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ACADEMIC CALENDAR 2016 - 2019
ASSOCIATE DEGREE AND SCHOOL OF PROFESSIONAL PROGRAMS

SPRING SEMESTER II – 2016

New Student Orientation .................................................... March 10
Classes Begin ................................................................. March 14
Add/Drop Period .............................................................. March 14 - 25
Spring Recess ................................................................. March 16 - 18
SPP Commencement ......................................................... March 19
Good Friday Holiday – College Closed after 1:00 p.m. ........ March 25
Mid-term Examinations ..................................................... May 9 - 13
Honors Convocation ......................................................... May 11
Associate Degree Commencement .................................... May 14
Pre-Registration for Next Semester .................................. May 20 - 24
Memorial Day Holiday – College Closed ......................... May 30
Last Day for Course Withdrawal with a Grade of “W” .......... June 14
Classes End ................................................................. June 24
Final Examinations ......................................................... June 27 - 29

SUMMER SEMESTER I – 2016

New Student Orientation .................................................... May 12
Classes Begin ................................................................. May 16
Add/Drop Period .............................................................. May 16 - 20
Honors Convocation ......................................................... May 11
Associate Degree Commencement .................................... May 14
Memorial Day Holiday – College Closed ......................... May 30
Independence Day Holiday – College Closed .................... July 4
Mid-term Examinations ..................................................... June 20-24
Last Day for Course Withdrawal with a Grade of “W” .......... June 24
Classes End ................................................................. July 1
Final Examinations ......................................................... July 5-8

SUMMER TERM – 2016

New Student Orientation .................................................... July 7
Classes Begin ................................................................. July 11
Add/Drop Period .............................................................. July 11 – 15
Mid-term Examinations ..................................................... August 15-19
Summer Recess ............................................................... September 1-2
Last Day for Course Withdrawal with a Grade of “W” .......... September 2
Labor Day Holiday – College Closed .............................. September 5
Constitution Day ........................................................... September 17
Classes End ................................................................. September 16
Final Examinations ......................................................... September 19-23

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year's Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACADEMIC CALENDAR 2016 - 2019
ASSOCIATE DEGREE AND SCHOOL OF PROFESSIONAL PROGRAMS

FALL TERM – 2016

New Student Orientation................................................. October 6
Classes Begin ........................................................................ October 10
Add/Drop Period ................................................................. October 10-14
SPP Commencement ............................................................ October 15
Mid-term Examinations ......................................................... November 14-18
Thanksgiving Holiday – College Closed ............................... November 24-25
Last Day for Course Withdrawal with a Grade of “W” ............ December 2
Classes End .......................................................................... December 16
Final Examinations .............................................................. December 19-23

WINTER TERM – 2017

New Student Orientation...................................................... January 5
Classes Begin ....................................................................... January 9
Add/Drop Period ................................................................. January 9-13
Martin Luther King, Jr. Holiday – College Closed ............... January 16
Mid-term Examinations ........................................................... February 13-17
Last Day for Course Withdrawal with a Grade of "W" ........... March 3
Spring Recess ..................................................................... March 6-8
Classes End .......................................................................... March 17
Final Examinations .............................................................. March 20-24
SPP Commencement ............................................................. March 25
Honors Convocation ............................................................. May 10
Associate Degree Commencement ....................................... May 13

SPRING TERM – 2017

New Student Orientation...................................................... April 6
Classes Begin ....................................................................... April 10
Add/Drop Period ................................................................. April 10-14
Good Friday Holiday – College Closed after 1:00 p.m........... April 14
Spring Recess ..................................................................... April 17-19
Honors Convocation ............................................................. May 10
Associate Degree Commencement ....................................... May 13
Mid-term Examinations ......................................................... May 15-19
Memorial Day Holiday – College Closed ............................ May 29
Last Day for Course Withdrawal with a Grade of “W” ......... June 2
Classes End .......................................................................... June 16
Final Examinations .............................................................. June 19-23

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
**ACADEMIC CALENDAR 2016 - 2019**  
**ASSOCIATE DEGREE AND SCHOOL OF PROFESSIONAL PROGRAMS**

### SUMMER TERM – 2017

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### FALL TERM – 2017

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### WINTER TERM – 2018

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*Dates subject to change*  
The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
### SPRING TERM – 2018

- New Student Orientation: April 5
- Classes Begin: April 9
- Add/Drop Period: April 9-13
- Spring Recess: April 23-25
- Honors Convocation: May 9
- Associate Degree Commencement: May 12
- Mid-term Examinations: May 14-18
- Memorial Day Holiday – College Closed: May 28
- Last Day for Course Withdrawal with a Grade of “W”: June 1
- Classes End: June 15
- Final Examinations: June 18-22

### SUMMER TERM – 2018

- New Student Orientation: July 5
- Classes Begin: July 9
- Add/Drop Period: July 9-13
- Mid-term Examinations: August 13-17
- Summer Recess: August 30-31
- Last Day for Course Withdrawal with a Grade of “W”: August 31
- Labor Day Holiday – College Closed: September 3
- Summer Recess: September 4
- Classes End: September 14
- Final Examinations: September 17-21

### FALL TERM – 2018

- New Student Orientation: October 4
- Classes Begin: October 8
- Add/Drop Period: October 8-12
- SPP Commencement: October 20
- Mid-term Examinations: November 12-16
- Thanksgiving Holiday – College Closed: November 22 - 23
- Last Day for Course Withdrawal with a Grade of “W”: November 30
- Classes End: December 14
- Final Examinations: December 17 - 21

*Dates subject to change*

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
WINTER TERM – 2019

New Student Orientation.............................................................. January 3
Classes Begin.................................................................................. January 7
Add/Drop Period ............................................................................ January 7 - 11
Martin Luther King, Jr. Holiday – College Closed ..................... January 21
Mid-term Examinations ................................................................. February 11-15
Last Day for Course Withdrawal with a Grade of "W" .................. March 1
Spring Recess.................................................................................. March 6-8
Classes End...................................................................................... March 15
Final Examinations......................................................................... March 18-22
SPP Commencement ...................................................................... March 23

SPRING TERM – 2019

New Student Orientation.............................................................. April 4
Classes Begin.................................................................................. April 8
Add/Drop Period ............................................................................ April 8-12
Honors Convocation ..................................................................... May 8
Associate Degree Commencement ............................................. May 11
Mid-term Examinations ................................................................. May 13-17
Spring Recess.................................................................................. May 23-28
Memorial Day Holiday – College Closed ................................ April 27
Last Day for Course Withdrawal with a Grade of "W" ............... June 7
Classes End...................................................................................... June 14
Final Examinations......................................................................... June 17-21

SUMMER TERM – 2019

New Student Orientation.............................................................. July 2
Classes Begin.................................................................................. July 8
Add/Drop Period ............................................................................ July 8-12
Mid-term Examinations ................................................................. August 12-16
Summer Recess................................................................................ August 29-September 3
Labor Day Holiday – College Closed ......................................... September 2
Last Day for Course Withdrawal with a Grade of "W" ............... September 3
Classes End...................................................................................... September 13
Final Examinations......................................................................... September 16-20

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACADEMIC CALENDAR 2016 - 2019
ASSOCIATE DEGREE AND SCHOOL OF PROFESSIONAL PROGRAMS

FALL TERM – 2019

New Student Orientation.........................................................October 3
Classes Begin............................................................................October 7
Add/Drop Period ........................................................................October 7-11
SPP Commencement ....................................................................October 19
Mid-term Examinations.................................................................November 11-15
Last Day for Course Withdrawal with a Grade of “W”......................November 27
Thanksgiving Holiday – College Closed .....................................November 28 - 29
Classes End................................................................................December 13
Final Examinations......................................................................December 16 - 20

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACADEMIC CALENDAR 2016 - 2019
A.S. PHYSICAL THERAPIST ASSISTANT

SUMMER SEMESTER – 2016
Classes Begin .......................................................... May 9
Add/Drop Period ...................................................... May 16-20
Memorial Day Holiday – College Closed ........................ May 30
Independence Day Holiday – College Closed .................... July 4
Mid-term Examinations ............................................. July 5-7
Last Day for course Withdrawal with a Grade of “W” ........... July 26
Classes End .................................................................... August 12
Final Examinations .....................................................
Commencement ......................................................... August 18

FALL SEMESTER – 2016
New Student Orientation ............................................. August 25
Classes Begin ............................................................ August 29
Add/Drop Period ........................................................ September 1-9
Labor Day – College Closed ........................................ September 5
Constitution Day ....................................................... September 17
SPP Commencement .................................................. October 15
Mid-term Examinations .............................................. October 24-28
Thanksgiving Holiday – College Closed ........................ November 24 - 25
Pre-Registration for Spring Semester ............................... November 11 - 15
Last Day for Course Withdrawal with a Grade of “W” ........ December 6
Classes End .................................................................... December 14
Final Examinations ..................................................... December 15 - 21

SPRING SEMESTER – 2017
Classes Begin ............................................................ January 2
Add/Drop Period ........................................................ January 5-13
Martin Luther King, Jr. Holiday – College Closed ............. January 16
Mid-term Examinations .............................................. February 27 – March 3
Spring Recess – College Closed ................................... March 15 - 17
Last Day for Course Withdrawal with a Grade of “W” ........ April 5
Classes End .................................................................... April 19
Final Examinations ..................................................... April 20 - 26

*Dates subject to change
The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACADEMIC CALENDAR 2016 - 2019
A.S. PHYSICAL THERAPIST ASSISTANT

SUMMER SEMESTER – 2017

Classes Begin ................................................................. May 15
Add/Drop Period ............................................................. May 15 - 19
Memorial Day Holiday – College Closed ........................... May 29
Mid-term Examinations ...................................................... July 10 - 14
Independence Day Holiday – College Closed ...................... July 4
Last Day for Course Withdrawal with a Grade of “W” .......... July 26
Classes End ........................................................................ August 18
Final Examinations ............................................................. August 21 - 23
Commencement ................................................................. TBD

FALL SEMESTER – 2017

New Student Orientation ..................................................... TBD
Classes Begin ...................................................................... August 31
Add/Drop Period ............................................................... August 31 - September 8
Labor Day – College Closed ............................................... September 4
Mid-term Examinations ....................................................... October 23-27
Thanksgiving Holiday – College Closed ............................ November 23 - 24
Last Day for Course Withdrawal with a Grade of “W” ......... December 6
Classes End ......................................................................... December 8
Final Examinations ............................................................. December 11-15

SPRING SEMESTER – 2018

Classes Begin ...................................................................... January 4
Add/Drop Period ............................................................... January 4-12
Martin Luther King, Jr. Holiday – College Closed .............. January 15
Mid-term Examinations ....................................................... March 5 - 9
Spring Recess – College Closed .......................................... March 14 - 16
Good Friday Holiday – College Closed after 1:00 p.m. ......... March 30
Last Day for Course Withdrawal with a Grade of “W” ......... April 6
Classes End ......................................................................... April 18
Final Examinations ............................................................. April 19 - 25

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACADEMIC CALENDAR 2016 - 2019
A.S. PHYSICAL THERAPIST ASSISTANT

SUMMER SEMESTER – 2018

Classes Begin .............................................................. May 14
Add/Drop Period .......................................................... May 14 - 18
Memorial Day Holiday – College Closed .................. May 28
Mid-term Examinations .................................................... July 9 - 13
Independence Day Holiday – College Closed ............ July 4
Last Day for Course Withdrawal with a Grade of “W” ... July 26
Classes End ........................................................................ August 17
Final Examinations ............................................................ August 20-22
Commencement ................................................................. TBD

FALL SEMESTER – 2018

New Student Orientation .................................................... TBD
Classes Begin ................................................................. August 29
Add/Drop Period .............................................................. August 29 - September 7
Labor Day – College Closed .............................................. September 3
Mid-term Examinations ...................................................... October 29 - November 2
Thanksgiving Holiday – College Closed ...................... November 22 - 23
Last Day for Course Withdrawal with a Grade of “W” .......... December 6
Classes End ................................................................. December 14
Final Examinations ......................................................... December 17 - 19

SPRING SEMESTER – 2019

Classes Begin ................................................................. January 7
Add/Drop Period ............................................................... January 7-11
Martin Luther King, Jr. Holiday – College Closed ........ January 21
Mid-term Examinations ...................................................... March 4-8
Spring Recess – College Closed ....................................... March 13 - 15
Last Day for Course Withdrawal with a Grade of “W” .... April 5
Good Friday Holiday – College Closed after 1:00 p.m. .... April 19
Classes End ................................................................. April 19
Final Examinations ......................................................... April 22-26

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACADEMIC CALENDAR 2016 - 2019
A.S. PHYSICAL THERAPIST ASSISTANT

SUMMER SEMESTER – 2019

Classes Begin ................................................................. May 13
Add/Drop Period .............................................................. May 13 - 17
Memorial Day Holiday – College Closed ............................. May 27
Mid-term Examinations ...................................................... July 8 - 12
Independence Day Holiday – College Closed ....................... July 4
Last Day for Course Withdrawal with a Grade of “W” ............. July 26
Classes End .......................................................................... August 16
Final Examinations ............................................................ August 19 - 21
Commencement ................................................................. TBD

FALL SEMESTER – 2019

Classes Begin ........................................................................ August 28
Add/Drop Period ................................................................. August 28-September 1
Mid-term Examinations ......................................................... October 21-25
Thanksgiving Holiday – College Closed ............................... November 28 - 29
Last Day for Course Withdrawal with a Grade of “W” ............ December 6
Classes End .......................................................................... December 13
Final Examinations ............................................................ December 16 - 18

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACADEMIC CALENDAR 2016 - 2019
PRACTICAL NURSING PROGRAM

June 2015 – June 2016

Semester Begins (First Semester) ................................................................. June 30, 2015
Drop/Add ........................................................................................................ May 1-5, 2015
Second Semester ......................................................................................... October 26, 2015
Third Semester ............................................................................................ March 7, 2016
Independence Day Holiday (School Closed) ..................................................... July 1-3, 2016

Semester Ends ............................................................................................... June 24, 2016
Pinning and Commencement Date ............................................................... June 24, 2016

June 2016 – June 2017

Semester Begins (First Semester) ................................................................. June 30, 2016
Drop/Add ........................................................................................................ May 1-5, 2016
Second Semester ......................................................................................... October 24, 2016
Recess ............................................................................................................ December 19, 2016 – January 2, 2017

Third Semester ............................................................................................ March 13, 2015
Independence Day Holiday (School Closed) ..................................................... July 4-8, 2016
Martin Luther King Day (School Closed) ......................................................... January 26, 2017
Semester Break ............................................................................................. March 6-10, 2017
Semester Ends ............................................................................................. June 30, 2017
Pinning and Commencement Date ............................................................... June 30, 2017

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACADEMIC CALENDAR 2016 - 2019
PRACTICAL NURSING PROGRAM


Orientation .................................................................January 7, 2016
Semester Begins (First Semester) ......................................January 7, 2016
Drop/Add ........................................................................January 7-14, 2016
Martin Luther King Day (School Closed) ................................January 18, 2016
Semester Break .............................................................April 25-29, 2016
Second Semester ............................................................May 2, 2016
Third Semester ................................................................August 29, 2016
Good Friday (School closes @ 1:00) ....................................March 25, 2016
Memorial Day Holiday (School Closed) ................................May 30, 2016
Independence Day Holiday (School Closed) ..........................July 4, 2016
Labor Day Holiday (School Closed) ....................................September 5, 2016
Thanksgiving Day Holiday (School Closed) .........................November 24-25, 2016
Semester Ends ................................................................December 16, 2016
Pinning and Commencement Date ........................................December 16, 2016

January 9, 2017 – December 15, 2017

Semester Begins (First Semester) .........................................January 9, 2017
Drop/Add ........................................................................January 9-16, 2017
Martin Luther King Day (School Closed) ................................January 16, 2017
Semester Break .............................................................April 24-28, 2017
Second Semester ............................................................May 1, 2017
Third Semester ................................................................August 28, 2017
Labor Day Holiday (School Closed) ....................................September 4, 2017
Thanksgiving Day Holiday (School Closed) .........................November 23-24, 2017
Semester Ends ................................................................December 15, 2017
Pinning and Commencement Date ........................................December 15, 2017

*Dates subject to change

The following nine and one-half holidays are observed by the College: New Year’s Day, Martin Luther King, Jr. Observance, Good Friday (after 1 p.m.), Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Day before Christmas, Christmas Day.
ACCREDITATION AND APPROVALS

P.I.T. is accredited by the Middle States Commission on Higher Education (MSCHE), 3624 Market Street, Philadelphia, PA 19104, (267) 287-5000. MSCHE is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

P.I.T. is approved as a two-year College by the Pennsylvania Department of Education.

