate after passing vendor certification exams. Our CompTIA, Cisco and Microsoft are exam prep eligible. TPTI DOES NOT grant certification. Certification is only earned by passing vendor exams. Students who successfully complete all courses and pass all related exams in their program will receive a Certificate of Program Completion from TPTI.

### ATTENDANCE

The Student Learning Portal at TPTI is the official record of attendance. Students are expected to actively participate in all courses. Each course shall have regularly scheduled academic-related activities that occur throughout each evaluation period of the term. Academic-related activities provide course instructors with specific measures that aid in the assessment of the student's performance and the eventual awarding of a final course grade. Examples of academically related activities are completion of an exam or instructor-graded activity. The attendance policies set standards that are critical to the student's academic success. An instructor may consider a student present who does not attend the entire class session if (a) the criteria used to make the determination are stated in the course syllabus and (b) the amount of time missed does NOT exceed 25% of the class session. Distant Learning progress and attendance are monitored and tracked through our online Learning Portal (LMS – LEARNING MANAGEMENT SYSTEM). Each student is provided a unique Username and Password. With these credentials, we can track when students are logged in, how long they've stayed active, the assignments, labs and modules completed. Also, Students can interact with Teachers in real time while also having the ability watch pre-recorded lectures and demonstrations.

### *ESTABLISHING ATTENDANCE / VERIFYING ENROLLMENT*

New students registered for a class shall attend by the second scheduled class session or be withdrawn.

*MONITORING STUDENT ATTENDANCE*

Instructors shall monitor students based on both consecutive absences and absences as a percentage of the total program hours.

*CONSECUTIVE ABSENCE RULE*

When a student is absent for (5) consecutive calendar days excluding holidays and scheduled breaks, the instructors shall notify the Director of Education. The consecutive absence rule is applied to days missed in the total program.

*PERCENTAGE ABSENCE RULE*

Percentage	Action Taken
15% of the total classroom hours missed	Attendance warning letter sent
25% of the total classroom hours missed	Withdrawn from the program/class

Any student who is withdrawn due to unsatisfactory attendance and/or whose enrollments are terminated for violation of the attendance policy may not reenter before the start of the next grading period.

*LEAVE OF ABSENCE POLICY*

TPTI permits students to request a leave of absence (LOA) as long as there are documented, legitimate extenuating circumstances that require the students to interrupt their education. In order for a student to be granted an LOA, the student must submit a completed, signed and dated Leave of Absence Request by the 10th calendar day of the leave to the Director of Education.

*RE-ADMISSION FOLLOWING A LEAVE OF ABSENCE*

Upon return from leave, the student will be required to repeat the Program, if it has been interrupted, and receive final grades. The student will not be charged any fee for the repeat of any program from which the student took leave or for re-entry from the leave of absence. The date the student returns to class is normally scheduled for the beginning of a program. When a student is enrolled in a program, the student may return to any appropriate program, not only the program from which the student withdrew.

*EXTENSION OF LOA*

A student on an approved LOA may submit a request to extend the LOA without returning to class. Such a request may be approved by the Director of Education provided:

- (a) The student submits a completed LOA Extension Request before the end date of the current leave.
- (b) There is a reasonable expectation the student WILL return.
- (c) Appropriate courses required for completion of the program will be available to the student on the Date of return.

If the extension request is approved, the end date of the student’s current leave will be changed in the official student information system to reflect the new end date. If the request is denied, the student will be withdrawn, and the withdrawal date will be the student’s last date of attendance (LDA).

*FAILURE TO RETURN FROM A LEAVE OF ABSENCE*

A student who fails to return from a LOA on or before the date indicated in the written request will be terminated from the program, and the school will invoke the refund policy. The student’s last date of

attendance prior to the approved LOA will be used in order to determine the amount of funds the school earned and make any refunds that may be required under state policy.

### *RULES OF NON-INTERFERENCE*

Students' time should be respected and honored. Any action which interferes with the productivity of another student is prohibited. Tampering with the Center equipment or that of other students is strictly prohibited. Practical "jokes" are not permitted, as they interfere with the productivity of the learning environment.

### *SAFETY*

Everyone's safety is of the utmost importance to us. Students must think about their actions and do nothing to create a situation or circumstance that may create peril hazard or endangerment to persons, property, systems, or processes, nor threaten to do so. Students should act to protect themselves and others from harm and to protect property from damage or theft. Do your part to create and maintain a safe and secure environment.

### *VIOLATION OF CONDUCT POLICIES*

If a student violates the conduct policy (toward another student), the victim is encouraged to bring this to the attention of the Director of Education who will set up a meeting between the student and the principal to determine the action which must be taken.

If a student otherwise violates the conduct policy, she appropriate staff member will notify the Director of Education of the violation and the Director will then meet with the student to discuss whether the violation warrants immediate termination or whether corrective action can be taken to avoid future conduct violations by the student.

The Director will attempt to meet with the students by requesting a meeting by phone and by email. If the student fails to respond for three business days, the enrollment will be terminated.

The Director will contact the student in writing within five calendar days of the meeting to notify the student of the decision which has been made.

Any violation of the Rules of Conduct or requirements outlined in this catalog may result in disciplinary action or actions, including but not limited to prosecution under the law, suspension, or expulsion (dismissal) from the Computer Learning Center, oral or written reprimand and/or correction, a meeting with the instructor or Director of Education, or a referral conversation with an official of the State of Texas Department of Education. Any student aiding or abetting violation of any policy shall also be deemed to have violated policy.

### *RE-ADMITTANCE INTO A PROGRAM*

If a student is dismissed from a program for any reason, the following procedure should be followed in order to re-enter the program:

The student submits a letter to his/her Career Consultant requesting re-admittance to the program.

After reviewing the letter, the Career Consultant meets with the student to discuss the reason(s) he/she removed from or stopped attending the program and how similar issues can be prevented should re-admission be granted. A student can NOT be readmitted until a minimum of one grading period has passed.

The Career Consultant will discuss the student's request with the VP of Operations and PRINCIPAL for a final decision to be made.

### *GRIEVANCE AND APPEALS PROCEDURE*

If a student has issues that need to be addressed, he/she must follow the procedure described below. The student must submit all relevant information concerning said issues in a timely manner. This information should be specific and honest.

The procedure is as follows:

The student should contact his/her instructor or representative and arrange a meeting to discuss the issues.

If the student's issues are not resolved after speaking with the instructor / representative, the student may request a meeting with the instructor's / representative's immediate supervisor to try and resolve the issue / dispute.

If the meeting with the supervisor does not result in an agreement, the student has the right to speak with the Director of Education to resolve the issues.

If the student's concerns are not met, the student will be referred to the PRINCIPAL.

If after meeting with the PRINCIPAL, the student is still not satisfied with the outcome of all these channels, he / she will be given TWC form PS-401A. (The Texas Workforce Commission Student Complaint Form). The student may complete this and mail it to: Texas Workforce Commission Career Schools and Colleges 101 East 15<sup>th</sup> Street, Room 226T Austin, TX 78778-001 Phone: 512-936-3100

# Programs

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## IT Help Desk / End User Support Specialist Program

### Admission Requirements:

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)
- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

### Course Description:

In this course, students will acquire the essential skills to perform the job as a Computer User Support Specialist or IT Help Desk / End User Support Specialist. This course covers information students will need to install, upgrade, repair, configure, troubleshoot, optimize, and perform preventative maintenance of basic personal computer hardware, devices, networks, and operating systems.

This course aligns with the CompTIA ITF+ and A+ Industry certification exams Core 1 (Exam: 220-1101) and Core 2 (Exam: 220-1102). CompTIA's vendor-neutral certification program is one of the best recognized in the IT industry. According to CompTIA, more than one million IT professionals hold a CompTIA Certification. CompTIA ITF+ and A+ certifications are required for Dell, Intel and HP service technicians, and many others, as well as recognized by the U.S. Department of Defense. This certification validates that a candidate has solid technical skills for an entry level IT position.

CompTIA ITF+ and A+ are accredited by ANSI to show compliance with the ISO 17024 Standard and, as such, undergoes regular reviews and updates to the exam objectives.

### Overview of Course Topics:

- Mobile Devices
- Networking
- Hardware
- Virtualization and Cloud Computing
- Hardware and Network Troubleshooting
- Operating Systems
- Security
- Software Troubleshooting
- Operational Procedures

\* Non-Degree Program

Subject Outline

Course ID	Subject Title	Lec /Lab/Ext/Total
555-200.1	Hardware Fundamentals	8 / 08 / 00 / 16
555-200.2	Operating System Fundamentals	4 / 08 / 00 / 12
555-200.3	Operational Procedures	4 / 04 / 00 / 8
555-200.4	Peripheral Components	4 / 04 / 00 / 8
555-200.5	Managing System Components	6 / 06 / 00 / 12
555-200.6	Installing and Configuring Operating Systems	8 / 08 / 00 / 16
555-200.7	Customized Client Environments	4 / 04 / 00 / 8
555-200.8	Networking Technologies	8 / 04 / 00 / 12
555-200.9	Installing, Configuring, & Maintaining Networks	4 / 04 / 00 / 8
555-200.10	Supporting Laptops	4 / 04 / 00 / 8
555-200.11	Mobile Computing	4 / 04 / 00 / 8
555-200.12	Supporting Printers	4 / 04 / 00 / 8
555-200.13	Security	6 / 06 / 00 / 12
555-200.14	Troubleshooting Hardware Components	6 / 06 / 00 / 12
555-200.15	Troubleshooting System-Wide Issues	6 / 06 / 00 / 12
	<b>Total Hours</b>	<b>80 / 80 / 00 / 160</b>

\*The approximate time required to complete this course is twelve weeks.

Subject Description or Synopsis

555-200.1

Hardware Fundamentals: Learn Computer System Components, Storage Devices and Device Connections as well as Interfaces.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

555-200.2

Operating System Fundamentals: Learn Personal Computer Operating Systems, Windows Control Panel Utilities, Command Line Tools, Windows Security Settings, and Windows Operating System Tools.

Prerequisites: *Students must meet the following*

- Completion of 555-200.1 Hardware Fundamentals

555-200.3

Operational Procedures: Learn basic maintenance tools and techniques, Electrical Safety, Environmental Safety and Materials Handling, Professionalism as well as Communication.

Prerequisites: *Students must meet the following*



- Completion of 555-200.2 Operating System Fundamentals

#### 555-200.4

Peripheral Components: In this subject student Install and Configure Display Devices, Install and Configure Input Devices, Install and Configure Expansion Cards, as well as Install and Configure Multimedia Devices.