The P.I.T. Practical Nursing (PN) program is approved by the Pennsylvania State Board of Nursing.

IMPORTANT NOTICE – Rights Reserved

This catalog supersedes previous catalogs. The information contained in this catalog is for information purposes only and does not constitute a contract P.I.T. (or “the College”) reserves the right to make changes in the policies, programs, calendar, academic schedule, course content, admissions, certificate and associate degree requirements, tuition, fees, regulations, course offerings, other academic activities, and any other information contained in this catalog at any time without prior notice, although an effort will be made to convey such changes. While P.I.T. has attempted to ensure accurate information at the time of printing, P.I.T. assumes no responsibility for editorial, clerical, and programming errors which may have occurred during the publication of this catalog.

The online version of P.I.T. Catalog of Courses, 2016-2019, is available at http://www.pit.edu and http://my.pit.edu. The online catalog is the official catalog of P.I.T.

P.I.T. reserves the right to deny the admission of, the continued enrollment of, or the readmission of any student when it has been deemed necessary by P.I.T. to do so in the interest of the student, or of P.I.T., or otherwise.
A BRIEF HISTORY OF P.I.T.

The history of P.I.T. is one of longstanding commitment to student success and meeting the changing educational needs of the Greater Philadelphia region we serve.

P.I.T. was founded in April 1953 by Walter R. Garrison, a practicing engineer. Mr. Garrison recognized that many of the technical positions in industry do not require a four-year engineering degree but rather a shorter, practical, “hands-on” technical curriculum. Soon thereafter, the first P.I.T. classes began in one classroom near 69th Street Terminal in Upper Darby, Pennsylvania. A dozen students attended evening classes in which they studied mathematics and technical subjects such as aircraft stress analysis. The programs of study also included Architectural and Mechanical Engineering, which are still offered today.

As enrollment grew, day classes were added, and the school relocated to several increasingly larger locations in Upper Darby. In 1982, P.I.T. moved to its current 14-acre main campus at 800 Manchester Avenue, near Baltimore Pike, in Media, Pennsylvania.

In 1976, the Pennsylvania Department of Education (PDOE) authorized P.I.T. to award specialized associate degrees in its technical programs. In 1983, the Pennsylvania Institute of Technology was accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104. (267-284-5000) The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

In 1987 and 1989, the PDOE authorized P.I.T. to award associate degrees in its business programs.

In 1995, the PDOE authorized P.I.T. to operate as a two-year college in the Commonwealth, thus becoming Pennsylvania’s first private, non-profit, two-year Technology College.
During 2004, the College materially expanded its service to the community by establishing the School of Professional Programs, which offers certificate programs in Allied Health and selected other fields. The College enabled students who did not have the financial resources to spend two years to earn an associate degree to begin career jobs after graduation.

In 2006, the College brought additional educational opportunities to the Greater Philadelphia Region by opening a new location in Center City Philadelphia at the Curtis Center near Independence Square.

Also in 2006, MSCHE reaffirmed the College’s accreditation through 2016, the longest period possible. That year, the College received The College Board’s Best Practices Award for its Academic Developmental Program, which helps students in Mathematics, Reading Comprehension, and Critical Thinking skills.

In October 2007, the College held its first Practical Nursing Commencement and Pinning Ceremony.

In April 2008, the College received the 2008 Leaders of Distinction Education Award of “The Foundation of the Delaware County Chamber”.

In July 2010, the College admitted its first class for the new Practical Nursing Evening/Weekend Program, a 21-month program.

In September 2011, the first class began coursework for the new A.S. in Electronic Health Records Program at the Media campus.

During April 2013, the College celebrated its 60th Anniversary and evaluated its service to the community.

As a result of Mr. Garrison’s vision and leadership, P.I.T. has grown from its beginnings in one classroom with a dozen students to today’s thriving College with two locations.
A MESSAGE FROM THE FOUNDER

Welcome to P.I.T.! In the years to come, you will be proud of your decision to take charge of your future by enrolling in our career-enhancing programs with superior admission four-year transfer opportunities. We are here to work with you and help you succeed in fulfilling your academic and career goals with up-to-date, university and industry approved programs, university transfer and career counseling, tutorial services and a dedicated faculty.

P.I.T. was founded 63 years ago to provide each and every deserving student an opportunity to reach their academic and career goals through an advanced technical education. If you are prepared to work diligently to attain your goals, you can be a great success at the College.

P.I.T. is organized for your success. You are the reason there is a P.I.T. Our dedicated faculty and staff design each course to challenge you to learn and experience at your own pace. Should you experience difficulties, there are daily opportunities for free peer, group or private tutoring in our Student Resource Center. A caring professional is always available if you should face academic, life, family or health concerns. Career and university counseling will guide you through university transfer or career employment preparation.

Our programs are organized with the assistance of Advisory Boards of local leaders from relevant industries, corporations and universities. These Advisory Boards work with our faculty and administration to keep our programs state-of-the-art and imparting to the students the critical skills necessary to succeed in their chosen profession or university transfer.

You have taken the first major step toward your successful future through a technology-based career or university transfer. Dedicate yourself to your academic success. The time, money and efforts you deliver to your academic program will correlate with your success in all the years to come. Begin now the exciting journey to your future success. Show yourself that you can fly with the eagles!

Welcome to P.I.T.

Walter R. Garrison, P.E.
Founder and President
P.I.T.
MISSION STATEMENT AND GOALS

MISSION STATEMENT

The Mission of Pennsylvania Institute of Technology is student success. The College is committed to providing committed learners with a quality, collegiate and career-enhancing education in a supportive environment that promotes personal growth and prepares graduates for successful careers and/or college transfer opportunities.

GOALS

The curricula seek to prepare individuals for transfer to a four-year college or university and/or for meaningful employment in industry and/or business and as students in further educational endeavors by combining a core of general education courses in conjunction with a comprehensive technical education.

In addition, P.I.T. seeks:

- To utilize the dedicated faculty and the effective tutoring and counseling to provide the students an environment that substantially increases the degree of their success;
- To provide the support services necessary to assist all students to succeed;
- To effectively prepare those students for transfer to four-year colleges or universities;
- To provide an emphasis on transfer of essential knowledge and experience in their field of study to enable students to achieve demonstrated mastery of programmatic competencies;
- To promote an environment in which students are encouraged to keep abreast of changing developments in their fields through continuous learning and professional certification;
- To maximize the job placement rate of job seeking graduates;
- To share its technical resources with the community for technically related educational purposes; and
- To encourage in its students a sense of social responsibility so that they are able to function as well in their family and community as in their professional lives.
THE COLLEGE SEAL

The P.I.T. Seal is the official academic signature of the college. Its use is restricted to formal college documents such as diplomas, certificates, awards, and college publications.

The seal represents the life-changing benefits and enduring value of a P.I.T. education, as well as the dedication of the Board of Trustees, administration, faculty, and staff to our students and the community.

The college seal is comprised of the following elements:

**Circular Border:** contains the name and founding date of the college.

**Colors:** P.I.T. colors are blue and gold. In heraldry, blue symbolizes truth, and gold symbolizes light.

**Shield:** the shield symbolically protects the college’s mission and goals.

**Lamp of Learning:** is an ancient symbol of scholarship. The lamp signifies the opportunity for a P.I.T. education. It also represents the illumination that comes through technical and lifelong learning.

**Laurel:** symbolizes excellence and achievement. In ancient times, a laurel wreath was conferred for excellence and honor. Today, Nobel laureates are figuratively crowned with a laurel wreath for outstanding achievements in various fields.

**Blazing Torch:** represents the many academic and student support services that P.I.T. faculty and staff provide to our students to help them succeed in college and in life.

**Atom:** the nucleus of the atom signifies the technical and allied health programs offered at P.I.T.

**Scroll:** is emblazoned with the College’s motto, “Scholarship, Service, Strength”. Faculty, students, staff, and administrators strive to exemplify these ideals.

**PIT:** the short version of the College’s name, which is pronounced as the letters “P,” “I,” and “T.”
DEGREES AND CERTIFICATES AWARDED

Associate Degrees:

P.I.T. is approved by the Pennsylvania Department of Education and the State Board of Education to confer the Associate in Science (A.S.) degree.

The A.S. degree is awarded to students who have been graduated from the following majors:
- Allied Health – Clinical Medical Assistant
- Allied Health – Medical Billing and Coding
- Allied Health – Pharmacy Technician
- Allied Health – Practical Nursing
- Biomedical Equipment Engineering
- Business Management
- Communications
- Computer Science
- Computer Support Engineering
- Engineering
- General Studies
- Health Care Management
- Health Science
- Physical Therapist Assistant

Certificates:

- **Practical Nursing Certificate:**
  The *Practical Nursing* program is a three-semester curriculum which prepares graduates to sit for the Practical Nursing (NCLEX-PN®) examination. After passing the exam, graduates are qualified for entry-level positions requiring LPN licensure. Practical Nursing graduates may further their education at P.I.T. by completing additional required courses for an A.S. in AHT-PN degree.

- **School of Professional Programs (SPP) Certificates:**
  - Clinical Medical Assistant
  - Medical Billing and Coding Specialist
  - Pharmacy Technician

These three-term programs prepare graduates to sit for industry certification examinations. Graduates of these Certificate programs may further their education at P.I.T. by completing additional required courses for the respective A.S. in AHT degrees.
ADMISSIONS

Admission to P.I.T. is open to those who can benefit from the programs that P.I.T. offers.

Although enrollment is open to high school graduates who can benefit from P.I.T. programs, all new students must meet minimum academic skill levels. Prospective students are encouraged to apply early to ensure space availability in their desired major.

- Applications for admission to Associate Degree majors and the SPP certificate programs are accepted throughout the year.
- PN program applications are accepted throughout the year for the 12-month, full-time day program that starts in January.

Admissions Policy

Programs of study are offered at the certificate and associate degree levels. Admissions criteria vary according to majors. At a minimum, applicants must be a graduate of an accredited high school; hold a diploma issued by the PDOE, or has a recognized equivalent such as a passing score on the General Educational Development (GED) Test.

Additionally, the College accepts the United States Department of Defense Form DD214 Certificate of Release or Discharge from Active Duty, as proof that the applicant is a high school graduate or equivalent, provided that Form DD214 clearly indicates that the individual is in fact a high school graduate or equivalent.

Matriculation in Associate Degree Programs of Study

New students pursuing an associate degree in a specific program of study, except Associate in Science – Allied Health, will be enrolled and matriculated only in the Fall I and Spring I semesters of each academic year.

New students enrolling in the Summer I semester of each academic year are considered as non-matriculated except for those students specifically approved for matriculation by the Provost. These students are enrolled on a course-by-course basis. They will be enrolled and matriculated in the selected associate degree for the Fall I and Spring I subsequent semesters. Non-matriculated students may take English, mathematics, humanities, social science, academic enrichment and other appropriate courses during the Summer I semester that are required in all programs of study.

The Practical Nursing and Physical Therapist Assistant programs have specific admissions requirements and different program start dates.
Steps for Admission

Schedule a Personalized Information Session and Campus Tour with an Admissions Specialist:

Suburban Location:
Media Campus
800 Manchester Avenue
Media, PA 19063

Generally, the open hours are:
M, T, TH 8:00-7:00
W 8:00-5:00
F 8:00-4:30
Call for Saturday Hours

Telephone: (610) 892-1500
Fax: (610) 892-1533
Email: info@pit.edu

Application Form: Complete an Application for Admission form, available online at www.pit.edu or from the Office of Admissions.

Transcripts: Provide official transcripts from high school or copies of verification paperwork and test scores for a GED certification. Also provide official transcripts from any post-secondary school attended, such as colleges, universities, and career and technical schools.

Placement Assessment: Applicants are required to take a computerized placement assessment which measures their academic skills in English, reading comprehension, mathematics, and computer applications. This assessment helps determine a student’s placement into programs of study. Certain students, such as those who have submitted recent SAT or ACT scores or who have already earned an associate degree or higher, may not need to take the placement assessment.

Skill Enrichment Education: All entering students must demonstrate required English and mathematics skills necessary for their program of study. Students who have not demonstrated these skills in the placement assessment must successfully complete mandatory skill-enhancing coursework.

Additional Admission Requirements: Admissions criteria vary according to program of study. Some programs are restricted to applicants who meet certain placement scores and other prerequisites.

Selective Admission Requirements: Admission into the PN program is highly competitive and meeting the minimum admissions requirements does not guarantee acceptance into the program. The specific admission criteria are referenced under the PN program of study.

Acceptance into a Program of Study: Acceptance is finalized when applicants have met all criteria for their program of study and the College indicates there are sufficient student applicants to justify offering the program of study. The College reserves the right to deny acceptance into a major or recommend another major if the applicant does not meet the program-specific criteria. The Office of Admissions issues an official acceptance letter to those applicants who have satisfied their admission requirements. Acceptance is offered on a rolling basis throughout the year.

Registration: First-time applicants meet with an Admissions Specialist to select and enroll in courses based on the chosen program of study and placement assessment results.
Advanced Academic Credit

Advanced Placement Credit: Advanced placement credit is awarded to students for prior academic learning or work experience. Students who wish to petition for or would like information on advanced placement credit should contact an Assistant Dean of Academic Affairs.

Learning Credit for Experience: Learning credits for experience refer to credits earned from work and life experience. Students who wish to petition for or would like information on learning credit for experience should contact an Assistant Dean of Academic Affairs.

Transfer Credit: Applicants who wish to transfer credits from another college to P.I.T. need to have official transcripts from all prior post-secondary institutions sent directly to the Office of Admissions. An Assistant Dean of Academic Affairs will evaluate transfer credit.

Transfer Articulation Agreements to Four-Year Colleges and Universities

Articulation Agreements: P.I.T. has implemented Transfer Articulation Agreements with a number of four-year colleges and universities. Students who anticipate transferring to a four-year college or university after completing an associate degree at P.I.T. should contact the Coordinator for Job Placement, College Transfer and Externship.

The following institutions have an articulation agreement with P.I.T. and accept the transfer of some or all of the courses from the College into their programs:

- Alvernia University (Reading, PA)
- Bloomsburg University (Bloomsburg and Philadelphia, PA)
- Capitol College (Laurel, MD)
- DeVry University (Fort Washington, PA)
- Drexel University (Philadelphia, PA)
- Eastern University (St. Davids, PA)
- Goldey-Beacom College (Wilmington, DE)
- Jones International University (Centennial, CO)
- Lincoln University (Lincoln University, PA)
- Neumann University (Aston, PA)
- Peirce College (Philadelphia, PA)
- Philadelphia University (Philadelphia, PA)
- Strayer University (Springfield, PA)
- Temple University (Philadelphia, PA)
- University of Phoenix (Wayne, PA)
- Widener University (Chester, PA)
- Wilmington University (New Castle, DE)
TUITION, FEES, AND OTHER EXPENSES

TUITION AND FEES

Tuition and fees are established by the P.I.T. Board of Trustees. The Trustees reserve the right to change tuition and fees at any time and without notice.

Tuition, Fees and Expenses*

Tuition and Fees for Associate Degree and Certificate Programs
  - Tuition is $375 per credit hour plus tech fees.