Prerequisites: *Students must meet the following*

- Completion of 555-200.3 Operational Procedures

#### 555-200.5

Managing System Components: In this subject student cover Motherboards, CPUs and Cooling Systems, Power Supplies, RAM Types and Features. Students also Install and Configure Storage Devices, as well as Configure the System BIOS.

Prerequisites: *Students must meet the following*

- Completion of 555-200.4 Peripheral Components

#### 555-200.6

Installing and Configuring Operating Systems: In this subject, students will Implement Virtualization, Install Microsoft Windows, perform Windows Upgrades and Windows Preventive Maintenance.

Prerequisites: *Students must meet the following*

- Completion of 555-200.5 Managing System Components

#### 555-200.7

Customized Client Environments: Learn Standard Clients, as well as Custom Client Environments.

Prerequisites: *Students must meet the following*

- Completion of 555-200.6 Installing and Configuring Operating Systems

#### 555-200.8

Networking Technologies: Learn Physical Network Connections, TCP/IP, Network Connectivity, Ports and Protocols, Set Up and Configure Windows Networking as well as Networking Tools.

Prerequisites: *Students must meet the following*

- Completion of 555-200.7 Customized Client Environments

555-200.9

Installing, Configuring, and Maintaining SOHO Networks: This subject covers the Installation and Configuration of SOHO Networks as well as Network Security.

Prerequisites: *Students must meet the following*

- Completion of 555-200.8 Networking Technologies

555-200.10

Supporting Laptops: Learn Laptop Hardware and Components. Students Install and Configure Laptop Hardware Components

Prerequisites: *Students must meet the following*

- Completion of 555-200.9 Networking Technologies

555-200.11

Mobile Computing: Learn Mobile Device Technologies as well as how to Configure Mobile Devices.

Prerequisites: *Students must meet the following*

- Completion of 555-200.10 Supporting Laptops

555-200.12

Supporting Printers: Learn Printer Technologies. Students install, configure, and maintain network Printers.

Prerequisites: *Students must meet the following*

- Completion of 555-200.11 Mobile Computing

555-200.13

Security: Learn Security Fundamentals, Security Threats and Vulnerabilities, Security Protection Measures and Workstation Security.

Prerequisites: *Students must meet the following*

- Completion of 555-200.12 Supporting Printers

555-200.14

Troubleshooting Hardware Components: Learn Troubleshooting Theory, Troubleshoot Video and Display, Devices, Troubleshoot Hard Drives and RAID Arrays, Troubleshoot System Components, Troubleshoot Laptops as well as Troubleshoot Printers.

Prerequisites: *Students must meet the following*

- Completion of 555-200.13 Security

555-200.15

Troubleshooting System-Wide Issues: Learn how to Troubleshoot Operating Systems, Troubleshoot Wired Wireless Networks and Troubleshoot Common Security Issues.

Prerequisites: *Students must meet the following*

- Completion of 555-200.14 Troubleshooting Hardware Components

**Tuition and Fees:**

Tuition	Fees
Program Cost	\$5,200.00
Books & Supplies	\$200.00
Total Cost	\$5,400.00

## Network Systems Administrator Associate Program

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)
- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

**Course Description:**

The Network Systems Administrator Associate Program describes the major networking technologies, systems, skills, and tools in use in modern corporate networks. Students will learn to install, configure, upgrade, maintain, and troubleshoot servers and server hardware while learning essential networking fundamentals and other information and skills for those pursuing a career path in IT infrastructure, Cloud and Network Systems Administration. This program aligns with the CompTIA Network+ Certification.

\* Non-Degree Program

Subject Outline

Course ID	Subject Title	Lec/Lab/Ext/Total
555-300.1	Introduction to Networks	08 / 08 / 00 / 16
555-300.2	The Open Systems Interconnection Specifications	4.5 / 4.5 / 00 / 9
555-300.3	Networking Connectors and Wiring	4.5 / 4.5 / 00 / 9
555-300.4	The Current Ethernet Specifications	4.5 / 4.5 / 00 / 9
555-300.5	Networking Devices	4.5 / 4.5 / 00 / 9
555-300.6	Introduction to the Internet Protocol	4.5 / 4.5 / 00 / 9
555-300.7	IP Addressing	4.5 / 4.5 / 00 / 9
555-300.8	IP Subnetting, Troubleshooting IP, and Intro to NAT	4.5 / 4.5 / 00 / 9
555-300.9	Introduction to IP Routing	4.5 / 4.5 / 00 / 9
555-300.10	Routing Protocols	4.5 / 4.5 / 00 / 9
555-300.11	Switching and Virtual LANs	4.5 / 4.5 / 00 / 9
555-300.12	Wireless Networking	4.5 / 4.5 / 00 / 9
555-300.13	Using Statistics and Sensors to Ensure Network Availability	4.5 / 4.5 / 00 / 9
555-300.14	Organizational Documents and Policies	4.5 / 4.5 / 00 / 9
555-300.15	High Availability and Disaster Recovery	4.5 / 4.5 / 00 / 9
550-300.16	Common Security Concepts	4.5 / 4.5 / 00 / 9
550-300.17	Common Types of Attacks	4.5 / 4.5 / 00 / 9
550-300.18	Network Hardening Techniques	4.5 / 4.5 / 00 / 9
550-300.19	Remote Access Security	4.5 / 4.5 / 00 / 9
550-300.20	Physical Security	4.5 / 4.5 / 00 / 9
550-300.21	Data Center Architecture and Cloud Concepts	4.5 / 4.5 / 00 / 9
550-300.22	Ensuring Network Availability	4.5 / 4.5 / 00 / 9
550-300.23	Cable Connectivity Issues and Tools	4.5 / 4.5 / 00 / 9
550-300.24	Network Troubleshooting Methodology	4.5 / 4.5 / 00 / 9
550-300.25	Network Software Tools and Commands	4.5 / 4.5 / 00 / 9
	<b>Total Hours</b>	<b>116 / 116 / 00 / 232</b>

\*The approximate time required to complete this course is twelve weeks.

Subject Description or Synopsis

555-300.1

Introduction to Networks: Provides a foundational understanding of computer networks, covering basic concepts, terminology, and the essentials of how networks function.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

## 555-300.2

The Open Systems Interconnection Specifications: In this course, students delve into the OSI model, which serves as a framework for understanding and describing network protocols and communication processes.

Prerequisites: *Students must meet the following*

- Completion of 555-300.1 - Introduction to Networks

## 555-300.3

Networking Connectors and Wiring: Networking Connectors and Wiring focuses on the physical aspects of network connections, teaching students about various connectors and cabling used in network infrastructure.

Prerequisites: *Students must meet the following*

- Completion of 555-300.2 - The Open Systems Interconnection Specifications

## 555-300.4

The Current Ethernet Specifications: This course explores the Ethernet standards and protocols that underpin modern local area networks (LANs), including Ethernet frame formats and transmission technologies.

Prerequisites: *Students must meet the following*

- Completion of 555-300.3 - Networking Connectors and Wiring

## 555-300.5

Networking Devices: Students learn about various networking devices, such as routers, switches, and hubs, and how they contribute to building and managing networks.

Prerequisites: *Students must meet the following*

- Completion of 555-300.4 - The Current Ethernet Specifications

## 555-300.6

Introduction to the Internet Protocol: Introduction to the Internet Protocol covers the fundamentals of IP addressing, routing, and the role of IP in data transmission across the internet.

Prerequisites: *Students must meet the following*

- Completion of 555-300.5 - Networking Devices

## 555-300.7

IP Addressing: This course delves deeper into IP addressing, subnetting, and the allocation of IP addresses to devices within a network.

Prerequisites: *Students must meet the following*

- Completion of 555-300.6 - Introduction to the Internet Protocol

## 555-300.8

IP Subnetting, Troubleshooting IP, and Intro to NAT: Students gain expertise in subnetting IP networks, troubleshooting IP-related issues, and are introduced to Network Address Translation (NAT).

Prerequisites: *Students must meet the following*

- Completion of 555-300.7 - IP Addressing

## 555-300.9

Introduction to IP Routing: Introduction to IP Routing explores the basics of routing, including routing tables, protocols, and how routers make decisions about forwarding data.

Prerequisites: *Students must meet the following*

- Completion of 555-300.8 - IP Subnetting, Troubleshooting IP, and Intro to NAT

## 555-300.10

Routing Protocols: This course covers routing protocols in detail, including dynamic routing protocols like OSPF and BGP, and their role in directing network traffic.

Prerequisites: *Students must meet the following*

- Completion of 555-300.9 - Introduction to IP Routing

## 555-300.11

Switching and Virtual LANs: Students learn about LAN switching, VLANs, and how switches operate to segment and manage network traffic effectively.

Prerequisites: *Students must meet the following*

- Completion of 555-300.10 - Routing Protocols

555-300.12

Wireless Networking: This course focuses on wireless technologies, including Wi-Fi, Bluetooth, and mobile networks, and how to configure and secure wireless networks.

Prerequisites: *Students must meet the following*

- Completion of 555-300.11 - Switching and Virtual LANs

555-300.13

Using Statistics and Sensors to Ensure Network Availability: Students discover methods for monitoring network performance, using statistics and sensors to ensure network availability and reliability.

Prerequisites: *Students must meet the following*

- Completion of 555-300.12 - Wireless Networking

555-300.14

Organizational Documents and Policies: This course covers the importance of network documentation and policies in maintaining a secure and well-managed network environment.

Prerequisites: *Students must meet the following*

- Completion of 555-300.13 - Using Statistics and Sensors to Ensure Network Availability

555-300.15

High Availability and Disaster Recovery: Students learn about strategies and technologies for achieving high network availability and planning for disaster recovery scenarios.

Prerequisites: *Students must meet the following*

- Completion of 555-300.14 - Organizational Documents and Policies

550-300.16

Common Security Concepts: Common Security Concepts introduce essential security principles, including confidentiality, integrity, and availability, as well as security controls and mechanisms.

Prerequisites: *Students must meet the following*

- Completion of 555-300.15 - High Availability and Disaster Recovery

550-300.17

Common Types of Attacks: This course explores common types of network attacks, including malware, DoS attacks, and social engineering techniques, to better understand security threats.

Prerequisites: *Students must meet the following*

- Completion of 550-300.16 - Common Security Concepts

## 550-300.18

Network Hardening Techniques: Students learn about methods and practices to harden network security, making it more resistant to unauthorized access and attacks.