A full-time student is defined as one who is enrolled in the P.I.T. Degree programs or SPP programs for 12 credits or more per term. Students who register in the Degree Programs for more than 18 credits must have the Provost approve the request.

Part-time students are defined as one who enrolls in 11 credits or less in the P.I.T. Degree programs or Certificate programs.

* Additional fees may be charged

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Tuition and Fees for the Practical Nursing Program

<table>
<thead>
<tr>
<th>Program</th>
<th>Full Time Tuition</th>
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<tbody>
<tr>
<td>Practical Nursing</td>
<td>$23,000</td>
</tr>
</tbody>
</table>

Tuition listed above for the Practical Nursing Program include books, fees, and supplies. Tuition rates are reviewed regularly and may be adjusted on an annual basis, at minimum, by the College’s Board of Trustees.

Fees

All students are required to pay certain fees, such as the Application, Cost of Fees, and Technology Fees.

Cost of Fees

Cost of Fees are different for each program depending upon many factors such as the books, supplies, equipment, scrubs, etc. that are provided to each student and the level of instructional support required including off-site clinical experiences, degree of on-site laboratory experiences, and other factors.

Technology Fee

A Technology Fee per credit hour enrolled is charged to cover the costs of upgrading and maintaining P.I.T.’s state-of-the-art equipment, software, and related technology.

Assessment of Experiential Learning Fee and Accredited Institutional College Credit Fee

College credits may be awarded for courses from non-accredited institutions and/or experiential learning experiences. See the Admissions Office for assistance with this process. Fees for assessment activities include a $150 portfolio evaluation fee plus $75 per credit hour transferred.
Transcript Fee
There is no charge for the first two P.I.T. transcripts requested by the student. Any additional transcripts are $3.00 each.

Graduation Fee
A charge of $100 will be assessed each graduating student to cover the costs of caps and gowns, producing his or her degree or certificate, and for other direct commencement expenses.

Special Non-Refundable Fees

<table>
<thead>
<tr>
<th>Fee Description</th>
<th>Fee</th>
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<tbody>
<tr>
<td>Return Check Fee</td>
<td>$45.00</td>
</tr>
<tr>
<td>Stop Payment Fee</td>
<td>$15.00</td>
</tr>
<tr>
<td>Transcript Fee (After first 2 free transcripts)</td>
<td>$3.00</td>
</tr>
<tr>
<td>Assessment of Experiential Learning Fee and Accredited Institutional College Credit Fee</td>
<td>$150.00 for evaluation of portfolio and assessment of experience, plus $75.00 per credit hour transferred from an accredited institution</td>
</tr>
<tr>
<td>Audit Course Fee</td>
<td>$150.00 per credit</td>
</tr>
<tr>
<td>Credit by Examination Fee</td>
<td>$150.00 per examination</td>
</tr>
</tbody>
</table>

Textbooks and Supplies
P.I.T. provides students with two options for obtaining the required textbooks each term – to purchase the textbooks through the College’s bookseller or through any other bookseller of the student’s choice. This policy does not apply to students enrolled in programs where the books are included in the program cost.

Currently, P.I.T. employs the services provided by ED MAP® (www.pitbookstore.com). Students whose tuition and fee charges are completely funded with Title IV aid in excess of all required and necessary charges will, if desired, be issued a book voucher redeemable through ED MAP®. However, in accordance with federal regulations, P.I.T. advises all students that there is no requirement to purchase any required textbooks through ED MAP®.

If a student qualifies and the student’s funding includes a book allowance, the student may request a stipend up to the amount of the scheduled book allowance (voucher) in order to purchase the required textbooks through a bookseller of the student’s choice. The stipend request must be made through the Business Office of P.I.T. where a check will be scheduled for disbursement to the student within seven (7) days* – provided the required funding has been received by the College.

*This timeframe applies to only those students whose financial aid is completed at least ten (10) days before the start of a term. All other requests are processed for disbursement within 14 days.

TUITION AND FEES PAYMENT POLICY
Billing: Full payment of tuition and fees is expected before each term begins. Students must pay the balance due in full or be approved for a College-acceptable payment plan. Students will not be allowed in class until satisfactory financial arrangements have been completed. Failure to pay on time may result in a student being administratively withdrawn from P.I.T.

Forms of Payment: P.I.T. accepts Visa, MasterCard, American Express, Discover Card, debit cards, personal checks, money orders, funds certified as collectable from approved government and scholarship organizations by the College Financial Aid Office or the College Business Office, and agency or sponsor funding.

How to Make a Payment: P.I.T. does not mail Student Account Summaries because this information is available online. Registered students may view their student account information and Form 1098T at http://students.pit.edu

- Registered students may make a payment online at http://students.pit.edu.
- Media Campus students may mail payments to the Student Accounts Administrator, Media Campus Business Office.
- Media Campus students may pay their bill in person to the Student Accounts Administrator, Media Campus Business Office.
- Center City Philadelphia Location students may pay their bill online, via telephone, or by mail.

For additional information, contact student accounts at (610) 892-1517 or (610) 892-1596.

WITHDRAWAL AND ADJUSTMENT OF CHARGES

This Withdrawal and Adjustment of Charges Policy applies to all students.

Students receiving financial aid are strongly encouraged to contact the Financial Aid Office before they withdraw from a course or withdraw from the College to determine the impact on current financial aid awards and the eligibility for receiving future financial aid.

TOTAL WITHDRAWAL AND ADJUSTMENT OF CHARGES

No refund of tuition and fees will be issued that is greater than 100% of the tuition and fees charged less any required deposits. Depending on the student’s financial aid status, the College will apply the College’s Withdrawal and Adjustment of Charges Policy and issue appropriate refunds according to the State or Federal Regulations for students receiving Title IV funding and other government funding. Full-time or part-time status of the student is determined as of the end of the Add-Drop Period. No adjustment of tuition or fees will be granted based on a change of status after the Add-Drop Period.

COLLEGE TOTAL WITHDRAWAL TUITION AND FEE ADJUSTMENT POLICY FOR ALL SEMESTERS

The College policy for the amount of the tuition and fee adjustment for the proper student-initiated Total Withdrawal from all courses for all students is:

- 100% adjustment prior to the first day of the semester and up to the end of the 5th day of classes
- 25% adjustment upon commencing the 6th through the 10th day of classes
- 0% adjustment after commencing the 11th day of classes
TOTAL WITHDRAWAL AND ADJUSTMENT FOR STUDENTS ON FEDERAL/STATE FINANCIAL AID

The College participates with the federal government in the Federal Pell Grant Program, Federal Supplemental Educational Opportunity Grant Program, Federal Stafford Loan Program, Federal Work Study Program, and the Academic Competitiveness Grant Program.

*It is extremely important that students contact the Financial Aid office if withdrawing from the College and that all withdrawal procedures mandated by these programs be followed. All tuition and fee adjustments are based on the withdrawal date.*

OFFICIAL TOTAL WITHDRAWAL

It is extremely important that students contact their College Financial Aid Advisor, especially if they are considering a total withdrawal. A total withdrawal can significantly affect future financial aid options.

All Tuition and Fee Adjustments are based on the date that the Academic Records office (ARO) or the Student Services Department receives a student-requested Official Total Withdrawal Form or an email or phone call from the student containing all the requested information on the Official Total Withdrawal Form, thus indicating total withdrawal from all courses. The student can obtain an Official Total Withdrawal Form by logging on the P.I.T. Student Resource Website and accessing the Policy Portal.
FINANCIAL AID AND STUDENT LOAN INFORMATION

The primary purpose of P.I.T.’s financial aid and scholarship programs is to provide financial assistance so that qualified students can reach their educational and career goals. A variety of financial aid programs are available to assist individuals and families unable to meet the full cost of a college education.

A student’s and parent’s expected contribution to educational expenses is determined by a financial need analysis. This analysis considers such criteria as income, household size, and number of family members in college, and investments and savings. Special circumstances such as loss of wages, divorce, and death of a spouse or parent may also affect the student’s financial aid.

The Financial Aid Office is available to assist student and parents in completing the required forms.

Types of Financial Aid: The basic types of financial aid are grants, loans, and federal work-study. Each program has its own criteria and guidelines for awarding funds. The College also offers scholarships to students who qualify.

Applying for Financial Aid: To be considered for financial aid, students must:

- Apply for Financial Aid online at www.fafsa.ed.gov which can be accessed through the P.I.T. Student Portal (http://students.pit.edu).
- Complete your federal tax return. If you and your parents complete your tax returns first, completing the FAFSA will be much easier. You will also not have to correct the tax information later.
- If you need help filling out the form go to: www.fafsa.ed.gov/contact.htm or call 1-800-4-FEDAID (433-3243).
- Apply for a PIN number prior to completing the FAFSA. With a PIN number, you can electronically sign your application, make corrections to your submitted application, and review your processed application date on the web at www.pin.ed.gov.
- Gather the following information before you sit down to complete the FAFSA:
  - Your Social Security number (can be found on your Social Security card)
  - Your driver’s license (if any)
  - Your most recent year’s W-2 Forms and other records of money earned
  - Your most recent year’s Federal Income Tax Return
  - Your parents’ most recent year’s Federal Income Tax Return (if you are a dependent student)
  - Your most recent year’s untaxed income records (Social Security, Temporary Assistance to Needy Families, welfare, or veterans benefits records)
  - Your most recent bank statements
  - Your most recent business and investment mortgage information, business and farm records, stock, bond, and other investment records
  - Your alien registration number or permanent residence card (if you are not a US citizen)
- Print a FAFSA from the Web worksheet. Write in your answers and, if a dependent student, gather your parents’ information so it is easier to enter the data into the FASFA on the Web at www.fafsa.ed.gov.
- Enter P.I.T.’s federal school code of 010998 on the FAFSA.
- Sign the FAFSA electronically by using your PIN number.
**Student Aid Report**: When you file a FAFSA electronically, it generally takes one (1) to three (3) days to receive a *Student Aid Report* (SAR), which contains your FAFSA application results. The results are sent electronically or mailed to the student. The Financial Aid Office receives an Institutional Student Information Record (ISIR) which will allow the Financial Aid Advisor to determine award eligibility. Awards are credited to the student's account after the term has begun.

**Verification**: Verification is the process the U.S. Department of Education uses to check the accuracy and validity of the information that a student provides when applying for Federal Student Aid. Verification covers the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Work-Study (FWS), Federal Perkins Loan, and Federal Direct Loan Programs.

The selection of an applicant for verification is completed by the Processing Center for the U.S. Department of Education. It does not necessarily indicate that P.I.T. believes that the information you have provided is incorrect. Your application is subjected to a multiple audit screening process. Listed below are some of the common scenarios for selecting applications for verification:

- Random sample based on the review of information.
- Data checked for consistency and logic based upon the common edits for each item on the FAFSA.
- Verification from the Social Security Administration, Selective Service Administration, Immigration and Naturalization Services, or Veterans Affairs Administration.
- Prior FAFSA submissions to the U.S. Department of Education.

The Verification process is required by Federal Regulations. P.I.T. must adhere to these regulations and procedures in order to offer and disburse Federal Student Aid to our students.

**** Until the verification process is completed on any student whose application has been selected for verification, Federal Student Aid funds may not be disbursed. Any student who fails to complete the verification process will lose their Federal Student Aid award. ****

For additional information on federal student aid, visit [http://federalstudentaid.ed.gov](http://federalstudentaid.ed.gov).

**Financial Aid Adjustments**: If you have been awarded any additional financial aid such as a private scholarship or employer tuition reimbursement, you must notify the Financial Aid Office of the awards. Students who add, drop, or withdraw from a course or courses are required to notify the Financial Aid Office of any changes, which may affect financial aid eligibility.

**Changes to Contact Information**: Students must notify the Financial Aid Office of any changes to their personal information such as address, telephone number, and marital status.

**Grants**: A *Grant* is aid awarded to a student based on financial need or other criteria defined by the funding source. Grant funding generally does not have to be repaid unless the student withdraws from school and owes a refund. To receive federal and state grant aid, students must be U.S. citizens or eligible non-citizens.

The following are summaries of federal and state grants. The information is subject to change. For additional information, contact a P.I.T. Financial Aid Advisor.

**Federal Pell Grant**: This program is federally administered and awards grants to full-time, part-time, and less than half-time undergraduate students who have demonstrated financial need and who are enrolled in a matriculated program at least three (3) credits per term. The maximum Federal Pell grant is determined each award year. Eligibility is for undergraduate students only.
Federal Supplemental Educational Opportunity Grant (FSEOG): This is a federal, campus-based program for full- and part-time students who demonstrate financial need. Students must be a Federal Pell Grant recipient. The amount of each award depends on the student's financial need, the availability of funds, and other financial aid awarded to the student.

Pennsylvania Higher Education Assistance Agency (PHEAA) Grant: Pennsylvania distributes grants from a fund appropriated each year by the State legislature from State revenues. Students must be Pennsylvania residents for one year prior to applying to P.I.T., have demonstrated financial need, be enrolled full-time (enrolled for 12 or more credits) or part-time (enrolled for at least six (6) credits) in a major which is at least two (2) full years in length, and not have earned a bachelor's degree. Students must also complete a FAFSA application. Students must file their FAFSA prior to May 1. For more information, visit PHEAA's web site at www.pheaa.org.

Grant Programs from Other States: Most states have their own grant programs and eligibility criteria. If a reciprocal agreement exists between Pennsylvania and the student's home state, students may use the grant in the home state. Delaware and Pennsylvania have a reciprocity agreement, but New Jersey and Pennsylvania do not. For more information, students should contact their state agencies.

STUDENT LOANS: A loan is borrowed money that needs to be repaid, along with interest and fees.


P.I.T. participates in the William D. Ford Federal Direct Loan Program. Financial need is determined by federal guidelines. The following information provides an overview of the Direct Loan Programs. For additional information, contact P.I.T. at (610) 892-1500 and ask to speak with a Financial Aid Advisor.

Federal Student Loans: Funds are borrowed from the federal government and are delivered to the student through a bank or other private lender that participates in the program. These low interest loans are insured by the U.S. Department of Education. Repayment of these loans to the bank or private lender begins six (6) months after the last date of attendance or the date upon which the student enrolls less than half-time. The student must complete a Master Promissory Note. Federal law requires first-time borrowers to complete entrance and exit counseling.

William D. Ford Federal Direct Loan Program

- **Subsidized Direct Loan**  
  Students must demonstrate sufficient financial need to qualify for this federal interest subsidy loan. Independent and dependent undergraduate students may borrow up to $3,500 for their first year and up to $4,500 for their second year. This loan is the student's responsibility; neither P.I.T. nor the student's parent is required to co-sign. The government pays the interest during the period the student is in school, the six-month grace period thereafter, and during a period of deferment. Repayment begins six (6) months after the student graduates, withdraws from P.I.T., or is enrolled less than half-time.

- **Unsubsidized Direct Loan**  
  Students who do not demonstrate sufficient need to qualify for grants or subsidized loans may receive this loan. Dependent undergraduate students may borrow up to $2,000 their first year and up to $2,000 for their second year. Independent undergraduate students and dependent students whose parents were denied a PLUS loan may borrow up to $6,000 for their first year and up to $6,000 for their second year. It has the same terms as a Subsidized Loan with one (1) exception: students are also responsible for payment of interest during the in-school and grace periods. Students may elect to defer the interest payments until repayment begins. However, interest will continue to accrue.
• **Direct PLUS (Parent Loans for Undergraduate Dependent Students) Loan**
  This loan program is designed to assist parents in the payment of educational expenses. Financial need is not required. Parents may borrow up to the cost of attendance minus all other financial assistance. The borrower is responsible for paying the interest. To be eligible to receive a PLUS Loan, the parent is required to pass a credit check. The parent may complete a Master Promissory Note at [www.studentloans.gov](http://www.studentloans.gov). If a parent is denied a PLUS loan, a dependent student is then eligible for an additional unsubsidized loan up to $4,000 per academic year.

**How Much Can You Borrow?**
The table below shows the maximum amount you, the student, can borrow each year and in total, based on your dependency status and grade level. A Financial Aid Advisor can tell you your dependency status. The actual amount you are eligible to borrow may be less than the amounts shown below and are based on factors determined by the College.

**These bullet points of information are also summarized in the tables below:**
- A dependent student cannot receive more than $31,000 of Stafford Loans (subsidized plus unsubsidized), including amounts outstanding for loans at other schools, overall. The maximum amount of subsidized Stafford Loans for dependent students is $23,000. Dependent students whose parents cannot borrow a PLUS Loan can borrow at the independent student levels.
- An independent student cannot receive more than $23,000 of subsidized Stafford Loans, and a total of $57,500, for unsubsidized and subsidized Stafford Loans, including amounts outstanding for loans at other schools, overall.
- **Subsidized loans** are awarded on the basis of financial need. You won't be charged any interest before you begin repaying the loan because the federal government subsidizes the interest during this time.

**Annual Loan Limits for Direct Subsidized Loans and Direct Unsubsidized Loans for Undergraduate Students**

<table>
<thead>
<tr>
<th></th>
<th>Dependent Undergraduate Students</th>
<th>Independent Undergraduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year (freshman)</strong></td>
<td>$5,500 (maximum $3,500 subsidized)</td>
<td>$9,500 (maximum $3,500 subsidized)</td>
</tr>
<tr>
<td><strong>Second Year (sophomore)</strong></td>
<td>$6,500 (maximum $4,500 subsidized)</td>
<td>$10,500</td>
</tr>
</tbody>
</table>

**Aggregate Loan Limits: Maximum Total Outstanding Loan Debt**

<table>
<thead>
<tr>
<th></th>
<th>Dependent Undergraduate Students</th>
<th>Independent Undergraduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Undergraduate</strong></td>
<td>$31,000 (maximum $23,000 subsidized)</td>
<td>$57,500 (maximum $23,000 subsidized)</td>
</tr>
</tbody>
</table>

*a Dependent students whose parents are unable to get PLUS Loans are eligible to receive the independent undergraduate loan limits.

*b Excludes dependent students whose parents are unable to borrow a PLUS Loan.

*c Includes dependent undergraduates whose parents are unable to borrow a PLUS Loan.
Obtaining a Loan

To get a Direct Loan, you must complete a Master Promissory Note (MPN). The MPN is a legally binding agreement stating that you agree you will repay your loan to the government. Your MPN contains the terms and conditions of the loan and how and when it must be repaid. You should always keep your MPN and any other loan documents in a safe place for future reference.

Cautions

You may use the loan money you receive only to pay for your educational expenses at the school that is giving you the loan. Education expenses include such school charges as tuition, room and board, fees, and indirect expenses such as books, supplies, and equipment.

Repaying Your Loan

For customized ESTIMATED repayment amounts, please visit www.direct.ed.gov.

FEDERAL WORK-STUDY (FWS)

The Federal Work-Study (FWS) program is designed to provide financial assistance through student employment during the academic year. For more information, see the FWS Handbook on the P.I.T. Student Portal (http://students.pit.edu).
COLLEGE AND FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS POLICY (SAP)

This SAP policy has been in effect since July 1, 2011.

Federal regulations require P.I.T. to establish and apply standards of financial aid satisfactory academic progress (SAP) for eligible students to receive financial assistance under the programs authorized by Title IV of the Higher Education Act. SAP is a federal student aid (FSA) eligibility requirement and is administered by P.I.T. in addition to the academic standards of performance required under the P.I.T. academic progress policy. The SAP policy is reviewed annually by the P.I.T. financial aid committee. Furthermore, the College has additional requirements for academic progress that apply to all students regardless of financial aid status.

Students are evaluated at the end of each term (fall term, spring term and summer term) for financial aid SAP once they have attempted 12 credit hours. All students are evaluated on three standards: Grade Point Average (GPA), (qualitative measure), credit hour completion ratio (quantitative measure), and maximum time frame. To maintain eligibility under SAP in “Good Standing,” students must meet all three (3) standards.

Attempted credits are defined as all hours, including remedial course work, for which the student either enrolls at P.I.T. or transfers into the College. Completed credits are defined as all hours in which the student receives the grade of "A," "B," "C," "D," or "P". Attempted, but not completed, credits are those in which the student receives the grade of "F," "FA," "I," or "W".

In addition, all students are evaluated each term for general academic progress, in the manner described below.

**Standard 1: GPA (Qualitative Measure)**

Students must maintain a minimum qualitative measure of progress defined as the cumulative GPA. The cumulative GPA includes all of the P.I.T. credit hours the student has attempted. The requirements are:

- Students in certificate program or associate degree program who have attempted 12 credit hours or more must maintain a minimum of a 2.0 cumulative GPA to continue receiving financial aid.

- In addition, the College requires all students, regardless of financial aid status, to maintain requisite cumulative and term GPAs. Students who do not maintain the cumulative GPA of 2.0 or whose GPA is less than 1.0 for any term or summer session are placed on Academic Warning. Students placed on Academic Warning are required to meet with their faculty advisor to review their scholastic standing.

- Students with Academic Warning status may be advised to consider registering for fewer courses until such time that they attain the required academic standing.

- Students will be placed on Academic Probation if they meet the criteria for Academic Warning status for two (2) terms, or if their cumulative GPA is 1.0 or below in any one (1) term. Students placed on Academic Probation must consult with their faculty advisor to plan a course of action.

**Standard 2: Credit Hour Completion Ratio (Quantitative Measure)**

Students receiving financial aid (either full-time or part-time) must maintain a minimum incremental progress by completing a percentage of all credit hours attempted including repeated courses, withdrawals, failures and incompletes. All students must successfully complete 67% of all cumulative credit hours attempted. As the chart demonstrates below, once the student attempts 12 credit hours, they must earn a minimum of eight (8) credit hours to meet the completion ratio.
Other than the above requirements for those receiving financial aid, the College does not have a credit hour completion ratio.

**Standard 3: Maximum Timeframe**

Students receiving financial aid must complete their degree program within 150% of the credit hour requirements for the degree. For example, if a certificate program at P.I.T. requires 36 credits for completion, under the 150% standard students are only eligible to receive financial aid for a maximum of 54 attempted credits. If an associate degree program at P.I.T. requires 63 credits for completion, under the 150% standard students are only eligible to receive financial aid for a maximum of 94 attempted credits. Students who are unable to complete their certificate program or their associate degree program within the timeframe limitation will be suspended from FSA program eligibility. The maximum timeframe limit may be reevaluated, on a case-by-case basis by the P.I.T. Director of Financial Aid if there are program changes that can eliminate prior courses that do not apply toward the current degree program.

**Academic Forgiveness**

A student receiving financial aid who qualifies for the “D” and “F” Forgiveness Rule for replacing the original grade with a new grade will have all earned grades counted in the quantitative measure, qualitative, and the maximum timeframe measure. For financial aid purposes all credits attempted will be used to determine SAP.

**SAP Notification**

Students are notified of the SAP policy in the P.I.T. catalogue and website. All periods of enrollment at P.I.T. are calculated in SAP, including periods of enrollment during which a student did not receive federal student aid. Cumulative GPAs are calculated using grades earned at P.I.T. Students receiving federal student aid who do not meet minimum SAP requirements will be notified by the Office of Financial Aid. Whether or not the student receives notification he is ineligible for federal financial aid when he has failed to meet one (1) or more of the SAP measures.

**Transfer Credits**

Transfer credits accepted toward the student’s degree program will be included when calculating the SAP Credit Hour Completion Ratio (Quantitative Measure) and the 150% maximum time frame.

**Remedial Coursework**

Students may receive federal student aid for up to 30 credit hours of remedial coursework. If more remedial courses are required, credit hours taken will not be considered for determining the amount of federal student aid. Credits for remedial courses, if accepted toward the degree program are counted toward the total credits in the student's maximum allowable timeframe for aid eligibility.

**Repeated Courses**

Students who are required to repeat a course due to a grade of F or due to a grade that falls below the graduation requirement may retake the course and include the credit hours when determining the student's enrollment status for Title IV purposes (i.e., Title IV funds may pay for the repeated course). However, repeated coursework cannot replace classes already completed by a student. Instead, the credits must be in addition to those already earned. Repeated courses will count toward the qualitative...
and quantitative progress requirement of SAP. They will also count towards the maximum time frame for eligibility.

Incomplete (I) or Missing Grades

Students receiving federal student aid may receive incomplete or missing grades, as allowed under P.I.T. academic policy. Incomplete and missing grades will count toward the quantitative and maximum time frame elements of SAP. As provided by P.I.T. academic policy, students who do not complete course requirements after an incomplete grade is assigned will receive a course grade based on the assignments completed with zeros being assigned for non-completed assignments. Incomplete grades and missing grades will be counted as an "F" until an earned grade is assigned for financial aid SAP determination. The SAP determination will be re-evaluated if a grade of “D” or better is assigned.

Financial Aid Warning

Students who do not maintain SAP under this policy will initially be placed on Financial Aid Warning and will be notified of their warning status. While on financial aid Warning, they will be eligible to receive federal student aid for their next 12 credit hours. Students on financial aid Warning will be reviewed at the end of each term. At the end of the Warning period, if they do not meet all conditions of SAP for Good Standing, they will have their federal student aid eligibility suspended.

Financial Aid Probation

If a student is suspended from financial aid, and has met with their Program Manager who has approved an academic plan to enable the student to reach Good Standing within one (1) term; the student will be placed on Financial Aid Probation and may use financial aid during the probationary period. At the end of their probationary period, if they do not meet all conditions of SAP for Good Standing they will have their federal student aid eligibility suspended.
Suspension of Federal Student Aid

By statute, students on financial aid Probation who do not meet SAP requirements after the warning or probationary period are ineligible for federal student aid program funding. Students who do not maintain SAP or fail to meet the conditions of their financial aid Probation will be notified by P.I.T. and suspended from receiving federal student aid.

Reinstatement of Federal Student Aid

A student may be reinstated for federal student aid once they have successfully met all of the conditions of the financial aid SAP policy.

SAP Appeal Petition

Students may appeal suspensions by completing the SAP appeal petition. Requests for reinstatement of eligibility must be made to the P.I.T. Office of Financial Aid no later than one (1) month prior to the term in which the student desires to enroll. Students may appeal their suspension under SAP if they were unable to maintain SAP as a direct result of hardship or special circumstances, as provided by federal regulations. Personal situations such as the death of a student's relative, an injury or illness of the student, or other special circumstance may prevent a student from achieving satisfactory academic progress. As a result, a student may appeal his or her suspension of federal student aid by completing the SAP appeal petition and by submitting the petition to the financial aid office. If the appeal is approved, a student will have a probationary period of 12 credit hours (attempted hours) during which he or she will receive federal student aid and reestablish eligibility under SAP. The financial aid director will submit completed SAP appeal petitions to the financial aid appeal board for review. The appeal board will make the final determination on all appeal petitions and forward all decisions to the financial aid director for action. The financial aid director will notify students of their appeal results within two weeks of submitting an appeal request. Students may be asked to submit additional documentation to support their request. Students may also resubmit a new appeal with additional documentation for consideration.

Reinstatement of Federal Student Aid

A student may be reinstated for federal student aid by paying for tuition and fees on their own and successfully meeting all of the conditions of the financial aid SAP policy for Good Standing or may be reinstated after they have successfully regained eligibility though the appeal process. Students who are granted an appeal will be reinstated on probation.
SCHOLARSHIPS

A scholarship is a type of financial aid that does not have to be repaid. Each scholarship has its own eligibility criteria such as financial need, academic achievement, program of study, or a special skill. Recipients are chosen through an application process based on the criteria.

P.I.T. Scholarship Information

P.I.T. is committed to the success of our students. We know how difficult it is for students to fund their education while working and maintaining their personal lives. The scholarships, grants and loans shown below are available for those in need of funding. This is just part of the way we can help students achieve their goals.

Applicants for participation in a P.I.T. Scholarship Program must file a FAFSA application so that eligibility for federal and/or state grant programs can be determined. The amount of a P.I.T. Scholarship award may be reduced by federal and/or state grants for which a student is determined to be eligible. Participation is limited to four (4) terms of full-time study for full-time students and a pro-rated number of terms for part-time students. The academic standards to continue to receive P.I.T. Scholarship support are established within each program of study.

P.I.T. Scholarships:

Anthony and Mary Waltrich Scholarship:
Provides up to $3,000 to Catholic high school graduates registered in a full-time degree program and involved in community service.

FAFSA File Date: May 1st
HS GPA: 2.5 min
SAT: N/A
Essay or Interview: Both
Reccomendation Letter: One (1) from high school faculty or advisor
P.I.T. GPA Criteria: 1st year GPA of 2.5 minimum
Personal College Assessment: Meet Program target Accuplacer® scores

Margaret Kuo Scholarship
One full scholarship per academic year; three (3) additional for $3,000 per academic year. Requirements: Recipient must be of Asian descent, 18 years of age or older and current high school senior.

FAFSA File Date: May 1st
HS GPA: 3.5 min
SAT: 1450
Essay or Interview: Both
Reccomendation Letter: One (1) from high school faculty or advisor
P.I.T. GPA Criteria: 1st year GPA of 3.0 minimum
Personal College Assessment: Meet Program target Accuplacer® scores

Dr. Clarence R. Moll Scholarship
Up to $3,000 scholarship toward tuition for students registered at least half-time in a degree program. Recipient may be a new or returning student at P.I.T.

FAFSA File Date: May 1st
HS GPA: 2.5 min
SAT: N/A
Essay or Interview: Both
Reccomendation Letter: One (1) from high school faculty or advisor
P.I.T. GPA Criteria: 1st year GPA of 2.5 minimum
Personal College Assessment: Meet Program target Accuplacer® scores
Eugene A. Braun Scholarship
Five (5) supplemental scholarships of up to $500 for a 2nd year P.I.T. student majoring in Computer Science.
FAFSA File Date: May 1st
HS GPA: N/A
SAT: N/A
Essay or Interview: Both
Recommendation Letter: One (1) from P.I.T. Program Manager
P.I.T. GPA Criteria: 1st year GPA of 3.0 minimum
Personal College Assessment: No – current students only

John Furey Scholarship
One supplemental scholarship per year of up to $500 for a 2nd year P.I.T. student majoring in Computer Science.
FAFSA File Date: May 1st
HS GPA: N/A
SAT: N/A
Essay or Interview: Both
Recommendation Letter: One (1) from P.I.T. Program Manager
P.I.T. GPA Criteria: 1st year GPA of 3.0 minimum
Personal College Assessment: No – current students only

P.I.T. Industry Supported Opportunity Grant
Provides up to 100% funds for tuition and textbooks for first-time degree students. Requirements: Must be a Pennsylvania resident who qualifies for a maximum PHEAA grant and a maximum Pell grant.
FAFSA File Date: May 1st
HS GPA: N/A
SAT: N/A
Essay or Interview: Both
Recommendation Letter: One (1) from employer or advisor
P.I.T. GPA Criteria: 1st year GPA of 2.5 minimum
Personal College Assessment: Meet Program target Accuplacer® scores

Presidential Scholarship
New, full-time students who have achieved or surpassed scores required on all three Accuplacer dimensions of essential academic skills will receive a Presidential Scholarship “up to” but not to exceed $1,000 for the first term, only after PHEAA and PELL grants have been awarded, in order to meet unfulfilled financial needs.
FAFSA File Date: May 1st
HS GPA: N/A
SAT: N/A
Essay or Interview: N/A
Recommendation Letter: N/A
P.I.T. GPA Criteria: First semester incoming students only
Personal College Assessment: Meet Program target Accuplacer® scores

Trustee’s Scholarship
A Trustee’s Scholarship will be awarded “up to” but not to exceed $1,500, for the 2nd term, and $2,000.00, for the 3rd term, only after PHEAA and PELL grants have been awarded in each term, in order to meet unfulfilled financial needs for the current term. No student stipends or refunds will be released directly to students from funds awarded through a Trustee’s Scholarship.
FAFSA File Date: May 1st
HS GPA: N/A
SAT: N/A
Essay or Interview: N/A
Recomendation Letter: N/A

P.I.T. GPA Criteria: 2nd term students must earn 3.0 min in previous term; 3rd term students must earn a 3.40 min in previous term

Personal College Assessment: Current students only

SPP High School Senior Scholarship
Supplemental scholarship of $1,000 for one (1) student per high school. Requirements: One (1) award per high school.
FAFSA File Date: May 1st
HS GPA: N/A
SAT: N/A
Essay or Interview: N/A
Recomendation Letter: One (1) from Guidance Counselor
P.I.T. GPA Criteria: First semester incoming students only
Personal College Assessment: Meet Program target Accuplacer® scores

Notification Letter: Students who are awarded a scholarship receive a mailed notification letter and a Notification Letter via the P.I.T. Student Portal, which states the amount to be credited to their student account. The actual award amount will be adjusted not to exceed the recipients' tuition and fees. The amount of a scholarship award may be affected by federal and/or state grants for which the student is determined to be eligible.