Prerequisites: *Students must meet the following*

- Completion of 550-300.17 - Common Types of Attacks

## 550-300.19

Remote Access Security: Remote Access Security covers secure methods for accessing networks remotely, including VPNs and secure authentication protocols.

Prerequisites: *Students must meet the following*

- Completion of 550-300.18 - Network Hardening Techniques

## 550-300.20

Physical Security: This course emphasizes physical security measures to protect network infrastructure, including data centers, server rooms, and networking equipment.

Prerequisites: *Students must meet the following*

- Completion of 550-300.19 - Remote Access Security

## 550-300.21

Data Center Architecture and Cloud Concepts: Students gain an understanding of data center design, cloud computing concepts, and their relevance to modern network infrastructure.

Prerequisites: *Students must meet the following*

- Completion of 550-300.20 - Physical Security

## 550-300.22

Ensuring Network Availability: This course explores strategies and technologies for ensuring network availability, including redundancy and fault tolerance.

Prerequisites: *Students must meet the following*

- Completion of 550-300.21 - Data Center Architecture and Cloud Concepts



### 550-300.23

Cable Connectivity Issues and Tools: Students learn to identify and troubleshoot cable-related network issues, along with the use of diagnostic tools.

Prerequisites: *Students must meet the following*

- Completion of 550-300.22 - Ensuring Network Availability

### 550-300.24

Network Troubleshooting Methodology: Network Troubleshooting Methodology provides a structured approach to diagnosing and resolving network problems efficiently.

Prerequisites: *Students must meet the following*

- Completion of 550-300.23 - Cable Connectivity Issues and Tools

### 550-300.25

Network Software Tools and Commands: This course covers essential software tools and command-line utilities used in network troubleshooting and management.

Prerequisites: *Students must meet the following*

- Completion of 550-300.24 - Network Troubleshooting Methodology

#### **Tuition and Fees:**

Tuition	Fees
Program Cost	\$7,540.00
Books & Supplies	\$200.00
Total Cost	\$7,740.00

## IT Security Administrator Associate Program

Admission Requirements:

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)

- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

Course Description:

Students will learn how to install, operate, configure, and verify a basic IPv4 and IPv6 network, including configuring a LAN switch, configuring an IP router, connecting to a WAN, and identifying basic security threats. Students will also gain an in-depth knowledge of systems security, access control, network infrastructure, assessments and audits, cryptography, and organizational security across all vendor products. These skills have become increasingly important, as additional safeguards such as intrusion detection systems, physical access control and multi-factor authentication become standard methods of protection.

Students are given real world scenarios to reinforce the material covered and will learn how to apply the concepts to their daily operations. IT Security Administrator Program teaches critical knowledge of communication security, infrastructure security, cryptography, operational security, and general security concepts. Because human error is the number one cause for a network security breach, CompTIA Security+ Courses are recognized by the technology community as a valuable credential that proves competency with information security.

\* Non-Degree Program

Subject Outline:

Course ID	Subject Title	Lec/Lab/Ext/Total
550-601.1	Security Fundamentals	10 / 10 / 00 / 20
550-601.2	Risk Management	10 / 10 / 00 / 20
550-601.3	Cryptography	8 / 8 / 00 / 16
550-601.4	Network Connectivity	8 / 8 / 00 / 16
550-601.5	Network Security Technologies	8 / 8 / 00 / 16
550-601.6	Secure Network Configuration	8 / 8 / 00 / 16
550-601.7	Authentication	8 / 8 / 00 / 16
550-601.8	Access Control	8 / 8 / 00 / 16
550-601.9	Securing Host and Data	8 / 8 / 00 / 16
550-601.10	Securing Specialized Systems	8 / 8 / 00 / 16
550-601.11	Application Security	10 / 10 / 00 / 20
550-601.12	Cloud Security	10 / 10 / 00 / 20
550-601.13	Organizational Security	8 / 8 / 00 / 16
550-601.14	Disaster Planning and Recovery	8 / 8 / 00 / 16
	<b>Total Hours</b>	<b>120 / 120 / 00 / 240</b>

\*The approximate time required to complete this course is twelve weeks.

Subject Description or Synopsis

555-601.1

Security Fundamentals: Learn about the basic security concepts, enterprise security planning and how to build a security program.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

555-601.2

Risk Management: Learn about threat sources and threat intelligence. How to calculate and manage risk and perform security assessments.

Prerequisites: *Students must meet the following*

- Completion of 555-601.1 Security Fundamentals

555-601.3

Cryptography: Learn about the primary types of cryptography and algorithms in common use as well as public key infrastructure (PKI) technologies.

Prerequisites: *Students must meet the following*

- Completion of 555-601.2 Risk Management

555-601.4

Network Connectivity: Learn about network attacks and how to control packet flow with ACLs and firewalls.

Prerequisites: *Students must meet the following*

- Completion of 555-601.3 Cryptography

555-601.5

Network Security Technologies: Learn network security appliances, monitoring, and analysis.

Prerequisites: *Students must meet the following*

- Completion of 555-601.4 Network Connectivity

555-601.6

Secure network configuration: Learn about Secure data via transport encryption and establish and maintain a secure network.

Prerequisites: *Students must meet the following*

- Completion of 555-601.5 Network Security Technologies

555-601.7

Authentication: Learn Authentication factors, principles, and systems.

Prerequisites: *Students must meet the following*

- Completion of 555-601.6 Secure network configuration

555-601.8

Access control: Learn Control principles and account management.

Prerequisites: *Students must meet the following*

- Completion of 555-601.7 Authentication

555-601.9

Securing hosts and data: Learn about malware, securing data, host, and applications.

Prerequisites: *Students must meet the following*

- Completion of 555-601.8 Access control

555-601.10

Securing specialized systems: Learn how to secure mobile devices, secure embedded and specialized systems.

Prerequisites: *Students must meet the following*

- Completion of 555-601.9 Securing hosts and data

555-601.11

Application Security: Secure data via transport encryption and establish and maintain a secure network.

Prerequisites: *Students must meet the following*

- Completion of 555-601.10 Securing specialized systems

555-601.12

Cloud Security: You will learn how to secure and harden virtual networks and cloud services.

Prerequisites: *Students must meet the following*

- Completion of 555-601.11 Application Security

555-601.13

Organizational Security: Lear about social engineering, typical policies, and business agreements. User Training practices and physically securing assets and managing safety controls.

Prerequisites: *Students must meet the following*

- Completion of 555-601.12 Cloud Security

555-601.14

Disaster planning and recovery: Learn about business continuity planning, fault tolerance and recovery and security incidents.

Prerequisites: *Students must meet the following*

- Completion of 555-601.13 Disaster planning and recovery

**Tuition and Fees:**

Tuition	Fees
Program Cost	\$7,000.00
Books & Supplies	\$200.00
Total Cost	\$7,200.00

## Cyber Security Professional Associate Program

Admission Requirements:

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)
- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

Course Description:

The Cyber Security Professional Associate Program is designed to prepare students for the constantly evolving realm of cybersecurity operations. Drawing from Cisco's CyberOps Associate CBROPS (200-201) curriculum, this program offers a comprehensive introduction to the foundational principles and practices central to cybersecurity. Upon completion, students will be well-equipped to earn the Cisco CyberOps Associate certification and pursue a career in cybersecurity operations centers (SOCs).

Course Objectives:

1. Provide a deep understanding of the role and responsibilities of an associate-level security analyst in security operation centers.
2. Offer insights into the workings of cybersecurity operations and their importance in the modern digital landscape.
3. Familiarize students with core knowledge and skills required to respond to cybersecurity threats and incidents efficiently.

\* Non-Degree Program

Subject Outline:

Course ID	Subject Title	Lec/Lab/Ext/Total
555-CYBER001	Cybersecurity Fundamentals	20 / 20 / 00 / 40
555-CYBER002	Introduction to Cloud Computing and Cloud Security	20 / 20 / 00 / 40
555-CYBER003	Access Control Models	20 / 20 / 00 / 40
555-CYBER004	Types of Attacks and Vulnerabilities	20 / 20 / 00 / 40
555-CYBER005	Fundamentals of Cryptography and Public Key Infrastructure (PKI)	20 / 20 / 00 / 40
555-CYBER006	Introduction to Virtual Private Networks (VPNs)	20 / 20 / 00 / 40
555-CYBER007	Introduction to Security Operations Management	20 / 20 / 00 / 40
555-CYBER008	Fundamentals of Intrusion Analysis	20 / 20 / 00 / 40
555-CYBER009	Introduction to Digital Forensics	20 / 20 / 00 / 40
555-CYBER010	Network Infrastructure Device Telemetry and Analysis	20 / 20 / 00 / 40
555-CYBER011	Endpoint Telemetry and Analysis	20 / 20 / 00 / 40
555-CYBER012	Challenges in the Security Operations Center (SOC)	20 / 20 / 00 / 40
555-CYBER013	The Art of Data and Event Analysis	20 / 20 / 00 / 40
555-CYBER014	Classifying Intrusion Events into Categories	20 / 20 / 00 / 40
555-CYBER015	Introduction to Threat Hunting	20 / 20 / 00 / 40
	<b>Total Hours</b>	<b>300 / 300 / 00 / 600</b>

\*The approximate time required to complete this course is thirty weeks.

Subject Description or Synopsis

555-CYBER001

Cybersecurity Fundamentals: Understand the foundational principles of cybersecurity. Explore the realm of digital threats, risk management, security architectures, and the importance of a robust cybersecurity posture in today's digital age.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

555-CYBER002

Introduction to Cloud Computing and Cloud Security: Delve into the world of cloud computing, its service models, and deployment methods. Understand the unique security challenges presented by the cloud and explore strategies and tools to mitigate those challenges.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER001 Cybersecurity Fundamentals

555-CYBER003

Access Control Models: Grasp the various access control models used in cybersecurity. Learn about discretionary, mandatory, role-based, and attribute-based access controls and their applications in different scenarios.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER002 Introduction to Cloud Computing and Cloud Security

555-CYBER004

Types of Attacks and Vulnerabilities: Uncover the vast landscape of cyber threats. Explore common attack vectors, vulnerabilities, and the methodologies attackers use to compromise systems.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER003 Access Control Models

555-CYBER005

Fundamentals of Cryptography and Public Key Infrastructure (PKI): Dive into the world of cryptography. Understand symmetric and asymmetric encryption, hashing, digital signatures, and the role of PKI in ensuring data confidentiality, integrity, and authentication.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER004 Types of Attacks and Vulnerabilities

555-CYBER006

Introduction to Virtual Private Networks (VPNs): Discover the importance of VPNs in ensuring secure communication over potentially insecure networks. Learn about different VPN types, protocols, and their implementation.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER005 Fundamentals of Cryptography and Public Key Infrastructure (PKI)

## 555-CYBER007

Introduction to Security Operations Management: Familiarize yourself with the roles, responsibilities, and best practices involved in managing and operating a secure and efficient Security Operations Center (SOC).

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER006 Introduction to Virtual Private Networks (VPNs)

## 555-CYBER008

Fundamentals of Intrusion Analysis: Master the art of identifying and analyzing malicious activities in network traffic and system logs. Understand the different types of intrusions and methodologies for their detection.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER007 Introduction to Security Operations Management

## 555-CYBER009

Introduction to Digital Forensics: Step into the realm of digital forensics. Understand the processes, tools, and techniques used to investigate and analyze digital evidence in the aftermath of a cybersecurity incident.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER008 Fundamentals of Intrusion Analysis

## 555-CYBER010

Network Infrastructure Device Telemetry and Analysis: Learn about the telemetry data produced by network devices. Develop skills to analyze this data for signs of malicious activities and potential security breaches.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER009 Introduction to Digital Forensics

## 555-CYBER011

Endpoint Telemetry and Analysis: Understand the importance of endpoint telemetry in detecting and responding to threats. Explore tools and techniques to analyze data from endpoints effectively.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER010 Network Infrastructure Device Telemetry and Analysis



## 555-CYBER012

Challenges in the Security Operations Center (SOC): Discuss the real-world challenges faced by SOCs. From resource constraints to evolving threats, understand the pressures on modern cybersecurity operations.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER011 Endpoint Telemetry and Analysis

## 555-CYBER013

The Art of Data and Event Analysis: Delve deep into the analysis of security data and events. Learn techniques and best practices to interpret, correlate, and derive meaningful insights from vast amounts of data.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER012 Challenges in the Security Operations Center (SOC)

## 555-CYBER014

Classifying Intrusion Events into Categories: Understand the taxonomy of intrusion events. Learn how to categorize, prioritize, and respond to intrusions based on their type and severity.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER013 The Art of Data and Event Analysis

## 555-CYBER015

Introduction to Threat Hunting: Embark on the proactive side of cybersecurity. Understand what threat hunting is, the tools and techniques used, and how to actively seek out threats before they manifest into significant incidents.

Prerequisites: *Students must meet the following*

- Completion of 555-CYBER014 Classifying Intrusion Events into Categories

Class Start Dates:

Classes for day students begin January 8, 2014, with successive classes beginning approximately every 36 weeks.

**Tuition and Fees:**

Tuition	Fees
Program Cost	\$13,980.00
Books & Supplies	\$1,120.00
Total Cost	\$15,100.00

## Database Administrator Associate Program

**Admission Requirements:**

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)
- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

**Course Description:**

This course covers database design and the use of database management systems for applications. It includes coverage of the relational model, and SQL. It also covers XML data including DTDs and XML Schema for validation, and the query and transformation languages XPath, XQuery, and XSLT. The course includes database design in UML, and relational design principles based on dependencies and normal forms. Many additional key database topics from the design and application-building perspective are also covered: indexes, views, transactions, authorization, integrity constraints, triggers, on-line analytical processing (OLAP), JSON, and emerging NoSQL systems.

This comprehensive course offers an in-depth exploration of fundamental database concepts and cloud-based data services, bridging the gap between the Microsoft Technology Associate (MTA) Database Fundamentals and Microsoft Azure Data Fundamentals certifications. Designed for aspiring database administrators, data analysts, and cloud enthusiasts, this course provides a solid foundation in managing data both on-premises and in the cloud.

This course prepares students for the Microsoft Azure Data Fundamentals Certification Exam DP-900.

\* Non-Degree Program

**Subject Outline:**

Course ID	Subject Title	Lec/Lab/Ext/Total
581- DA40349	Understanding Core Database Concepts	8 / 08 / 00 / 16

581- DA40350	Create Database Concepts	8 / 08 / 00 / 16
581- DA40351	Manipulate Data	8 / 08 / 00 / 16
581- DA40352	Understanding Data Storage	8 / 08 / 00 / 16
581- DA40353	Administer a Database	8 / 08 / 00 / 16
581- DA40354	Core Data Concepts	10 / 10 / 00 / 20
581- DA40355	Relational Databases in Azure	10 / 10 / 00 / 20
581- DA40356	Nonrelational Databases in Azure	10 / 10 / 00 / 20
581- DA40357	File, Object, and Data Lake Storage	10 / 10 / 00 / 20
581- DA40358	Modern Data Warehouses in Azure	10 / 10 / 00 / 20
581- DA40359	Reporting with Power BI	10 / 10 / 00 / 20
	Total Hours	100 / 100 / 00 / 200

\*The approximate time required to complete this course is twelve weeks.

#### Subject Description or Synopsis

581- DA40349

Understanding Core Database Concepts: This course provides a foundational understanding of core database concepts. Students will learn the basics of database management systems, data models, and the importance of data integrity.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

581- DA40350

Create Database Concepts: In this course, students will delve into the creation of databases. They will learn how to design and implement databases, including defining tables, relationships, and data types.

Prerequisites: *Students must meet the following*

- Completion of 581- DA40349 Understanding Core Database Concepts

581-DA40351

Manipulate Data: Manipulate Data focuses on the skills needed to work with data within a database. Students will learn how to query databases using SQL (Structured Query Language) and perform data manipulation tasks.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40350 Create Database Concepts

## 581-DA40352

Understanding Data Storage: This course explores various aspects of data storage, including data types, file formats, and storage solutions. Students will gain a deeper understanding of how data is stored and managed.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40351 Manipulate Data

## 581-DA40353

Administer a Database: Administer a Database covers database administration tasks, including security, backups, and performance tuning. Students will learn how to ensure the availability and reliability of a database.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40352 Understanding Data Storage

## 581-DA40354

Core Data Concepts: This course builds on core data concepts, diving deeper into database design, optimization, and data modelling. Students will gain advanced skills in managing and working with data.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40353 Administer a Database

## 581-DA40355

Relational Databases in Azure: Students will explore the world of relational databases in the Azure cloud environment. This course covers the setup, management, and optimization of relational databases in Microsoft Azure.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40354 Core Data Concepts

## 581-DA40356

Nonrelational Databases in Azure: Nonrelational Databases in Azure focuses on NoSQL databases and their use in the Azure cloud. Students will learn about various NoSQL data models and how to work with them in Azure.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40355 Relational Databases in Azure

581-DA40357

File, Object, and Data Lake Storage: This course covers different types of data storage in Azure, including file storage, object storage, and data lake storage. Students will understand when and how to use each type effectively.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40356 Nonrelational Databases in Azure

581-DA40358

Modern Data Warehouses in Azure: Modern Data Warehouses in Azure explores the design and implementation of data warehousing solutions in the Azure cloud. Students will learn about data warehousing best practices.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40357 File, Object, and Data Lake Storage

581-DA40359

Reporting with Power BI: This course focuses on using Power BI, a powerful business intelligence tool, for data visualization and reporting. Students will learn how to create interactive and insightful reports.

Prerequisites: *Students must meet the following*

- Completion of 581-DA40358 Modern Data Warehouses in Azure

**Tuition and Fees:**

Tuition	Fees
Program Cost	\$7,000.00
Books & Supplies	\$200.00
Total Cost	\$7,200.00

## Data Analyst Professional Associate Program

Admission Requirements:

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)

- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

Course Description:

The Data Analyst Professional Associate Program is a comprehensive training initiative designed to equip aspiring data analysts with the foundational and advanced skills required to thrive in the modern data-driven business world. This program leverages the robust curricula of Microsoft's renowned certifications - the MTA Database Fundamentals, Microsoft Azure Data Fundamentals, and Microsoft-certified Power BI Data Analyst.

Course Objectives:

The primary objective of the Data Analyst Professional Associate Program is to comprehensively train and nurture participants to become proficient in data analysis by integrating foundational knowledge, cloud-based data solutions, and advanced visualization techniques. By leveraging the well-established frameworks of the MTA Database Fundamentals, Microsoft Azure Data Fundamentals, and Microsoft-certified Power BI Data Analyst, the program aims to:

1. Equip Participants with Core Competencies: Enable learners to grasp the foundational concepts of databases, understand the nuances of cloud data solutions in Azure, and master the art of data visualization using Power BI.
2. Provide Hands-On Experience: Offer an immersive learning environment through hands-on labs, real-world projects, and practical assignments to ensure participants can apply theoretical knowledge in actual business scenarios.
3. Promote Career Advancement: Through this program, participants will earn three valuable Microsoft certifications, positioning them favorably in the job market and paving the way for numerous roles in the data analytics domain.
4. Foster Continuous Learning: Encourage participants to remain curious, engage in lifelong learning, and stay updated with the ever-evolving data landscape.

\* Non-Degree Program

Subject Outline:

Course ID	Subject Title	Lec/Lab/Ext/Total
581.1-DA001	Understanding Core Database Concepts	15 / 15 / 00 / 30
581.1-DA002	Create Database Objects	15 / 15 / 00 / 30
581.1-DA003	Manipulate Data	15 / 15 / 00 / 30
581.1-DA004	Understand Data Storage	15 / 15 / 00 / 30
581.1-DA005	Administer a Database	15 / 15 / 00 / 30
581.1-DA006	Core Data Concepts	15 / 15 / 00 / 30
581.1-DA007	Relational Databases in Azure	15 / 15 / 00 / 30
581.1-DA008	Nonrelational Databases in Azure	15 / 15 / 00 / 30
581.1-DA009	File, Object, and Data Lake Storage	15 / 15 / 00 / 30
581.1-DA010	Modern Data Warehouses in Azure	15 / 15 / 00 / 30
581.1-DA011	Reporting with Power BI	15 / 15 / 00 / 30
581.1-DA012	Analyzing Data with Self-Service BI	15 / 15 / 00 / 30
581.1-DA013	Connecting to Data Sources	15 / 15 / 00 / 30

581.1-DA014	Performing Data Cleaning, Profiling, and Shaping	15 / 15 / 00 / 30
581.1-DA015	Visualizing Data with Power BI	15 / 15 / 00 / 30
581.1-DA016	Enhancing Data Analysis	15 / 15 / 00 / 30
581.1-DA017	Modeling Data with Calculations	15 / 15 / 00 / 30
581.1-DA018	Creating Interactive Visualizations	15 / 15 / 00 / 30
581.1-DA019	Using Advanced Analysis Techniques	15 / 15 / 00 / 30
581.1-DA020	Enhancing Reports and Dashboards	15 / 15 / 00 / 30
581.1-DA021	Publishing and Sharing Reports and Dashboards	15 / 15 / 00 / 30
581.1-DA022	Extending Power BI Beyond the Desktop	15 / 15 / 00 / 30
	<b>Total Hours</b>	<b>330 / 330 / 00 / 660</b>

\*The approximate time required to complete this course is thirty weeks.