External Scholarship Information:

Commonwealth “Good Citizen” Scholarship
Associate degree students may compete for seven Commonwealth “Good Citizen” Scholarships of $1,000 each. The scholarships are reserved for full-time undergraduate students who have shown extraordinary commitment to community service and who have demonstrated creativity in shaping their volunteer activities. The GPA is considered only in the event of a tie. These scholarships are administered by the Association of Independent Colleges and Universities of Pennsylvania (AICUP), of which P.I.T. is a member. Application forms are available from a Financial Aid Advisor or by visiting the AICUP website at http://www.aicup.org.

New Economy Technology Scholarship Program (NETS)
The Pennsylvania New Economy Technology Scholarship (NETS) Program provides scholarships for Pennsylvania students who are pursuing higher education and training in science, technology, and allied health. The Technology Scholarship is awarded through this program.

The Technology Scholarships provide up to $1,000 per year for full-time students based on total educational costs to Pennsylvania high school graduates who do not seek a four-year education but do want to succeed in a technology-based economy. Part-time students enrolled for at least three (3) credits per semester or the equivalent are eligible to be considered for a scholarship based on tuition and mandatory fees as reported by the school, less any Federal Pell and State Grant aid, up to a maximum of $1,000 or 20% of their tuition and mandatory fees, whichever is less. The application deadline is December 31 of the academic year for which a student wishes to receive the scholarship.

To qualify for this scholarship, a student must:
- Be a resident of the Commonwealth of Pennsylvania.
- Be a high school graduate.
- Be enrolled at a PHEAA-approved Pennsylvania school in an approved science, technology, or allied health program.
- Maintain at least a 3.0 cumulative GPA or the equivalent during postsecondary study; this will be checked annually, at the end of each spring term.
- Commence employment in Pennsylvania in a field related to a NETS approved program of study within one year after completion of studies, and continue employment, one year (12 months) for
each year (two semesters or three quarter terms) of full-time NETS funds received. Each full-time semester award carries a six-month work obligation and each full-time quarter award carries a four-month work obligation. Funds received for part-time terms require a proportionally shorter work obligation. A deferment of the employment obligation is available for those students who enroll in full-time graduate/undergraduate study within one year of the student’s receipt of a baccalaureate degree.

- Apply for a Federal Pell Grant and Pennsylvania State Grant by completing the current year’s FAFSA. Apply on-line at www.pheaa.org/afasa.

**UPS Scholarship Program**
The UPS Foundation created the UPS Educational Endowment Fund at the Foundation for Independent Higher Education (FIHE). Each FIHE-affiliated college awards the UPS Scholarship to any full-time undergraduate student the school chooses. The scholarship may also be divided among multiple recipients. At P.I.T., the Scholarship Committee selects the recipient(s) based on academic achievement and community service. The monetary amount of the yearly award varies.

**Other Scholarship Sources:**
Numerous private scholarships are funded by foundations, corporations, unions, fraternities and sororities, employers, religious and civic organizations. Interested students may obtain further information on these scholarships from their high school guidance counselors, public library, and the internet.

Web sites include:
- [http://www.fafsa.ed.gov](http://www.fafsa.ed.gov) (Free Application for Federal Student Aid)
- [http://www.pheaa.org](http://www.pheaa.org) (Pennsylvania Higher Education Assistance Agency)
- [http://gibill.va.gov](http://gibill.va.gov) (GI Bill Website: U.S. Dept. of Veterans Affairs)
- [http://www.todaysgibill.org](http://www.todaysgibill.org) (Today’s GI Bill – Website Sponsored by ACE)
- [http://www.nasfaa.org/students/About_Financial_Aid.aspx](http://www.nasfaa.org/students/About_Financial_Aid.aspx) (National Association of Student Financial Aid Administrators: Students, Parents and Counselors Page)
- [www.fastweb.com](http://www.fastweb.com) (FastWeb)
- [http://www.aie.org/paying-for-college](http://www.aie.org/paying-for-college) (TG™ Adventures in Education, Paying for College Webpage)
- [www.scholarshipprovider.net](http://www.scholarshipprovider.net) (Scholarship Provider.net)
- [www.finaid.org](http://www.finaid.org) (FinAid: The SmartStudent™ Guide to Financial Aid)

**VETERANS EDUCATION BENEFITS**
P.I.T. is approved by the U.S. Department of Veterans Affairs (VA) for Education and Job Training Programs. All programs offered in Media and Center City are approved for military veterans and sons and daughters of deceased veterans. P.I.T. is also a member institution of the Service members Opportunity Colleges (SOC).

Standard admissions procedures apply to all veterans. New students should bring their original Discharge Document (DD form 214, copy 4) or a Notice of Basic Eligibility (NOBE). Veterans attending college for the first time need to obtain an Application for VA Education Benefits (VA Form 22-1990) from either a P.I.T. Financial Aid Advisor or the VA website ([http://www.gibill.va.gov/apply-for-benefits/application](http://www.gibill.va.gov/apply-for-benefits/application)). This form and a certified copy of the DD-214 should be submitted to a P.I.T. Financial Aid Advisor. Veterans transferring from another institution need only complete Request for Change of Program or Place of Training (VA Form 22-1995). The completed VA Form 22-1995 must be submitted to a P.I.T. Financial Aid Advisor as soon as possible prior to the new program’s start date. After registration, a P.I.T. Financial Aid Advisor will certify the student’s enrollment and forward original forms to the VA. Returning students should submit a copy of their student schedule to a P.I.T. Financial
Aid Advisor for certification with the VA. Any changes in enrollment status (i.e. drops, adds, or withdrawals, change of major), must be reported to the VA as soon as they occur.

For additional information regarding veterans’ benefits, refer to the Veterans Administration website: [http://www.va.gov](http://www.va.gov). For additional information about using your VA benefits at P.I.T., contact Dona Marie Fabrizio, P.I.T. VA Liaison, at (610)-892-1514 or email dfabrizio@pit.edu.

**EMPLOYER TUITION REIMBURSEMENT PLANS**
Numerous Delaware Valley companies offer full or partial tuition reimbursement programs that are designed to assist employees advance their careers through higher education. Students pay their tuition then receive full or partial refund from their employer. Students should inquire of their employers for further information.
STUDENT SERVICES INFORMATION

P.I.T. is proud of its emphasis on assisting students to succeed in college. The Student Services Department provides academic support and financial literacy counseling, transfer counseling, and peer and professional tutoring. The Coordinator for Job Placement, College Transfer and Externship provides career planning and placement assistance to all students. Student Services also administers the federal TRIO Student Support Services Grant Program, the P.I.T. Library, and the P.I.T. Stop Café. In addition, a variety of activities, volunteer opportunities, and membership in two academic honor societies are available to students.

The Innovation Center: The Innovation Center serves as P.I.T.’s primary location for students to receive assistance in improving and advancing their academic skills and course completion. The Innovation Center also houses the College’s peer and professional tutoring program. The Innovation Center is also an open lab area that provides resource materials and equipment to assist students in all phases of their education.

The Innovation Center in Media is open from 8:00 AM to 5 PM, Monday-Thursday; and, 8:00 AM to 4:30 PM on Fridays. Holiday or summer hours may vary due to changes in the schedule.

The Center City SRC is located on the first floor of the Curtis Center (Room 125). Center City’s SRC is open all day.

Library: P.I.T.’s Library provides resources and services to P.I.T. students, faculty, staff, and alumni that support their educational and lifelong learning goals while providing a gateway to the world of knowledge and information. Library resources consist of print volumes, eBooks, audiovisual materials, and full-text databases. The Special Collections include the Founder’s Collection (covering numerous subjects), the Hinderliter Collection (covering archaeology and architecture), and the Honeywell Collection (covering engineering).

Library services include reference assistance, information literacy instruction, interlibrary loan, the online catalog PITCat (http://pitcat.pit.edu), and Internet access. Information Literacy workshops are offered to classes and individuals. A television to view DVDs and videos, computers, laser printers, and a coin-operated photocopier are available to support students’ work. To use print volumes and audiovisual materials, Center City students are welcome to visit the Media Campus or use its next-day delivery service. Off The Shelf, the monthly Library newsletter, features research techniques, explanations of new or expanded services, and listings of new materials. Alumni have lifetime privileges to many Library resources and services.

The Library maintains membership in ACCESS PA, a database which facilitates resource sharing among Pennsylvania libraries; OCLC, an international library resource sharing network; and Lyrasis, a regional library network.

Location: The P.I.T. Library is located on the first floor of the Media Campus adjacent to the Admissions Department.
Hours: Monday, Tuesday, Thursday, 8:30 AM-7:00 PM., Wednesday, 8:30 AM-5:00 PM., Friday, 8:30 AM -5:00 PM. The Library is also open as necessary to support evening and weekend programs. Summer hours may vary.
Associate Degree Programs:

Jumpstart: This six-week, summer academic enrichment program is open to incoming associate degree students whose placement scores indicate the need to strengthen basic skills to succeed in college. Jumpstart students take classes in Reading, English, Mathematics, and Computers. Academic Support Counseling services are an important part of the program. At the end of the program, Jumpstart students take P.I.T.’s placement tests. Students who have sufficiently raised their scores are not required to enroll in developmental education courses.

Academic Support and Financial Literacy Counseling: Academic Support and Financial Literacy Counselors are available to all students on both campuses to provide educational counseling as well as counseling for personal development and financial literacy, including a clear understanding of the SAP policy, to assist students in attaining academic success. The counselors on staff are highly trained and experienced professionals who counsel and/or advise students by appointment and on a walk-in basis. Students are encouraged to avail themselves of the services of an Academic Support and Financial Literacy Counselor according to their designated major and/or campus. Time management, goal setting, and academic progress are reviewed regularly according to individual student needs. Each Academic Support and Financial Literacy Counselor works one (1) night a week till 6:00 PM or 7:00 PM. Work schedules are posted throughout the College and on each Academic Support and Financial Literacy Counselor’s door.

Tutoring Services: Tutoring Services are provided in the Innovation Center by peer, associate or professional tutors. Professional tutors are required to have a minimum of a Bachelor’s Degree, Associate tutors are required to have an Associate Degree and peer tutors are referred by faculty and must maintain a GPA of 3.0 or better. Tutoring services are provided either by appointment or on a drop-in basis. All tutors are very knowledgeable in their chosen fields and peer tutors are recommended by faculty. Students may attend tutoring sessions as often as necessary. Appointments in Media are facilitated through the Tutorial Coordinator whose office is located across from the Academic Records Office. Appointments in Center City are facilitated through the Assistant Dean of Academic Affairs, Dr. Lea Capobianco and the Academic Support Counselors.

JOB PLACEMENT AND TRANSFER SERVICES:

The Office of Job Placement and College Transfer Services is committed to assisting students and alumni in the successful realization of challenging, meaningful, and rewarding careers. We provide a wide array of cutting edge career-related services including career counseling, job search workshops and coaching, career library resources, full-time job search assistance, an electronic job leads portal, four-year college transfer fairs and job fairs, resume and cover letter writing assistance, interview preparation and practice interviews.

The College’s role in the graduate’s job search effort is to provide job search assistance for each student approaching graduation and who is newly graduated, and the graduate’s role is to make substantial, good faith efforts to find employment. The College’s services assist graduates in obtaining positions commensurate with their skill development. While the service is provided to assist in the job search; the graduate is still responsible to seek job openings, send resumes, prepare for job interviews and do all those things suggested by their Placement Advisor customarily done to aggressively obtain employment. Students are advised that the goal of the College’s Career Services Program is only to provide assistance, not obtain jobs for the graduate. This is for a very simple reason. Only the graduate can properly prepare his or her resume, conduct a job search, attend a job interview, impress the prospective employer, and accept or decline on offer. The College’s role is to assist the graduate in accomplishing these activities.

As with anyone who enters a new career field, graduates can generally expect entry-level positions; however, the level of employment obtained and the likelihood of obtaining employment are heavily dependent on the student’s job search efforts and the record the student achieves while in school. Students are advised that their transcripts may be requested by future employers.
The Office of Career Placement and College Transfer is staffed by the Coordinator for Job Placement, College Transfer and Externship, who provides job placement assistance and four year college transfer advising to degree students at both campuses as well as to Media PN students, and a SPP Job Placement Coordinator, who provides job placement assistance to SPP students.

Degree Job Placement and Transfer to Four-Year Institutions

Career Planning and Placement for Degree Students: Lifelong placement services are available to each graduate upon completion of their degree program. Many prominent Delaware Valley companies such as Boeing, Exelon Energy, State Farm Insurance, PENNDOT, Crozer Chester Medical Center, Elwyn Institute and Southco, as well as many others have employed P.I.T. graduates.

Students and alumni are encouraged to use the resource and reference materials available in the Job Placement and College Transfer Services Office and the P.I.T. Library. Job-hunting books, periodicals, college/university and employer directories, brochures, job postings and other sources of information about careers, colleges and specific companies are available. Videotapes and DVDs of job search methods, as well as additional printed materials concerning career development, can be utilized. Computer terminals for viewing job postings are located in the Library and the Student Resource Center.

Career Planning for Degree Students: Career planning is a process through which students learn to evaluate their interests, values and skills to determine how these relate to an occupational choice. Students uncertain as to their career direction are encouraged to make an initial one-on-one career planning appointment with the Coordinator for Job Placement, College Transfer and Externship. Before completion of the student's third term, all students should make a one-on-one appointment to assess what the student will need to accomplish before graduating to reach their career goals.

Degree Job Placement: The Office of Job Placement and College Transfer Services is committed to supporting every student's goal of launching a satisfying career upon graduation or transferring to a four-year institution. All students who complete their Associates Degree have lifetime placement assistance. Career planning sessions with the Coordinator for Job Placement, College Transfer and Externship are available by appointment for prospective graduates to utilize career placement services such as resume writing, cover letter writing, interviewing skills, and dressing for success.

On-Campus Degree Placement and College Transfer Events: Business and industry representatives, along with employers and technical recruiters, have the opportunity to participate in Career Fairs, held annually during the fall or spring terms. In addition, a college transfer fair is held every fall term. These are designed to assist our graduates by providing opportunities for continuing their education and meeting employers to network for career opportunities.

Career and Job Placement Services for All Students: The College takes pride in offering our graduates services and resources that give them an advantage in a competitive job market and global economy. Our students directly benefit from the College’s ever-growing relationships with local employers and from the knowledge in job search techniques that the College staff has developed. Despite those advantages, no reputable college or other postsecondary institution can or would guarantee the success of any graduate or that the graduate will achieve his/her specific career, financial, or other goals. The reason for this is that no educational institution can guarantee a student’s future! A student's career success will depend largely on that student’s attitude, determination, and the effort put into school work, the job search, and the job. For that reason, the college strictly prohibits its employees from making any promises regarding the student’s success. In the end, only the student can guarantee his/her success. The individual graduate is properly responsible for and should receive full credit for his/her job and career success.