#### Subject Description or Synopsis

##### 581.1-DA001

Understanding Core Database Concepts: Dive deep into the fundamental concepts of databases. Explore the differences between relational and non-relational databases, the importance of data normalization, and the roles and functionalities of database management systems (DBMS).

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

##### 581.1-DA002

Create Database Objects: Acquire hands-on skills in designing and creating essential database objects. Learn about tables, views, stored procedures, and triggers. Understand how to set primary and foreign keys and establish database relationships.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA001 Understanding Core Database Concepts

##### 581.1-DA003

Manipulate Data: Master the art of data manipulation using SQL. Delve into selecting, inserting, updating, and deleting data. Understand the nuances of SQL queries and the power of data transformation.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA002 Create Database Objects

## 581.1-DA004

Understand Data Storage: Gain insights into how data is stored within a database. Explore data types, indexes, and normalization techniques to ensure data integrity and optimize performance.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA003 Manipulate Data

## 581.1-DA005

Administer a Database: Delve into the responsibilities of a database administrator (DBA). Learn about backup and restore operations, security implementations, and routine maintenance practices to ensure database health.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA004 Understand Data Storage

## 581.1-DA006

Core Data Concepts: Begin with a comprehensive understanding of core data concepts within Azure. Explore structured and unstructured data, the importance of data analytics, and the role of big data.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA005 Administer a Database

## 581.1-DA007

Relational Databases in Azure: Discover the power of Azure's cloud-based relational database services. Learn about Azure SQL Database, Azure SQL Managed Instance, and how to deploy, maintain, and scale relational databases on Azure.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA006 Core Database Concepts

## 581.1-DA008

Nonrelational Databases in Azure: Dive into the world of NoSQL databases within Azure. Explore Azure Cosmos DB, Table Storage, and their applications in modern-day businesses.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA007 Relational Databases in Azure



#### 581.1-DA009

File, Object, and Data Lake Storage: Understand the significance of large-scale data storage solutions in Azure. Learn the intricacies of Azure Blob Storage, Azure Files, and Azure Data Lake Storage.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA008 Nonrelational Databases in Azure

#### 581.1-DA010

Modern Data Warehouses in Azure: Delve into Azure Synapse Analytics and its role as a contemporary data warehouse solution. Understand its architecture, capabilities, and integrations.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA009 File, Objects and Data Lake Storage

#### 581.1-DA011

Reporting with Power BI: Get acquainted with the capabilities of Power BI as a reporting tool. Learn to create, customize, and share visual reports sourced from Azure data solutions.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA010 Modern Data Warehouses in Azure

#### 581.1-DA012

Analyzing Data with Self-Service BI: Kickstart your journey with Power BI's self-service capabilities. Understand the significance of self-service BI and how Power BI empowers users to derive insights.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA011 Reporting with Power BI

#### 581.1-DA013

Connecting to Data Sources: Master the methods to connect Power BI to various data sources, from databases, Excel sheets, to online services. Understand data gateways and real-time data connections.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA012 Analyzing Data with Self Service BI

## 581.1-DA014

Performing Data Cleaning, Profiling, and Shaping: Learn essential data preprocessing steps. Understand the Power Query Editor, data profiling techniques, and methods to shape and transform raw data into meaningful datasets.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA013 Connecting to Data Sources

## 581.1-DA015

Visualizing Data with Power BI: Dive deep into data visualization concepts. Explore Power BI's wide array of visualizations, from charts, graphs to custom visuals.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA014 Performing Data Cleaning, Profile, and Shaping

## 581.1-DA016

Enhancing Data Analysis: Enhance your data analytical skills using Power BI's in-built AI capabilities. Delve into Q&A, Quick Insights, and AI visuals.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA015 Visualizing Data with Power BI

## 581.1-DA017

Modeling Data with Calculations: Understand the power of DAX (Data Analysis Expressions) for advanced calculations and data modeling. Explore measures, calculated columns, and time intelligence functions.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA016 Enhancing Data Analysis

## 581.1-DA018

Creating Interactive Visualizations: Make your reports come alive with interactivity. Learn about slicers, drill through, and cross-report drill through to facilitate user engagement.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA017 Modeling Data with Calculations

#### 581.1-DA019

Using Advanced Analysis Techniques: Delve deeper into advanced analytical capabilities. Explore forecasting, clustering, and anomaly detection in Power BI

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA018 Creating Interactive Visualizations

#### 581.1-DA020

Enhancing Reports and Dashboards: Discover techniques to enhance the appeal and usability of your reports. Understand themes, layouts, and custom visuals to beautify your reports.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA019 Using Advanced Analysis Techniques

#### 581.1-DA021

Publishing and Sharing Reports and Dashboards: Master the art of publishing reports to the Power BI service. Learn about sharing, workspaces, and embedding reports for wider consumption.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA020 Enhancing Reports and Dashboards

#### 581.1-DA022

Extending Power BI Beyond the Desktop: Explore the extended ecosystem of Power BI. Understand Power BI Mobile, Power BI Report Server, and integrations with other tools and services.

Prerequisites: *Students must meet the following*

- Completion of 581.1-DA021 Publishing and Sharing Reports and Dashboards

#### **Tuition and Fees:**

Tuition	Fees
Program Cost	\$14,980.00
Books & Supplies	\$1,120.00
Total Cost	\$16,100.00

## Software Solution Developer Associate Program

### Admission Requirements:

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)
- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

### Course Description:

Master the fundamentals of these topics: Core Programming, Object-Oriented Programming, General Software Development, Web Applications, Desktop Applications, and Databases website development, such as HTML5, XHTML, CSS, JavaScript, Ajax, multimedia, HTTP, and scripting languages. Build dynamic, database-driven web applications. Students will design, code, and build mobile apps and games using cross-platform tools.

This comprehensive program combines the essential concepts of software development with the cutting-edge world of cloud computing using Microsoft technologies. Designed for individuals aspiring to become software developers and cloud solution architects, this course covers the foundational knowledge needed for the Microsoft Technology Associate (MTA) Software Developer Fundamentals certification and the Microsoft Developing Solutions for Azure certification. Students will gain a strong understanding of software development principles and learn how to develop, deploy, and manage cloud-based solutions using Microsoft Azure. This course prepares students for the Developing Solutions for Microsoft Azure Exam AZ-204.

\* Non-Degree Program

### Subject Outline:

Course ID	Subject Title	Lec/Lab/Ext/Total
582- DEV5000	Intro to Programming	10 / 10 / 00 / 20
582- DEV5001	Intro to Object-Oriented Programming	10 / 10 / 00 / 20
582- DEV5002	General Software Development	10 / 10 / 00 / 20
582- DEV5003	Web Applications	10 / 10 / 00 / 20
582- DEV5004	Desktop Applications & Databases	10 / 10 / 00 / 20
582- DEV5005	Develop Azure Infrastructure as a Service	10 / 10 / 00 / 20
582- DEV5006	Develop for Azure Storage	10 / 10 / 00 / 20

582- DEV5007	Implement Azure Security	10 / 10 / 00 / 20
582- DEV5008	Monitor, Troubleshoot and Optimize Azure Solutions	10 / 10 / 00 / 20
582- DEV5009	Consume Azure Services and Third-Party Services	10 / 10 / 00 / 20
	Total Hours	100 / 100 / 00 / 200

\*The approximate time required to complete this course is twelve weeks.

#### Subject Description or Synopsis

##### 582-DEV5000

Intro to Programming: This course serves as an introduction to the world of programming. Students will learn fundamental programming concepts, including variables, data types, control structures, and basic algorithms.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

##### 582-DEV5001

Intro to Object-Oriented Programming: In this course, students will delve into object-oriented programming (OOP) principles. They will learn how to create and work with objects, classes, inheritance, and polymorphism.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5000 Intro to Programming

##### 582-DEV5002

General Software Development: General Software Development covers a wide range of software development topics, including software design, testing, debugging, and best practices. Students will gain a comprehensive understanding of the software development lifecycle.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5001 Intro to Object-Oriented Programming

##### 582-DEV5003

Web Applications: This course focuses on web application development. Students will learn how to create dynamic and interactive web applications using web development technologies such as HTML, CSS, JavaScript, and web frameworks.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5002 General Software Development

## 582-DEV5004

Desktop Applications & Databases: Desktop Applications & Databases covers the development of desktop software applications and database management. Students will learn how to create user-friendly desktop applications and work with databases for data storage and retrieval.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5003 Web Applications

## 582-DEV5005

Develop Azure Infrastructure as a Service Compute Solution: This course focuses on developing infrastructure as a service (IaaS) solutions in Microsoft Azure. Students will learn how to create and manage virtual machines, networks, and other Azure resources.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5004 Desktop Applications & Databases

## 582-DEV5006

Develop for Azure Storage: Develop for Azure Storage covers the development of applications that leverage Azure storage services. Students will learn how to work with various types of Azure storage, including blobs, tables, and queues.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5005 Develop Azure Infrastructure as a Service Compute Solution

## 582-DEV5007

Implement Azure Security: In this course, students will focus on implementing security measures in Azure solutions. Topics include identity and access management, encryption, and compliance.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5006 Develop for Azure Storage

## 582-DEV5008

Monitor, Troubleshoot and Optimize Azure Solutions: This course covers monitoring, troubleshooting, and optimization of Azure solutions. Students will learn how to proactively manage and optimize Azure resources for performance and cost efficiency.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5007 Implement Azure Security

#### 582-DEV5009

Connect to and Consume Azure Services and Third-Party Services: This course focuses on connecting to and consuming Azure services and third-party services in Azure solutions. Students will learn how to integrate various services to create robust and feature-rich applications.