Upon graduation, students who are not employed and want a job are responsible for continuing their job search, on a full-time basis, by contacting potential employers, searching out job leads, applying for available job openings, etc. Students/graduates are also expected to stay in contact with the Coordinator for Job Placement, College Transfer and Externship at least monthly for
suggestions and updates, to receive available job leads, and are expected to conduct a thorough job search to find the job the graduate wants.

The College provides an electronic portal where employers can post job leads and both Degree and SPP students can post resumes. At times, the College reviews job leads that it receives and attempts to “fit” available Degree and or SPP graduates to specific job leads. In these cases, the College will determine which graduate’s strengths and weaknesses most closely approximate the requirements of a specific job lead and then provide that lead to those graduates or (students about to graduate). It is the graduate’s responsibility to contact and/or respond to the employer, use the skills learned working with their Job Placement advisor, schedule a job interview and ultimately accept or decline the job offer. The College reserves the right to withhold assistance from students/graduates who do not follow the techniques they have been taught, or who are not making a dedicated job search effort. The career placement assistance described above is available to students in their final term at P.I.T. as well as to Alumni. As Degree students prepare to graduate in their last term, they are required to meet with the Coordinator for Job Placement, College Transfer and Externship, and begin their job search on a part-time basis. The Coordinator for Job Placement, College Transfer and Externship will review job search readiness and give suggestions as the student begins the job search.

Transferring to Four-Year Institutions to Achieve Higher Education: The Coordinator for Job Placement, College Transfer and Externship can also assist students who are looking to further their education and transfer into a four-year college or university. It is important for students to schedule an initial one-on-one meeting at least one year prior to graduation, especially if students are not certain where they would like to transfer, in order to meet all four-year institutions’ application deadlines.

SPP Job Placement: Job placement assistance for SPP students and SPP alumni is provided by the Coordinator for Job Placement, College Transfer and Externship. To engage SPP students in the job search process, the Coordinator for Job Placement, College Transfer and Externship presents to SPP students during class time, usually in their second term (as pre-arranged with instructors) to cover areas such as resume and cover letter writing, interviewing, interview preparation and the job search. Also addressed are topics such as dressing for success, professionalism and expectations related to SPP students pursuing and succeeding in a professional position they are likely to pursue with their MA, MBC or PHT certificate. SPP students are welcome to schedule an appointment with the SPP Job Placement Coordinator at any point during their SPP schooling at P.I.T. to create a resume, practice interviewing, and begin learning about the job search and the job market related to their field. Once an SPP student is mid-way (approximately 90 hours) through their externship in their third SPP term, they are expected to contact the SPP Job Placement Coordinator to update their resume with their externship, discuss any concerns and questions related to job searching and job search skills, and sign on to begin receiving field related job leads the SPP Job Placement Coordinator sends out weekly via email. Students may waive the assistance of the SPP Job Placement Coordinator by signing a waiver form. The SPP Job Placement Coordinator continues to be available to SPP graduates once they’ve completed their externship to assist with the job search and document the student’s employment, once they obtain a position. SPP students who also complete the two terms of the Allied Health degree program will then fall under the jurisdiction of the Coordinator for Job Placement, College Transfer and Externship for job placement assistance and/or transfer assistance.

ADDITIONAL STUDENT SERVICES

Student Activities: P.I.T. encourages its students to be active in student organizations and activities. Currently enrolled P.I.T. students are recognized as members of the Student Government Association (SGA) and may choose to serve on the SGA High Council representing their major, a student organization, or a student group.

The P.I.T. SGA acts as a liaison between the student body and the college administration as both strive towards the mutual mission of “providing committed learners with a quality collegiate and career-enhancing education in a supportive environment that promotes personal growth and prepares graduates for successful careers and/or college transfer opportunities.”
Students who enjoy public speaking and meeting new people are encouraged to consider participating in the Student Ambassadors group. This group provides support to the Admissions Office by giving tours to potential students or other visitors, and assists at a variety of college events.

Students who meet the eligibility requirements will be invited to join one or both of the College’s sponsored honor societies: Chi Alpha Epsilon – Chi Chapter and Phi Theta Kappa – Alpha Psi Mu Chapter. Eligibility requirements are different for each group and interested students are encouraged to contact the advisor, the Director of the Library, with any questions. Students who choose to accept the membership invitation are encouraged to participate in the activities of the societies.

Students who excel in their courses are encouraged to speak to their professors for a recommendation or contact the Tutorial Coordinator at 610-892-1560. Students also have access to the computers in the Innovation Center and in the Library as open labs. The Library offers recreational reading in addition to resources to support the College curricula.

The College provides a Student Lounge which includes a pool table, video games, and other recreational resources. Students are encouraged to make use of the lounge and to assist in the care of the space.

The College will sponsor local chapters of professional organizations in areas related to students’ majors if student interest justifies it. If a student is interested in establishing a student organization, which is not already available on campus, the student should provide a written request to the Dean of Student Services. If enough student interest exists, the College will sponsor the chapter.

The College may sponsor extracurricular activities in accordance with student interest. Student suggestions for activities should be provided to the Dean of Student Services.

Being a team player is an important aspect of the work environment in today’s economy. Therefore, students interested in specific activities will be given the responsibility to help organize and help carry out such extracurricular activities with the assistance of the College for approved activities.

**Café:** On the Media Campus, The P.I.T. Stop Café is open Monday-Friday from 8 AM-2 PM. The Café offers delicious, affordable meals and snacks. Vending machines are also available at any time. The Center City Philadelphia Location is within walking distance of several food courts and restaurants.

**Student Photo Identification/Library Card:** P.I.T. provides one official Photo Identification/Library Card at no cost to the student. Replacement ID/Library Cards are available at a cost of $20. The card also serves as the P.I.T. Library card and must be presented when certain records are validated. Students must present their card when requested by any authorized teaching, administrative, or security personnel. In Media, student ID's are available from the librarians. In Center City, student IDs are available from the Campus Manager.

**Shuttle Service:** In Media, P.I.T. Shuttle Service between the Media Campus and the Providence Road (Bowling Green) stop of the SEPTA 101 trolley is available at designated times Monday through Friday. For specific times, please see the P.I.T. receptionist.

**Alumni Association:** The Alumni Association meets periodically to organize and sponsor various educational and social activities that are beneficial to both graduates of P.I.T. and its current student body.
GRANTS SUPPORTING STUDENT SERVICES

The College receives several grants that promote student success. Support services in the areas of tutoring and academic support counseling provide students with the tools needed to strive for and achieve academic excellence.

**Carl D. Perkins Grant Program:** The Perkins Grant provides tutoring, computer laboratory and library equipment, supplies, and other curricular assistance. Students who have questions about the scope of the program should contact the Registrar.

**Student Support Services (SSS):** Student Support Services (SSS) is a federally funded support program that provides a wide range of services, including basic skills instruction, tutoring, and academic support counseling. This program is available to all students who take basic skills courses and who meet federally established guidelines. The program also provides transfer counseling services to students who, upon graduation, are interested in continuing their education at four-year colleges or universities.

**ACT 101:** ACT 101 is a state-funded program that parallels P.I.T.’s philosophy of providing services to ensure student success. The ACT 101 student is one who is a Pennsylvania resident, who is enrolled in a degree program, who meets the financial guidelines as established by the Pennsylvania Department of Education and PHEAA, and who needs academic support. The program has three (3) components: academic support counseling, tutoring, and transfer counseling.
COLLEGE POLICIES

Attendance Policy: A student is expected to attend every class and laboratory for which he or she has registered. The College takes and records attendance for all classes.

Computer Use Policy: P.I.T. encourages students to make effective and efficient use of communication and learning tools, such as e-mail and Internet connectivity. P.I.T. will allow the use of these tools for personal activities, providing that this use has no adverse effects on the productivity and work environment of others, and does not violate the guidelines established as policy by P.I.T. (see the Student Handbook). In all cases, the usage of P.I.T. communication and learning resources is subject to the discretion of the Board of Trustees or their designees. Students should direct questions to their instructors, Academic Support and Financial Literacy Counselors, Librarians, or the Chief Information Officer (CIO).

Drug-Free Campus Policy: In compliance with The Drug-Free Schools and Communities Act Amendments of 1989, which is designed to provide an environment for learning free from the effects of alcohol and/or other performance impairing substances, P.I.T. strictly forbids and will impose appropriate disciplinary action up to and including dismissal from the College for the use, sale, or possession of a controlled substance, drug not medically authorized, or any other substance that may impair performance or may pose a hazard to the safety and welfare of the students or other members of the academic community, on the property of P.I.T. or as any part of P.I.T. activities.

Identification Checks: College policy requires that persons on campus be enrolled as students, employed by the College, or have other legitimate business on the campus. Students and employees may be requested to produce their official College ID. In Media, College IDs are available from the Librarians. In Center City, College IDs are available from the Campus Manager.

Inclement Weather Notification: During extreme weather conditions, P.I.T. may be closed, have a delayed opening, or an early closing. Students and staff who have provided contact information to the P.I.T. Emergency Message System (E.M.S.) will be automatically notified via voice messages or emails. In addition to the E.M.S., students and staff may obtain information from the sources listed below:

The Media Campus Snow Codes are Day 504 and Evening 2504. Media students and staff may:
- Listen to radio station KYW 1060 AM for the snow codes.
- Visit the P.I.T. web site at www.pit.edu for closing information.
- Call (610) 892-1500 for closing information.

The Center City Philadelphia Location Snow Codes are Day 1179 and Evening 2179. Center City Philadelphia Location students and staff may:
- Listen to radio station KYW 1060 AM for the snow codes.
- Visit the P.I.T. web site at www.pit.edu for closing information.
- Call (610) 892-1500 for closing information.

Non-Discrimination Policy: It is the policy of P.I.T. not to discriminate on the basis of sex, disability, race, age, color, religion, national origin, veteran status, or sexual orientation or any other characteristic protected by applicable law in its educational programs, admissions policies, employment practices, financial aid, or other school-administered programs. This policy is consistent with various state and federal laws including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1967, and the Americans with Disabilities Act of 1990. For any claims of sex discrimination, sexual harassment or sexual violence, please contact the College’s Title IX Coordinator, Kamira Evans. Ms. Evans’ contact information is, Office of the Dean of Student Services, P.I.T. 800 Manchester Avenue, Media, PA 19063.
Parking Policy for Media: P.I.T. students, faculty and staff are required to display a valid parking permit when parking in the Media Campus parking lot.

Parking permits are sold at all student orientations. If you do not purchase your parking permit at orientation, permits can be purchased from the Department of Student Services. The cost for each student parking permit is a one-time fee of $5.00. All P.I.T. parking permits must be hung from the rear view mirror with the decal facing out so that the P.I.T. seal is clearly visible to any official checking your car. If you lose your parking permit, you will be charged another $5.00 for the replacement parking permit.

All students must complete the parking permit form before they can purchase a parking permit.

Students, faculty, and staff may not park in spots designated as “Visitor” parking, “Authorized Use Only”, or in the spots marked as “Reserved” parking.

Handicapped space usage is governed by the laws of the Commonwealth of Pennsylvania.

Enforcement of the parking rules and regulation is overseen by the Facilities Department and the Dean of Student Services. Persons who obtain several parking violation notices in an academic term may be subject to the loss of parking privileges or the towing of the vehicle at the owner’s expense.

NOTICE: The College assumes no liability for loss or damage to vehicles or contents on P.I.T. properties. All questions, concerns, or comments should be directed to the Dean of Student Services at (610) 892-1514.

P.I.T. Student Code of Conduct: Student conduct at P.I.T. should reflect favorably on the student and on the College. Regulations concerning appropriate conduct on the part of students are published in the P.I.T. Student Handbook. The policies require that student behavior contribute positively to student welfare and safety in order to enhance the quality of the campus environment and to develop respect for the rights of others. These principles and regulations are designed to advance the goals and objectives of the individual and of P.I.T.

P.I.T. reserves the right to deny admission or the continued enrollment of any student. Additional information and a description of due process procedures are explained in the Student Handbook.

Satisfactory Academic Progress (SAP) Policy: See FINANCIAL AID and SCHOLARSHIP PROGRAMS section of this Catalog.

Student Records: The Family Educational Rights and Privacy Act (FERPA) affords you certain rights with respect to your education records. These rights include:

1. The right to inspect and review your education records (with certain limited exceptions) within 45 days of the day P.I.T. receives your request for access. You should submit any such request to the Registrar’s Office in writing, identifying the records you wish to inspect. The Registrar’s Office will make arrangements for access and notify you of the time and place where the records may be inspected. Records customarily open for student inspection will be accessible without written request.

2. The right to request the amendment of your education records if you believe them to be inaccurate. You should submit any such request to the Registrar’s Office in writing, clearly identifying the records that you want to have amended and specifying the reasons you believe them to be inaccurate. The Registrar’s Office will notify you of its decision or any further action that should be taken by you before P.I.T. can issue a decision. If the decision is negative, you will be notified of your right to a hearing regarding your request for amendment. Additional information regarding the hearing procedures will be provided to you at that time.
3. The right to consent to disclosures of personally identifiable information contained in your education records, except to the extent that FERPA authorizes disclosure without consent. One such exception permits disclosure to “school officials” with “legitimate educational interests.” A “school official” is any person employed by P.I.T. in any administrative, supervisory, academic or research, or support staff position (including public safety and health services staff); any person or company with whom P.I.T. has contracted to provide a service to or on behalf of P.I.T. (such as an attorney, auditor, or collection agent); any person serving on P.I.T.’s Board of Trustees; or any student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a “legitimate educational interest” if the official needs to review an education record in order to fulfill the official’s professional responsibility.

Another such exception permits P.I.T. to disclose your “directory information”, consisting of your name; address; major field of study; enrollment status; dates of attendance; anticipated degree; degrees, honors, and awards received. Students who wish to have their directory information withheld must notify the Registrar’s Office in writing. (Please note that such a notification will prevent P.I.T. from providing your directory information to your friends, prospective employers, and others with whom you may wish us to share such information, so make your decision carefully.) You may give such notification at any time, but it will be effective only prospectively.

Upon request, P.I.T. also discloses education records without consent in accordance with applicable law. Information on other such exceptions is available through the Registrar’s Office.

Students are entitled to file a “Student Academic Information Release Form” available through the ARO. By signing and returning this form to the Registrar’s Office, you may authorize P.I.T. to release your grades and other information from your education records to your parents or other individual. This consent remains in effect until changed in writing with the Registrar’s Office. Continuing students who did not fill out the form in their first year may do so at any subsequent time. If you choose not to file the form, you are urged to inform your parents of your decision.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by P.I.T. to comply with the requirements of FERPA. The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-4605.

**Student Responsibility:** Students in doubt about the meaning of any P.I.T. regulation should seek advice from the Dean of Student Services, an Academic Support and Financial Literacy Counselor, or the appropriate P.I.T. office. Each student is personally responsible for all regulations in this Catalog that may affect academic progress, financial obligations, and relationships with P.I.T. authorities, transfer of credits, and eligibility for graduation.