Prerequisites: *Students must meet the following*

- Completion of 582-DEV5008 Monitor, Troubleshoot and Optimize Azure Solutions

#### Tuition and Fees:

Tuition	Fees
Program Cost	\$7,000.00
Books & Supplies	\$200.00
Total Cost	\$7,200.00

## AI Engineer Professional Associate Program

#### Admission Requirements:

Individuals applying for this course are required to:

- Interview with an Admissions Counselor.
- Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- Present proof of secondary education (high school diploma or GED certificate)
- Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

#### Course Description:

Welcome to the AI Engineer Professional Associate Program. This immersive program is designed to provide participants with comprehensive knowledge, hands-on experience, and recognized certification in the dynamic field of Artificial Intelligence (AI). Incorporating the widely respected CertNexus Certified Artificial Intelligence Practitioner (CAIP) curriculum, this course empowers students with both the theoretical knowledge and practical skills required to excel as an AI Engineer.

#### Course Objectives:

1. Foundational Understanding: Grasp the foundational concepts of AI, including its history, potential applications, and current real-world uses.
2. Deep Dive into ML & DL: Delve deep into machine learning and deep learning techniques, understanding their mechanics, algorithms, and implementation.

3. AI Ethics & Bias: Recognize and address issues related to ethics, fairness, and biases in AI.
4. Practical Implementation: Engage in hands-on labs and real-world projects to apply AI solutions using popular tools and platforms.
5. CAIP Certification Preparedness: Equip students with the requisite knowledge and practice to successfully clear the CertNexus CAIP exam.

\* Non-Degree Program

Subject Outline:

Course ID	Subject Title	Lec/Lab/Ext/Total
582.1-CAIP0001	Introduction to Python	16 / 16 / 00 / 32
582.1-CAIP0002	Data Types	16 / 16 / 00 / 32
582.1-CAIP0003	Control Statements	16 / 16 / 00 / 32
582.1-CAIP0004	Functions	16 / 16 / 00 / 32
582.1-CAIP0005	Lists and Tuples	16 / 16 / 00 / 32
582.1-CAIP0006	Dictionaries and Sets	16 / 16 / 00 / 32
582.1-CAIP0007	Object-Oriented Programming	16 / 16 / 00 / 32
582.1-CAIP0008	Modules, Packages and File Operations	16 / 16 / 00 / 32
582.1-CAIP0009	Error Handling	16 / 16 / 00 / 32
582.1-CAIP0010	Solving Business Problems Using AI and ML	16 / 16 / 00 / 32
582.1-CAIP0011	Collecting and Refining the Dataset	16 / 16 / 00 / 32
582.1-CAIP0012	Setting up and Training a Model	16 / 16 / 00 / 32
582.1-CAIP0013	Finalizing a Model	16 / 16 / 00 / 32
582.1-CAIP0014	Building Linear Regression Models	16 / 16 / 00 / 32
582.1-CAIP0015	Building Classification Modes	16 / 16 / 00 / 32
582.1-CAIP0016	Building Clustering Models	16 / 16 / 00 / 32
582.1-CAIP0017	Building Decision Trees and Random Forests	16 / 16 / 00 / 32
582.1-CAIP0018	Building Support-Vector Machines	16 / 16 / 00 / 32
582.1-CAIP0019	Building Artificial Neural Networks	16 / 16 / 00 / 32
582.1-CAIP0020	Promoting Data Privacy and Ethical Practices	16 / 16 / 00 / 32
	<b>Total Hours</b>	<b>320 / 320 / 00 / 640</b>

\*The approximate time required to complete this course is thirty-two weeks.

Subject Description or Synopsis

582.1-CAIP0001

Introduction to Python: Kick-start your journey into the realm of programming with this succinct introduction to Python, one of the world's most popular and versatile programming languages. Tailored to align with the PCEP certification objectives, this course offers a glimpse into Python's origins, its diverse applications, and its undeniable impact on the technology landscape.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.



## 582.1-CAIP0002

Data Types: Dive deep into the fundamental data types that power Python programs. This module explores the various built-in types, their properties, and practical applications.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0001 Introduction to Python

## 582.1-CAIP0003

Control Statements: Master the art of decision-making in Python with control statements. Learn to guide your program's logic effectively using conditional and looping constructs.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0002 Data Types

## 582.1-CAIP0004

Functions: Delve into the modular world of Python functions. Discover how to encapsulate code logic, enhance reusability, and simplify complex tasks.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0003 Control Statements

## 582.1-CAIP0005

Lists and Tuples: Explore the power of ordered collections in Python. Understand the dynamics, manipulations, and practical applications of lists and tuples.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0004 Functions

## 582.1-CAIP0006

Dictionaries and Sets: Navigate the world of key-value pairs with dictionaries and grasp the importance of unique element storage with sets.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0005 Lists and Tuples

## 582.1-CAIP0007

Object-Oriented Programming: Step into the paradigm of object-oriented programming (OOP) with Python. Explore classes, objects, inheritance, polymorphism, and encapsulation.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0006 Dictionaries and Sets

## 582.1-CAIP0008

Modules, Packages and File Operations: Expand your Python programming toolkit by diving into modules, packages, and file handling techniques.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0007 Object-Oriented Programming

## 582.1-CAIP0009

Error Handling: Equip yourself with the skills to handle unexpected scenarios in Python. Delve into the world of exceptions, errors, and the art of graceful program recovery

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0008 Modules, Packages and File Operations

## 582.1-CAIP0010

Solving Business Problems Using AI and ML: Understand the potential of AI and ML in today's business landscape. Dive into real-world case studies and the strategic decision-making processes involved in choosing the right AI or ML solution.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0009 Error Handling

## 582.1-CAIP0011

Collecting and Refining the Dataset: Learn about the importance of quality data. Understand how to gather, clean, and preprocess data to ensure it's ready for model training.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0010 Solving Business Problems Using AI and ML

#### 582.1-CAIP0012

Setting up and Training a Model: Delve into the lifecycle of model development. Understand how to set up your environment, choose appropriate algorithms, and train your models effectively.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0011 Collecting and Refining the Dataset

#### 582.1-CAIP0013

Finalizing a Model: Discover the art of fine-tuning. Learn about hyperparameter optimization, model validation, and techniques to improve performance.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0012 Setting up and Training a Model

#### 582.1-CAIP0014

Building Linear Regression Models: Understand the foundation of regression analysis in predicting continuous outcomes. Learn how to implement, evaluate, and interpret linear regression models.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0013 Finalizing a Model

#### 582.1-CAIP0015

Building Classification Models: Gain insights into models that categorize data points. Explore algorithms such as logistic regression, k-Nearest Neighbors, and more.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0014 Building Linear Regression Models

#### 582.1-CAIP0016

Building Clustering Models: Uncover the essence of unsupervised learning through clustering techniques like K-means and hierarchical clustering.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0015 Building Classification Modes

582.1-CAIP0017

Building Decision Trees and Random Forests: Dive deep into these intuitive and powerful models. Learn how they make decisions and how to optimize them for better predictions.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0016 Building Clustering Models

582.1-CAIP0018

Building Support-Vector Machines: Delve into the mechanics of SVM. Understand its applications and how to harness its power for both classification and regression tasks.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0017 Building Decision Trees and Random Forests

582.1-CAIP0019

Building Artificial Neural Network: Get acquainted with the foundation of deep learning. Explore the architecture of ANNs, backpropagation, and their applications in solving complex problems.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0018 Building Support-Vector Machines

582.1-CAIP0020

Promoting Data Privacy and Ethical Practices: In a world where data is power, understand the importance of ethical considerations. Dive into best practices to ensure data privacy and address potential biases in AI/ML models.

Prerequisites: *Students must meet the following*

- Completion of 582.1-CAIP0019 Building Artificial Neural Networks

**Tuition and Fees:**

Tuition	Fees
Program Cost	\$14,980.00
Books & Supplies	\$1,120.00
Total Cost	\$16,100.00

## Computer Systems Analyst / Office 365 Administrator Associate Program

**Admission Requirements:**

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)
- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

**Course Description:**

This comprehensive program combines the essential knowledge of Microsoft Office 365 Fundamentals with the critical aspects of Identity and Access Management, providing participants with a well-rounded understanding of productivity tools and security measures. Tailored for individuals seeking to enhance their productivity skills while securing digital identities, this course covers the foundational knowledge required for both the Microsoft Office 365 Fundamentals and Microsoft Identity and Access certifications. Participants will become proficient in using Office 365 apps and implementing identity and access controls effectively.

This course targets the needs of those who are interested in taking part in evaluation, planning, deployment, and operating procedures of Office 365 services, including its identities, dependencies, requirements, and supporting technologies. This course focuses on skills required to set up an Office 365 tenant, including federation with existing user identities, and skills required to sustain an Office 365 tenant and its users.

Computer Systems Analyst / Office 365 Administrator Associate Program prepares you for a position as an Office 365 Network Systems Administrator, Software as a Service (SaaS) Administrator, Systems Engineer, and Cloud Engineer focused on managing Office 365 business productivity products like Exchange, SharePoint, and Skype for Business.

This course prepares students for the Microsoft Office 365 Fundamentals and Identity & Access Management Certifications.

\* Non-Degree Program

Subject Outline:

Course ID	Subject Title	Lec/Lab/Ext/Total
583-0365.1	Cloud Concepts	10 / 10 / 00 / 20
583-0365.2	Core Microsoft 365 Services and Concepts	10 / 10 / 00 / 20
583-0365.3	Security, compliance, privacy, and trust	10 / 10 / 00 / 20
583-0365.4	Microsoft 365 Pricing and Support	10 / 10 / 00 / 20
583-0365.5	Identity Management Solution	15 / 15 / 00 / 30
583-0365.6	Authentication and Access Management Solution	15 / 15 / 00 / 30
583-0365.7	Access Management for Apps	15 / 15 / 00 / 30
583-0365.8	Implement an Identity Governance Strategy	15 / 15 / 00 / 30
	Total Hours	100 / 100 / 00 / 200

\*The approximate time required to complete this course is twelve weeks.

Subject Description or Synopsis

583-0365.1

Cloud Concepts: Cloud Concepts introduces students to the fundamental concepts of cloud computing. They will learn about the advantages of cloud services, cloud deployment models, and cloud service models.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

583-0365.2

Core Microsoft 365 Services and Concepts: Core Microsoft 365 Services and Concepts covers the essential services and concepts within the Microsoft 365 ecosystem. Students will gain a comprehensive understanding of Microsoft 365 offerings.