**Student Right-to-Know and Campus Security Act:** The Student Right to Know Act requires an institution that participates in any student financial assistance program under Title IV of the Higher Education Act of 1965 (as amended) to disclose information about graduation rates to current and prospective students. In addition to the graduation rates, P.I.T. complies with the crime statistics reporting requirements of the Student Right to Know and Campus Security Act. The following information is reported through the College departments listed below:

- Campus Crime Statistics – ARO and on the P.I.T. Website: Consumer Disclosures
- Graduation Rates of Students – ARO and on the P.I.T. Website: Consumer Disclosures
GRADING SYSTEM

The quality of a student’s work is measured by a system of letter grades and cumulative quality points. The grading system is included on each course syllabus. The meaning of each grade in relation to its quality point value is as follows:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Grade Points</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>Distinctive Achievement</td>
</tr>
<tr>
<td>A-</td>
<td>3.67</td>
<td>Distinctive Achievement</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
<td>Excellent Achievement</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Excellent Achievement</td>
</tr>
<tr>
<td>B-</td>
<td>2.67</td>
<td>Excellent Achievement</td>
</tr>
<tr>
<td>C+</td>
<td>2.33</td>
<td>Satisfactory Achievement</td>
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<tr>
<td>C</td>
<td>2.00</td>
<td>Satisfactory Achievement</td>
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<tr>
<td>C-</td>
<td>1.67</td>
<td>Satisfactory Achievement</td>
</tr>
<tr>
<td>D+</td>
<td>1.33</td>
<td>Minimal Achievement</td>
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<tr>
<td>W</td>
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<tr>
<td>AU</td>
<td>0.00</td>
<td>Audited course</td>
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</tbody>
</table>

*Notes: The final grade of “FA” is assigned to students who failed to participate in course activities through the end of the term. This grade is used when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible. Incomplete (“I”) is a temporary grade. Students are required to petition for this grade by completing the Verification of Incomplete Grade Form. This form must be approved in advance by the instructor and the Provost or an Assistant Dean of Academic Affairs. It is the sole responsibility of the student to complete the required work no later than 60 calendar days from the last class session or by an earlier date assigned by the instructor.

GPA: A student's term or cumulative GPA is determined by dividing the total quality points earned by the total number of term credits of study attempted at P.I.T. The total of quality points earned in a given course is equal to the grade point value of the grade earned by the student multiplied by the number of credits assigned to the given course.

Honors - Associate Degree Students: P.I.T. has two (2) types of term honors to recognize the academic achievement of associate degree students:
- Dean’s List (3.5-4.0 GPA).
- Academic Honors (3.0-3.49 GPA).

At the end of each term, the Registrar prepares a list of students with GPAs between 3.0-4.0 and meeting the below criteria. To be eligible for the Dean’s List or Academic Honors, a student must be:
- A full-time, matriculated associate degree student.
- A part-time, matriculated associate degree student who has successfully completed 12 or more credits at P.I.T. and who is enrolled for 6 to 11 credits.
**Grade Reports:** Grade reports for each term are available on the student portal within two (2) business days of the end of the final exam period (as listed on the Academic Calendar).

**Grade Appeals:** Students who have questions about incorrect or unjustified grades must first contact their faculty member. If the student is not satisfied with the resolution of the issue after such discussion, they may appeal to the appropriate Program Manager. If students desire, the decision by the faculty member and Program Manager may be appealed to the Provost. The decision by the Provost is final.

**Academic Standing:** To be in satisfactory academic standing, P.I.T. requires that a student have a cumulative GPA of 2.0 on a 4.0 scale.

**Academic Warning or Probation:** Students who do not maintain the requisite GPA or whose GPA is less than 1.0 for any term session are placed on Academic Warning status. Students placed on Academic Warning are required to meet with their faculty advisor to review their scholastic standing. Students with Academic Warning status may be advised to consider registering for fewer courses until such time that they attain the required academic standing.

Students who meet the criteria for Academic Warning status for two (2) terms, or whose cumulative GPA is 1.0 or below in any one (1) term, will be placed on Academic Probation. Students placed on Academic Probation must consult with their faculty advisor to plan a course of action.

**Academic Dismissal:** Students meeting the criteria for Academic Warning or Probation are referred to the Provost. The Provost will recommend action to the President and Chief Executive Officer. The President and Chief Executive Officer’s decision is final.

**Readmission:**

**Degree Students:** P.I.T. students who have been enrolled continuously for less than one (1) academic year may apply for readmission by contacting the ARO. Once readmitted, the student will be matriculated under the current academic catalog. Students who return after more than a one (1) academic year absence are considered a new student instead of a readmission.

**SPP Students:** SPP students who wish to readmit to the College must email readmit@pit.edu to begin the readmission process. Once this is completed, the Program Manager determines which courses the student has to complete and when the student may return. The student must then meet with the Program Manager and a Financial Aid Advisor for a re-entry appointment to learn what financial aid options are available.

After a one-term dismissal, students may apply for reinstatement by submitting a written request to an Assistant Dean of Academic Affairs. Prior to reinstatement, the student must schedule a re-entry interview with an Assistant Dean of Academic Affairs and the Dean of Student Services. If the application for reinstatement is approved, the student must submit an application for readmission to the Admissions Office.
GRADUATION

P.I.T. holds separate commencement ceremonies for Associate Degree, Practical Nursing and School of Professional Programs students.

**Associate Degree Programs:**
P.I.T. confers degrees after the end of the fall, spring, and summer terms. A commencement ceremony is held in May.

To graduate with either an Associate in Applied Science (A.A.S.) degree or the Associate in Science (A.S.) degree, a student must:
- Earn the required number of term credits in a specific degree program or the equivalency thereof, of which at least 50% of all required credits must be earned at P.I.T.
- Have a minimum cumulative GPA of 2.0 on a 4.0 scale.
- Complete the approved curriculum satisfactorily.

A student planning to graduate in a specific term needs to:
- Submit a *Petition to Graduate* form to the ARO no later than two (2) months prior to the proposed graduation date.
- Pay a $100 Graduation Fee to the Business Office.
- Submit a *Cap and Gown* request to the ARO no later than two (2) months prior to the proposed graduation date. The student owns the cap and gown upon graduation.

The Registrar conducts a Graduation Audit to ensure that a candidate has met all requirements for the degree.

Students who petitioned in a previous term and did not graduate must complete a second petition in the term they anticipate graduating.

**Dual Degrees**
A P.I.T. student may qualify for dual degrees. To qualify for a second major, a student must:
- Matriculate in the second major immediately after completing requirements for the first degree.
- Meet all requirements for the second major.
- Complete at least six (6) courses (18 credits) at P.I.T. after completing requirements for a degree in the first major.
- Obtain the written approval for both majors from the appropriate Program Manager(s) and the Provost.
- Have no outstanding financial obligations to P.I.T.
- Complete requirements for both majors while at the same time maintaining a cumulative GPA of at least 2.0 on a 4.0 scale in each of the major programs.

**May Associate Degree Commencement Ceremony**
Students who expect to graduate in December and May are invited to march in the May commencement ceremony.

Students who will complete requirements during the summer term following commencement will be allowed to march with their class if they:
- Possess a minimum cumulative GPA of 2.0.
- Need up to two (2) outstanding courses (6 credits) to complete their degrees, as confirmed by the Registrar.
- Registered for the outstanding course(s) during the summer term.
- Submitted a *Petition to Graduate* form to the ARO.
- Paid a $100 Graduation Fee to the Business Office.
- Submitted a *Cap and Gown* request to the ARO no later than two (2) months prior to the proposed graduation date.

Graduates who are Phi Theta Kappa members in good standing are permitted to wear the Phi Theta Kappa honors stole and cords and graduates who are Chi Alpha Epsilon members in good standing are permitted to wear the Chi Alpha Epsilon honors cords.

The May Commencement Program includes the names of those students who completed degree requirements during the fall and spring terms, as well as those who anticipate completing requirements during the summer term.

Please consult the Academic Calendar for dates of the SPP and PN Commencement Ceremonies.

**Graduation Honors**

Associate degree students with outstanding academic records receive graduation honors. Students with the following cumulative GPAs, calculated on all coursework completed at P.I.T., graduate with distinction:

- **Summa cum laude** (with highest honor): 3.90-4.0 cumulative GPA.
- **Magna cum laude** (with high honor): 3.70-3.89 cumulative GPA.
- **Cum laude** (with honor): 3.50-3.69 cumulative GPA.

The distinctions are noted on the diploma and in the commencement program.

**Commencement Awards**

The following awards for Associate Degree graduates, which recognize student achievement, are presented at commencement. P.I.T. officials select the awardees:

**Valedictorian**: The Valedictorian Award is presented to the graduate with the highest cumulative GPA.

**Salutatorian**: The Salutatorian Award is presented to the graduate with the second highest cumulative GPA.

**Founder’s Award**: The Founder’s Award is presented to the graduate selected by the Founder who exemplifies the College’s Mission to help deserving students help themselves through a technical education.

**President’s Award**: The President’s Award is presented to the graduate chosen by the President for meritorious service to the College and for academic excellence.

**Distinguished Alumnus Award**: The Distinguished Alumnus Award recognizes the alumnus who is an accomplished professional and humanitarian.

**Dean’s Award for Outstanding Service to P.I.T.**: Presented to the graduate who has demonstrated academic excellence and has significantly contributed time, energies, ideas, service and support to College functions, activities, organizations, groups, faculty and staff (presented at discretion of the Provost).
Honors Convocation
The Student Services Department sponsors the annual Honors Convocation for P.I.T. In addition to the recipients of the Valedictorian Award, Salutatorian Award, President’s Award, Founder’s Award, and Distinguished Alumnus Award, graduates receiving the following awards are recognized at the Honors Convocation:

Program of Study Awards:
- Allied Health
- Architecture and Civil Engineering
- Business Administration
- Computer-Aided Design
- Computer Science
- English/Humanities
- Walton Hill-Oscar Charles Mathematics
- Mechanical Engineering
- Physical Therapy Assistant
- Student Persistence Award: Awarded to a student who has demonstrated exceptional determination in the educational process. (Presented at the discretion of the college faculty)

The Honors Convocation also recognizes graduating members of Chi Alpha Epsilon Honor Society and Phi Theta Kappa Honor Society for their academic achievement, graduating Peer Tutors for their academic support, graduating Student Ambassadors for their service to P.I.T., and graduating nominees to Who’s Who Among Students in American Colleges and Universities for their academic achievement and/or service to P.I.T. On an intermittent basis, P.I.T. also recognizes the Outstanding ACT 101 Grand Participant, the Outstanding Student Support Services Participant, the Outstanding Chi Alpha Epsilonian, and the Outstanding Phi Theta Kappan.

Issuance of Diplomas
The ARO issues diplomas:
- For students who completed requirements in May, degrees are issued after the May Commencement Ceremony.
- For students who completed requirements in August, degrees are issued in August.
- For students who completed requirements in December, degrees are issued in December.

Students may pick up a diploma at the ARO. The office will not release diplomas to students who have outstanding financial obligations to P.I.T.

Practical Nursing (PN) Program:

Commencement Awards
The following awards for PN graduates, which recognize student achievement, are presented at commencement. Nursing Faculty select the awardees.

Academic Honors Award: Presented to the graduate(s) with the highest GPA.

Caring and Compassionate Nurse Award: Recognizes the graduate who consistently demonstrated empathy, kindness, and concern with clients and their families.

Clinician Award: Presented to the graduate whose nursing practice, in any clinical setting, reflected the highest clinical standards and sensitivity to the needs of the patients and their families.
Pinning Ceremony
The Pinning Ceremony is a rite-of-passage for students who have completed the PN program. The newly-graduated nurses are “pinned” by the Nursing Faculty as a symbol of welcome to the nursing profession. The pin also identifies the nursing school from which the nurse graduated.

The P.I.T. PN Pin is a replica of the P.I.T. seal which signifies scholarship, service, and strength. The nursing pinning ceremony originated in the 1860s at the Nightingale School of Nursing at St. Thomas Hospital in London, England.

School of Professional Programs (SPP):
P.I.T. confers SPP certificates at two commencement ceremonies throughout the academic year.

To graduate with a certificate, a student must:
- Earn the required number of term credits in a specific program. Of the number of credits required for completion of the specific certificate program, at least 50% of the credits must have been earned at P.I.T.
- Have a minimum cumulative GPA of 2.0 on a 4.0 scale.
- Complete the approved curriculum satisfactorily.

A student planning to graduate after completion of the certificate program of study must:
- Submit a Petition to Graduate form to the ARO no later than two (2) months prior to the proposed graduation date.
- Be scheduled to complete the program of study prior to the proposed graduation ceremony date.
- Submit a Cap and Gown request to the Business Office no later than two (2) months prior to the proposed graduation date.

The Registrar conducts a Graduation Audit to ensure that a candidate has met all requirements for the certificate.

Students who petitioned at a previous date and did not graduate must complete a second petition no later than two (2) months prior to the proposed graduation date.
Commencement Awards
The following awards for SPP graduates, which recognize student achievement, are presented at commencement. P.I.T. officials select the awardees.

Outstanding Overall Medical Assistant Student: Presented in recognition of the highest level of achievement in academics, interpersonal skills, and clinical proficiency.

Outstanding Overall Pharmacy Technician Student: Presented in recognition of the highest level of achievement in academics, interpersonal skills, and clinical proficiency.

Outstanding Overall Medical Billing and Coding Student: Presented in recognition of the highest level of achievement in academics, interpersonal skills, and clinical proficiency.

Outstanding Overall Medical Assistant Externship Student: Presented in recognition of the highest level of achievement during clinical externship.

Outstanding Overall Medical Billing and Coding Externship Student: Presented in recognition of the highest level of achievement during clinical externship.

Outstanding Overall Pharmacy Technician Externship Student: Presented in recognition of the highest level of achievement during clinical externship.

Issuance of Certificates
The ARO issues certificates, which are awarded after the student completes their degree requirements. Certificates are typically printed on the 15th of each month for students who completed their requirements in the prior month. The ARO notifies students when their certificate is ready for pickup. They can be picked up in the ARO for Media students and at the Curtis Center for students from the Philadelphia location.

The ARO will not release certificates to students who have outstanding financial obligations to P.I.T.
ACADEMIC INFORMATION

ACADEMIC AFFAIRS STUDENT SUCCESS PROGRAMS

The Academic Affairs Department provides comprehensive student success programs, designed to help students start college with confidence, successfully meet the challenges of college life, and achieve their educational goals. All programs are provided at no additional cost to eligible, registered P.I.T. students.

Topics covered include basic computer, mathematics, communications, and study skills essential for academic achievement in college. In addition, students learn to identify their preferred learning style and develop self-responsibility.

**Associate Degree Students:**
- **Academic Advising:** Program Managers provide curriculum guidance to students from their first term through graduation. Individual advising appointments are available to assist students with course selection, questions about course placement, prerequisites and co-requisites, and meeting degree requirements for graduation.
  - **Offered:** During Pre-Registration and Registration.
  - **Location:** Media Campus and Center City Philadelphia Location.

- **New Student Orientation** is designed for students who are enrolling for the first time at P.I.T. The on-campus program eases a student’s transition into college life. Students learn about faculty expectations, college policies, academic and student support services, important dates to remember, and how to be a successful college student. Students learn the location of various classrooms and offices, as well as how to access their P.I.T. email and student accounts. Faculty and staff are available to answer questions students may have.
  - **Prerequisite(s):** None.
  - **Offered:** Prior to the beginning of the fall, winter, spring, & summer degree terms and all AHT and SPP terms. Participation is optional but strongly recommended.
  - **Location:** Media Campus and Center City Philadelphia location

- **The Academic Enrichment Program (AEP)** is an innovative approach for strengthening students skill levels with individualized learning in Reading, Sentence Structure, Writing and Arithmetic required by four-year colleges and universities as well as employers. AEP uses an alternative educational approach enabling students to immediately enroll in a program of study without delay while strengthening these important skills.
  - **AEP has positively impacted the national higher education community. P.I.T.’s AEP boasts of:**
    - Nomination for a “Best Practices” nationwide award by The College Board
A June 2006 presentation of “Achieving Confidence: Transforming the Self-Fulfilling Prophecy of Doubt” at The College Board’s Sixteenth Annual ACCUPLACER/WritePlacer® Plus National Conference in Washington, D.C.

Acknowledgement by the Brooke J. Lenfest Foundation in its acceptance of a grant for a newly designed AEP Center at our Center City location.

The Achievement in Education Award from the Rose Tree Media Optimist Club in 2006 for the impact on student success.

AEP seeks to bolster student learning outcomes by engaging students.