Prerequisites: *Students must meet the following*

- Completion of 583-0365.1 Cloud Concepts

583-0365.3

Security, Compliance, Privacy, and Trust: This course focuses on security, compliance, privacy, and trust in Microsoft 365. Students will learn about security features, compliance standards, data privacy, and trust in Microsoft 365 services.

Prerequisites: *Students must meet the following*

- Completion of 583-0365.2 Core Microsoft 365 Services and Concepts

#### 583-O365.4

Microsoft 365 Pricing and Support: Microsoft 365 Pricing and Support provides insights into Microsoft 365 pricing models and support options. Students will understand licensing, subscription plans, and support resources.

Prerequisites: *Students must meet the following*

- Completion of 583-O365.3 Security, Compliance, Privacy, and Trust

#### 583-O365.5

Identity Management Solution: Identity Management Solution delves into identity management within the Microsoft 365 environment. Students will learn how to manage user identities, authentication methods, and directory services.

Prerequisites: *Students must meet the following*

- Completion of 583-O365.4 Microsoft 365 Pricing and Support

#### 583-O365.6

Authentication and Access Management Solution: Authentication and Access Management Solution covers authentication and access management strategies in Microsoft 365. Students will explore single sign-on (SSO), multi-factor authentication (MFA), and access controls.

Prerequisites: *Students must meet the following*

- Completion of 583-O365.5 Identity Management Solution

#### 583-O365.7

Access Management for Apps: Access Management for Apps focuses on managing access to applications in Microsoft 365. Students will learn how to configure application access and implement access policies.

Prerequisites: *Students must meet the following*

- Completion of 583-O365.6 Authentication and Access Management Solution

#### 583-O365.8

Implement an Identity Governance Strategy: In this course, students will implement an identity governance strategy for Microsoft 365. Topics include identity lifecycle management, role-based access control (RBAC), and identity governance best practices.

Prerequisites: *Students must meet the following*

- Completion of 583-O365.7 Access Management for Apps

**Tuition and Fees:**

Tuition	Fees
Program Cost	\$7,300.00
Books & Supplies	\$200.00
Total Cost	\$7,500.00

Private Cloud Administrator Associate Program

Admission Requirements:

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)
- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

Course Description:

Cover the new features and enhancements for transforming virtualization and cloud computing. The program collectively covers implementing, managing, maintaining, and provisioning services and infrastructure in a Cloud based environment. It also covers the deploying of web applications, creating web apps from the gallery, deploying and monitoring Web Apps, creating and configuring Virtual Machines, creating, and managing storage accounts, blobs, and containers in a storage account.

Students create, configure, and connect to a SQL Database instance, importing a standalone database, manage users, groups, and subscriptions in an Azure Active Directory instance, creating a virtual network, implementing a point to site network. Students learn how to describe architecture components, including infrastructure, tools, and portals, implementing, and managing virtual networking and connecting to on-premises environments. Additionally, students plan and create virtual machines, configure webs apps and mobile apps, implement, manage, backup, and monitor storage solutions, implement data services based on SQL Database to support applications, manage AD tenants, and configure application integration with cloud AD.

\* Non-Degree Program

Subject Outline:

Course ID	Subject Title	Lec/Lab/Ext/Total
600-MSEPC532	Cloud Computing and Configurations and Deployment	10 / 10 / 00 / 20
600-MSEPC533	Cloud Deployments	10 / 10 / 00 / 20
600-MSEPC534	Security in the Cloud	10 / 10 / 00 / 20
600-MSEPC535	Implementing Cloud Security	10 / 10 / 00 / 20



600-MSEPC536	Maintaining Cloud Operations	10 / 10 / 00 / 20
600-MSEPC537	Disaster Recovery, Business Continuity, and Ongoing Maintenance	10 / 10 / 00 / 20
600-MSEPC538	Cloud Management	10 / 10 / 00 / 20
600-MSEPC539	Troubleshooting	10 / 10 / 00 / 20
600-MSEPC540	Cloud Management Baselines, Performance, and SLAs	10 / 10 / 00 / 20
600-MSEPC541	Troubleshooting Networking and Security Issues	10 / 10 / 00 / 20
<b>Total Hours</b>		<b>100 / 100 / 00 / 200</b>

#### Subject Description or Synopsis

600-MSEPC532

Cloud Computing and Configurations and Deployment: The course starts out investigating the most common cloud components such as applications, compute, storage, and networking. Then how to determine the correct size and scale of the systems is discussed. You will get a basic understanding of configurations found in the cloud and learn about production, quality assurance, and development cloud systems.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

600-MSEPC533

Cloud Deployments: In this lesson you'll learn about deploying services in the cloud and how to execute a deployment plan; the most common service models; and the various ways that clouds are delivered such as public, private, and community. Common cloud terminology and storage are explained.

Next, the technical background is presented on how to determine the needs and design an effective cloud deployment. This includes what virtualization is, its benefits, and why it is a central technology in cloud computing. You'll learn about hypervisors, virtual machines, and how to migrate from your existing operations to the cloud.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC532 Cloud Computing and Configurations and Deployments

600-MSEPC534

Security in the Cloud: This lesson covers cloud security starting with security policies, laws and standards. You will then learn about specific security technologies, applications, and services.

Prerequisites: *Students must meet the following*

- Completion 600-MSEPC533 Cloud Deployments

600-MSEPC535

Implementing Cloud Security: This lesson builds on your security knowledge by explaining how to implement secure storage, networks, and compute systems. Security tools, intrusion systems, encryption, tools, techniques, and services are introduced.

Prerequisites: *Students must meet the following*

- Completion 600-MSEPC534 Security in the Cloud

600-MSEPC536

Maintaining Cloud Operations: This lesson focuses on keeping your cloud deployment current with the latest updates and discusses the processes to follow. Automation is introduced, and you will learn about the importance of cloud automation and orchestration systems. The lesson concludes with a discussion on backing up your data in the cloud.

Prerequisites: *Students must meet the following*

- Completion 600-MSEPC535 Implementing Cloud Security

600-MSEPC537

Disaster Recovery, Business Continuity and Ongoing Maintenance: We'll take a step back in this lesson and cover how to go about developing a disaster recovery plan and the common models available. You will learn the importance of business survivability during a severe outage and understand the issues concerning recovery. The lesson ends with describing how to perform ongoing maintenance in your cloud environment.

Prerequisites: *Students must meet the following*

- Completion 600-MSEPC536 Maintaining Cloud Operations

600-MSEPC538

Cloud Management: You'll now delve deep into the operations aspects of cloud computing. Lesson 7 begins with a discussion of monitoring the cloud and then moves on to look at the allocation and provisioning of resources. Then you will learn about business requirements, application life cycles, and the impact they have on managing your cloud deployment. The lesson concludes with discussion on security of your cloud operations with accounts, automation, authentication, and automation models.

Prerequisites: *Students must meet the following*

- Completion 600-MSEPC537 Disaster Recovery, Continuity, and Ongoing Maintenance

600-MSEPC539

Troubleshooting: You'll dive deep into the technical aspects identifying and correcting cloud technical issues. We cover troubleshooting of new and existing deployments. You will learn about common problems found in the cloud that you will need to resolve. We will teach you how to identify and resolve deviations from your baselines and what to do when breakdowns in the workflow occur. Be sure to pay close attention to this lesson!

Prerequisites: *Students must meet the following*

- Completion 600-MSEPC538 Cloud Management

600-MSEPC540

Cloud Management Baseline, Performance, and SLAs: This lesson explains how to determine what is considered normal cloud operations by creating and maintaining baseline measurements. Based on these measurements, we go on to discuss how to monitor your cloud fleet for deviations from the baseline and the steps to take when this occurs. Service level agreements and chargeback models are also explained in this lesson.

Prerequisites: *Students must meet the following*

- Completion 600-MSEPC539 Troubleshooting

600-MSEPC541

Troubleshooting Networking and Security Issues and Understanding Methodologies: The final lesson continues investigating troubleshooting with a focus on tools and techniques. We will present common troubleshooting utilities found in Linux and Windows systems and how to perform a structured troubleshooting approach.

Prerequisites: *Students must meet the following*

- Completion 600-MSEPC540 Cloud Management Baseline, Performance, and SLAs

**Tuition and Fees:**

Tuition	Fees
Program Cost	\$7,600.00
Books & Supplies	\$200.00
Total Cost	\$7,800.00

## Cloud Computing Professional Associate Program

### Admission Requirements:

Individuals applying for this course are required to:

- A. Interview with an Admissions Counselor.
- B. Be at least 18 years of age (applicants under the age of 18 require written permission from a parent or legal guardian to enroll)
- C. Present proof of secondary education (high school diploma or GED certificate)
- D. Achieve a passing score on the Wonderlic Basic Skills Test (Verbal 200 and Quantitative 210) in the event the applicant is unable to provide proof of secondary education.

### Course Description:

Delve into the comprehensive Integrated Cloud Computing Professional Associate Program, meticulously designed to impart a profound understanding of cloud computing, network technologies, and their real-world applications. This course combines the curricula of CIW: Network Technology Associate, CompTIA Cloud+, and the Microsoft Azure Administration, making it an unparalleled training program for IT professionals, administrators, and anyone keen on mastering cloud and network technologies.

### Key Course Components:

1. Intro to Network Technologies:
  - Understanding the role of various network components and their functions.
  - Basics of networking standards and protocols.
  - Overview of network transmission, IP routing, and addressing.
  - Network security concepts, threats, and best practices.
  - Hands-on experience with network tools and diagnostic utilities.
  - Internet services and cloud computing from a networking perspective.
2. Cloud Computing (CompTIA Cloud+):
  - Introductory concepts and benefits of cloud computing.
  - Deep dive into cloud models: IaaS, PaaS, and SaaS.
  - Deployment types: Private, Public, Hybrid, and Community clouds.
  - Cloud networking, storage solutions, and virtualization.
  - Workload migrations, infrastructure management, and security in the cloud.
3. Microsoft Azure Administration:
  - Comprehensive overview of Azure's vast services and capabilities.
  - Mastery over managing Azure resources and subscriptions.
  - Storage solutions, virtual networks, and virtual machines in Azure.
  - Identity management through Azure Active Directory.
  - Implementing and managing Azure's load balancers and traffic management.
  - Azure security, monitoring, and troubleshooting.

## Learning Outcomes:

Upon concluding this program, participants will:

- Attain a robust understanding of cloud computing models, network principles, and best practices.
- Exhibit proficiency in deploying and managing solutions on Microsoft Azure.
- Demonstrate knowledge in network architecture, protocols, and security measures.
- Be adept in devising security, disaster recovery, and business continuity plans for cloud and network environments.
- Be well-equipped to sit for the CompTIA Cloud+, Microsoft Azure Administrator, and CIW: Network Technology Associate certification exams.

\* Non-Degree Program

## Subject Outline:

Course ID	Subject Title	Lec/Lab/Ext/Total
600-MSEPC526	Introduction to Networking	10 / 10 / 00 / 20
600-MSEPC527	Networking Components and Standards	10 / 10 / 00 / 20
600-MSEPC528	Connecting to the Internet	10 / 10 / 00 / 20
600-MSEPC529	Internet Services	10 / 10 / 00 / 20
600-MSEPC530	Hardware and Device Connectivity	10 / 10 / 00 / 20
600-MSEPC531	Network and Cloud Security	10 / 10 / 00 / 20
600-MSEPC532	Cloud Computing and Configurations and Deployment	10 / 10 / 00 / 20
600-MSEPC533	Cloud Deployments	10 / 10 / 00 / 20
600-MSEPC534	Security in the Cloud	10 / 10 / 00 / 20
600-MSEPC535	Implementing Cloud Security	10 / 10 / 00 / 20
600-MSEPC536	Maintaining Cloud Operations	10 / 10 / 00 / 20
600-MSEPC537	Disaster Recovery, Business Continuity, and Ongoing Maintenance	10 / 10 / 00 / 20
600-MSEPC538	Cloud Management	10 / 10 / 00 / 20
600-MSEPC539	Troubleshooting	10 / 10 / 00 / 20
600-MSEPC540	Cloud Management Baselines, Performance, and SLAs	10 / 10 / 00 / 20
600-MSEPC541	Troubleshooting Networking and Security Issues	10 / 10 / 00 / 20
600-MSEPC542	Manage Azure Identities and governance	36 / 36 / 00 / 72
600-MSEPC543	Implement and manage storage	36 / 36 / 00 / 72
600-MSEPC544	Deploy and manage Azure compute resources	36 / 36 / 00 / 72
600-MSEPC545	Configure and Manage virtual networking	36 / 36 / 00 / 72
600-MSEPC546	Monitor and back up Azure resources	36 / 36 / 00 / 72
	<b>Total Hours</b>	<b>340 / 340 / 00 / 680</b>

## Subject Description or Synopsis

600-MSEPC526

Introduction to Networking: The cornerstone module within the CIW: Network Technology Associate program, tailored for individuals seeking a foundational understanding of networking. This course demystifies

the essential concepts behind how networks function, the significance of their role in the modern digital landscape and introduces participants to the basic terminologies and components involved.

Prerequisites: *Students must meet the following*

- Completion of Texas Premier Technology Institute, Inc. admissions and enrollment procedures.

#### 600-MSEPC527

Networking Components and Standards: module provides an in-depth exploration into the integral components that constitute modern networks, and the prevailing standards that guide their operation and interoperability. Building on foundational knowledge, participants will dive deeper into the intricate elements that make networks run efficiently, and the globally accepted standards that ensure seamless communication across diverse equipment and platforms.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC526 Introduction to Networking

#### 600-MSEPC528

Connecting to the Internet: course offers a comprehensive dive into the mechanisms, processes, and technologies that allow devices to connect to the vast world of the Internet. Participants will uncover the intricate layers of Internet connectivity, from the physical equipment in their homes to the colossal data centers that make up the backbone of the World Wide Web.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC527 Networking Components and Standards

#### 600-MSEPC529

Internet Services: dives into the array of services and functionalities made available by the vast expanse of the Internet. Participants will journey through the diverse applications and platforms that have become integral in our daily lives, both for personal use and within the commercial and industrial sectors. This module unveils the mechanisms behind these services and how they interact to create the vibrant digital landscape we engage with daily.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC528 Connecting to the Internet

## 600-MSEPC530

Hardware and Device Connectivity: module delves into the tangible realm of networking, exploring the myriad devices, components, and connectors that breathe life into digital networks. From personal devices to enterprise-grade servers, participants will understand how hardware plays a crucial role in data transmission, and how diverse devices interconnect and communicate in modern digital infrastructures.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC529 Internet Services

## 600-MSEPC531

Network and Cloud Security Risks: module, participants will embark on a journey into the realms of cybersecurity as applied to networks and cloud infrastructure. With the increasing prevalence of cyber threats, understanding the vulnerabilities and potential risks in these domains is paramount. This course provides a detailed overview of the most common risks and offers strategies and best practices to mitigate them.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC530 Hardware and Device Connectivity

## 600-MSEPC532

Cloud Computing and Configurations and Deployment: The course starts out investigating the most common cloud components such as applications, compute, storage, and networking. Then how to determine the correct size and scale of the systems is discussed. You will get a basic understanding of configurations found in the cloud and learn about production, quality assurance, and development cloud systems.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC531 Network and Cloud Security Risks

## 600-MSEPC533

Cloud Deployments: In this lesson you'll learn about deploying services in the cloud and how to execute a deployment plan; the most common service models; and the various ways that clouds are delivered such as public, private, and community. Common cloud terminology and storage are explained.

Next, the technical background is presented on how to determine the needs and design an effective cloud deployment. This includes what virtualization is, its benefits, and why it is a central technology in cloud computing. You'll learn about hypervisors, virtual machines, and how to migrate from your existing operations to the cloud.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC532 Cloud Computing and Configurations and Deployment

600-MSEPC534

Security in the Cloud: This lesson covers cloud security starting with security polices, laws and standards. You will then learn about specific security technologies, applications, and services.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC533 Cloud Deployments

600-MSEPC535

Implementing Cloud Security: This lesson builds on your security knowledge by explaining how to implement secure storage, networks, and compute systems. Security tools, intrusion systems, encryption, tools, techniques, and services are introduced.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC534 Security in the Cloud

600-MSEPC536

Maintaining Cloud Operations: This lesson focuses on keeping your cloud deployment current with the latest updates and discusses the processes to follow. Automation is introduced, and you will learn about the importance of cloud automation and orchestration systems. The lesson concludes with a discussion on backing up your data in the cloud.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC535 Implementing Cloud Security

600-MSEPC537

Disaster Recovery, Business Continuity and Ongoing Maintenance: We'll take a step back in this lesson and cover how to go about developing a disaster recovery plan and the common models available. You will learn the importance of business survivability during a severe outage and understand the issues concerning recovery. The lesson ends with describing how to perform ongoing maintenance in your cloud environment.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC536 Maintaining Cloud Operations



## 600-MSEPC538

Cloud Management: You'll now delve deep into the operations aspects of cloud computing. Lesson 7 begins with a discussion of monitoring the cloud and then moves on to look at the allocation and provisioning of resources. Then you will learn about business requirements, application life cycles, and the impact they have on managing your cloud deployment. The lesson concludes with discussion on security of your cloud operations with accounts, automation, authentication and automation models.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC537 Disaster Recovery, Business Continuity and Ongoing Maintenance

## 600-MSEPC539

Troubleshooting: You'll dive deep into the technical aspects identifying and correct cloud technical issues. We cover troubleshooting of new and existing deployments. You will learn about common problems found in the cloud that you will need to resolve. We will teach you how to identify and resolve deviations from your baselines and what to do when breakdowns in the workflow occur. Be sure to pay close attention to this lesson!

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC538 Cloud Management

## 600-MSEPC540

Cloud Management Baseline, Performance, and SLAs: This lesson explains how to determine what is considered normal cloud operations by creating and maintaining baseline measurements. Based on these measurements, we go on to discuss how to monitor your cloud fleet for deviations from the baseline and the steps to take when this occurs. Service level agreements and chargeback models are also explained in this lesson.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC539 Troubleshooting

## 600-MSEPC541

Troubleshooting Networking and Security Issues and Understanding Methodologies: The final lesson continues investigating troubleshooting with a focus on tools and techniques. We will present common troubleshooting utilities found in Linux and Windows systems and how to perform a structured troubleshooting approach.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC540 Cloud Management Baseline, Performance, and SLAs

## 601-MSEPC542

Manage Azure Identities and Governance: This comprehensive module dives into the essential aspects of managing identities, resources, and governance within the Microsoft Azure environment. Tailored for aspiring Azure administrators, this course provides participants with hands-on experience and knowledge, preparing them for the challenges of real-world Azure administration and the AZ-104 certification exam.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC541 Troubleshooting Networking and Security Issues and Understanding Methodologies

## 601-MSEPC543

Implement and Manage Azure Storage: In this module, participants will delve into the foundational storage solutions provided by Microsoft Azure. From storage accounts to data services, this course elucidates the best practices and techniques necessary for effective Azure storage management. Tailored for budding Azure administrators, the content ensures attendees gain both the theoretical knowledge and hands-on experience vital for real-world Azure administration tasks and the AZ-104 certification exam.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC542 Manage Azure Identities and Governance

## 601-MSEPC544

Deploy and Manage Azure Compute Resources: This module provides a deep dive into the Azure compute resources, focusing on the deployment, management, and optimization of virtual machines and associated compute services. Designed for budding Azure administrators and professionals aiming to enhance their cloud compute expertise, this course offers an amalgamation of theoretical knowledge, best practices, and hands-on labs, priming participants for the AZ-104 certification exam.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC543 Implement and Manage Azure Storage

## 601-MSEPC545

Configure and Manage Azure Virtual Networking: Dive deep into the world of Azure networking with this comprehensive module. Covering a range of topics from the basics of virtual networks to advanced configurations and hybrid networking solutions, this course ensures participants are well-equipped to design, deploy, and manage Azure's network resources. Ideal for future Azure administrators, the course content merges theoretical discussions, best practices, and hands-on labs, paving the way for the AZ-104 certification exam.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC544 Deploy and Manage Azure Compute Resources

601-MSEPC546

Monitor and Back Up Azure Resources: This module focuses on the essential tasks of monitoring and backing up Azure resources, ensuring data resilience and operational continuity. As the capstone of effective Azure administration, understanding these operations is critical. Participants will delve into Azure's monitoring tools, data backup solutions, and disaster recovery protocols. This course is designed to marry theory with hands-on experience, preparing attendees for the challenges of real-world Azure administration and the AZ-104 certification exam.

Prerequisites: *Students must meet the following*

- Completion of 600-MSEPC545 Configure and Manage Azure Virtual Networking

**Tuition and Fees:**

Tuition	Fees
Program Cost	\$14,980.00
Books & Supplies	\$1,120.00
Total Cost	\$16,100.00