- The College uses MyFoundationsLab® as an online mastery-based resource for assessing and remediating college and career readiness skills in reading, writing and mathematics. The system offers a rich environment of assessments, personalized learning plans, and highly interactive learning activities enabling students to master skills at their own pace and receive immediate feedback. MyFoundationsLab® provides skill development students need to be successful in college level courses or careers.

- This Emporium model of skill strengthening allows students to learn at a self-paced rate even though they may not start with the same level of knowledge or learn at the same pace. This approach offers student’s a close approximation to one-on-one tutoring or on-demand personal assistance by instructors allowing for self-paced learning inside of the classroom. The program’s digital aspect allows for self-paced learning outside of the classroom as well. Combining the digital interactive software approach of MyFoundationsLab® with traditional methods of teaching including short periods of lecturing, in-class and group activities, homework assignments, projects allowing every student a greater chance at achieving mastery.

Once a student has mastered the skills by achieving or surpassing Accuplacer® scores, the student will work on more advanced learning modules to increase knowledge and practice skills in mathematics, reading comprehension and sentence structure. This model of remediation shifts instruction from a traditional learning model to a more active and learner-centered mode.

- Tutoring - PN Program: PN faculty provides individualized and group tutoring in nursing subjects throughout the Academic Year on the Media Campus.

- Tutoring - SPP Courses: The SPP faculty provides individualized and group tutoring in CMA, MBC and PHT subject throughout the academic year at both the Media Campus and Center City Philadelphia Location.

- Tutoring – Degree Program: For information regarding tutoring services available to degree students, please refer to this catalog under STUDENT SERVICES: Tutoring Services on page 37.
COLLEGE COMPETENCIES

P.I.T. has specific objectives for each of the courses offered and student learning outcomes for graduates of each Associate Degree and Certificate program. The course objectives are listed in the syllabus for each course. The student learning outcomes are listed in the description of each program in the "Programs of Study" section of the Catalog.

There are 11 college-wide competencies, each developed from the course objectives and student learning outcomes throughout the P.I.T. curriculum. Students who complete a program of study and graduate from P.I.T. should:
1. Have an understanding of how computers are used in the workplace or future educational endeavors and be competent in all appropriate software applications.
2. Be able to apply mathematical skills appropriate to their field of work or four-year college or university transfer.
3. Be able to communicate effectively, in writing and speaking, in technical and non-technical functions, with their peers in the workplace or transfer to a four-year degree program and in their personal lives.
4. Understand the problem-solving process and be able to apply that process in real-life situations.
5. Be aware of the varied resources available in traditional book form and contemporary electronic information systems and be able to locate technical information related to their work or four-year degree programs.
6. Be competent and comfortable relating to peers, supervisors, clients, and others with whom they interact.
7. Have both the skills and motivation to continue learning throughout their lives.
8. Understand the varied aspects of the career field they have chosen in order to make appropriate choices in their educational and career advancement.
9. Possess the appropriate technical skills, both academic and applied, necessary to transfer to a four-year degree program or obtain employment upon graduation and to advance in their field as they gain experience and obtain additional education.
10. Have an appreciation of the effort required to obtain a four-year degree and of employers’ basic expectations in the workplace with respect to loyalty, use of resources, productivity, and professional ethics.
11. Have a positive attitude and reaction to change, in academic challenges, in the workplace, and in their personal lives, in order to adapt appropriately to new situations.

REGISTRATION AND COURSE CREDITS

Class Scheduling

**Associate Degree Programs**

Day classes are held Monday through Friday, typically starting at 8:30 AM and ending by late afternoon. Students may arrange their class schedules with their Program Manager’s approval to accommodate cooperative work experiences, employment, and personal needs. Evening classes are held Monday through Thursday, typically from 5:30 PM. to 9:00 PM. or 10:00 PM.

Pre-registration for the next term for current students is scheduled during the designated period on the Academic Calendar. Students who intend to return are encouraged to pre-register to ensure an optimum class schedule and to be reasonably certain of obtaining the classes they want. Also, returning students who register during the pre-registration period are not required to pay the registration fee.

Registration for new students is scheduled several weeks before the beginning of classes and is also conducted in conjunction with New Student Orientation. New students receive a letter from the College’s Admissions Department informing them of the date and time for orientation and registration. New students must attend the orientation and registration session.
Registration for each term includes:
- Consulting with an Admissions Specialist (for new students) or a Program Manager (for continuing students) to confirm appropriate courses for the forthcoming term.
- Consulting with the Financial Aid Office each term to finalize eligibility for any needed financial aid and support.
- Paying tuition and fees via the P.I.T. Student Portal or to the Media Campus Business Office.
- Obtaining an official class schedule from the ARO.
- Purchasing required textbooks and supplies.

PN Program
The 12-month, Full-Time Day Program classes are scheduled Monday through Friday from 8:30 AM - 4:00 PM, with clinical days beginning at 6:45 AM - 3:00 PM. The possibility of clinical evening and weekend rotation exists.

SPP
Day classes typically meet Monday through Friday from 8:30 AM - 4:30 PM, and evening classes meet Monday, Tuesday and Thursday from 6:00 PM - 10:00 PM. Students move from class to class within a cohort group and are required to take all courses listed in the curriculum.

Registration is conducted for each new term. The Program Manager assists students with registration as needed.

Academic Information
An officially registered student is one who has been:
- Approved, either electronically or manually, by all of the following:
  - An Admissions Specialist (for new students) or a Program Manager (for continuing students).
  - Financial Aid Office.
  - Business Office.
- Approved for scheduling by the ARO.

Students are permitted to attend only those classes for which they have been officially registered and financially cleared.

Change of Name and/or Address
Students are required to inform the ARO concerning any change of identification, such as change of name, home address, email address, and telephone number. It is the student’s responsibility to keep the College informed of all demographic changes.

Transcript Request
Students and alumni may request transcripts from the ARO. An official transcript request form may be completed in the ARO or a letter requesting the transcript can be mailed or faxed to the ARO at (610) 892-1522. The letter should include the following information: name, home address, home telephone number, approximate dates of attendance, social security number, and the address to which the transcript is to be sent. The request letter requires the student’s signature. There is no charge for the first two (2) P.I.T. transcripts requested by a student. Any additional transcripts are $3.00 each.
Student Academic Load:
- **Associate Degree Programs:** A degree-seeking student is considered full-time when registered for a minimum of 12 term credits.
- **SPP:** A SPP certificate student is considered full-time when registered for a minimum of 12 term credits.

Course Overload
A degree seeking student may apply for an overload of courses, 19 credits or more, provided he or she has maintained a cumulative GPA of at least 3.0. Written approval by the student’s Program Manager and an Assistant Dean of Academic Affairs is required.

Formation of Sections and Cancellation of Courses
The formation and continuation of class sections and courses of instruction are subject to adequate enrollment. The College administration reserves the right to cancel a course or section, to change the time of meeting, to subdivide a section, or to combine two (2) or more sections as circumstances may require. Every effort is made to minimize the impact of such changes on the students. Students who are involved in a change of schedule may seek assistance from an Admissions Specialist (for new students), a Program Manager (for continuing students) or the ARO.

Transfer of Credit
Students who have attended another institution of higher education and who wish to transfer to P.I.T. must submit an Application for Admission and official transcripts of all post-secondary education credits. Transfer applicants are advised to submit catalogs, including course descriptions, prior to admission so credits may be evaluated and an appropriate schedule of courses developed. Generally, courses considered for transfer to P.I.T. are those earned at institutions accredited by one (1) of the six (6) regional accrediting agencies.

The College reserves the right to accept only post-secondary credits for science courses that were earned within five years from the date of application. The Practical Nursing and Physical Therapist Assistant program have other restrictions on advanced placement credits.

Only earned credits are transferred; grades and GPAs are not transferred. It is the policy of P.I.T. to transfer credits for those courses in which the student has earned a grade of “C+” or higher.

Students who have questions concerning transfer credits should seek assistance from an Assistant Dean of Academic Affairs or the Office of Admissions.

Advanced Placement Credit
Advanced placement credit is awarded to students for prior academic learning and/or work experience. Credits are determined using standardized examinations such as the College Level Examination Program (CLEP) and the Advanced Placement Program, through in-house examinations, or by assessment of the student's work. Students may petition an Assistant Dean of Academic Affairs for advanced placement credit. There is a fee for transfer of credit from accredited institutions and for transfer of credit for experiential learning.

Experiential Learning Credit
Experiential Learning Credits are earned based on work experience. Examples of a student’s work may include computer programs, work projects, drafting plates, portfolios, and other completed projects. Students may petition an Assistant Dean of Academic Affairs for experiential learning credit. There is an Assessment of Experiential Learning Fee.
Credits in Residence Requirements
A minimum of 50% of the total term credits of any certificate or degree program must be completed at P.I.T. A maximum of 50% of the total term credits required for a degree or certificate may be earned by transfer credit and/or Advanced Placement Examinations. When transfer credits or advanced placement credits are awarded, students receive the credits on their academic record, but grades are not transferred. Therefore, the student's P.I.T. GPA is not affected.

Course Substitution
P.I.T. is authorized to make course substitutions for enrolled students when warranted, subject to the Credits in Residence Requirements (above). Students who receive transfer of credit or advanced placement credit may utilize some of those credits toward their degree at P.I.T. To accomplish this, the student must apply for course substitution approval as follows:

- Students may petition their Program Manager to make substitutions within their curriculum with other courses taken either at P.I.T. or courses taken at other accredited institutions. Substitute courses from other institutions must be included in the total of transferred credits.
- Students must obtain a Course Substitution Form from the ARO and then meet with their Program Manager to obtain approval for the change.
- If the Program Manager approves the substitution, the student must then bring the petition to an Assistant Dean of Academic Affairs for preliminary approval and then to the Provost for final approval.
- If the Provost approves the substitution, the completed form is returned to the ARO.

Course Audits
If students wish to take a course for enrichment purposes, they may choose to audit the course. They may attend the lectures, take part in the discussions, and in every other way participate in the learning activity; they are not required to complete assignments or take examinations. Students register to audit a course in the same way and at the same time as they register for credit courses. An audited course is listed on the student's transcript with the code of "AU," which indicates no grade or credit for the course. The tuition charge for an audited course is $150.00 per credit. Students may not change from audit to credit or vice versa after the end of the Add-Drop Period.

Special Topics Courses
Several programs at P.I.T. offer "Special Topics" courses. These courses provide students with the opportunity to explore aspects of a program beyond what is offered in the Recommended Course Sequence. Such courses require significant initiative on the part of students and are open only to students who have completed at least one term of study and who have the written approval of the instructor and the Program Manager. Objectives, time commitments, and credits awarded are determined through consultation with the instructor subject to the approval by an Assistant Dean of Academic Affairs.

Directed Study Courses
Occasionally, because of scheduling conflicts, graduation deadlines, or course cancellations, a required course may not be available when a student needs it. As a result, it may be necessary for the student to request taking the course as a Directed Study course. Arrangements for such courses will be made with the individual instructor and must be approved by an Assistant Dean of Academic Affairs. Courses offered through directed study must meet the requirements of the regular course. The objectives and competencies listed in the course syllabus are presented as they would be in the regular course, and the grade for the course is determined by the same procedures.

Students who wish to take a course through directed study must have a cumulative GPA of 2.5 or higher, complete the required form available from the ARO, and obtain the written approvals of the instructor, the Program Manager, and an Assistant Dean of Academic Affairs.
Change of Program (Curriculum)
To change from one academic program to another, students must obtain a Change of Program Form and a copy of their degree evaluation from the ARO. After receiving the approval and signature of their original Program Manager, a student must obtain the approval and signature of the new Program Manager and an Assistant Dean of Academic Affairs.

Students are notified by their new Program Manager concerning the procedures involved in scheduling classes for the new program at the time of acceptance into the new program. Students who change programs retain their previous academic records and must meet all requirements for graduation in their new program.

Students receiving financial aid are required to consult with the Financial Aid Office before they finalize the change of program to determine the possible consequences of a Change of Program on their financial aid and other financial obligations to P.I.T.

Schedule Changes – Add-Drop Courses:

Associate Degree Programs
To drop a course during the 10-class day Add-Drop Period of the term, the student must obtain an Add-Drop Form from the ARO. Courses dropped during the Add-Drop Period do not appear on a student's academic record. Courses may be added within the posted Add-Drop Period of the term.

It is very important for students to confer with the Financial Aid Office to determine and understand the effect that adding or dropping courses will have on their financial aid status.

SPP and Practical Nursing:
To drop a course during the 5-class day Add-Drop Period of the term, the student must obtain an Add-Drop Form from the ARO. Courses dropped during the Add-Drop Period do not appear on a student's academic record. Courses may be added within the posted Add-Drop Period of the term.

It is very important for students to confer with the Financial Aid Office to determine and understand the effect that adding or dropping courses will have on their financial aid status.

Effect on Grades of Withdrawal from Course(s)
If a student drops a term taught course after the Add-Drop Period of the term and before the end of the 14th week of the term, they receive a Withdrawal ("W") grade in the course. A grade of "W" does not affect the student's cumulative GPA. A course dropped or not attended during the last two weeks of a term may be recorded by the faculty members as a Failure ("F") or Failure because of excessive absenteeism ("FA") grade. Under certain circumstances, an Incomplete ("I") grade is given.

It is important that students are aware that withdrawal may impact their financial aid status. Full-time or part-time status is determined as of the end of the Add-Drop Period. No adjustment of charges will be granted based on a change of status after the Add-Drop Period. For further information, contact the Financial Aid Office.

Repetition of Courses
A course may be repeated regardless of the earned grade or transferred credit either to effect a change in the student's GPA or to review the content of a course previously taken. When a course is repeated, the higher earned grade is used in the calculation of the cumulative GPA. The lower earned grade for the course remains on the transcript but is not used in calculating the student's cumulative GPA.
Accreditation, Approvals, and Memberships

Accredited by:
The Middle States Commission on Higher Education (MSCHE)
3624 Market Street
Philadelphia, PA 19104
(267) 284-5000
MSCHE is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Approved by:
Department of Education, Commonwealth of Pennsylvania as a Two-year College
Pennsylvania State Board of Nursing for the Practical Nursing Program
U.S. Department of Veterans Affairs for Education and Job Training Programs

A Member of:
ACCESS PENNSYLVANIA
Association of Independent Colleges and Universities of Pennsylvania
Chi Alpha Epsilon National Honor Society
Cisco Networking Academy
College Board
Council for Opportunity in Education
Delaware County Chamber of Commerce
Delaware County Healthcare Partnership
League for Innovation
Lyrasis
Microsoft IT Academy
National Association of College and University Attorneys
National Association of Independent Colleges and Universities
National Association of Student Financial Aid Administrators
National Healthcareer Association
National League for Nursing
OCLC (Online Computer Library Center)
PathWays PA
Pennsylvania Association of Developmental Educators
Pennsylvania Association of Practical Nursing Administrators
Pennsylvania League for Nursing – Area 1
Phi Theta Kappa International Honor Society
AUTHORIZED TRAINING AND TESTING SITES

American Red Cross
P.I.T. serves as an American Red Cross authorized provider for the following certification examinations at both its Media Campus and Center City Philadelphia Location:
- Cardiopulmonary Resuscitation (CPR)
- First Aid

National Healthcareer Association (NHA)
P.I.T. serves as an approved NHA testing site for the following certification examinations at both its Media Campus and Center City Philadelphia Location:

- **NHA Clinical Certification:**
  - Certified Clinical Medical Assistant (CCMA)
  - Certified EKG Technician (CET)
  - Certified Patient Care Technician (CPCT)
  - Certified Pharmacy Technician (CPhT)
  - Certified Phlebotomy Technician (CPT)

- **NHA Medical Administrative Certification:**
  - Certified Billing and Coding Specialist/Certified Medical Administrative Assistant (CBCS/CMAA)
  - Certified Medical Administrative Assistant (CMAA)

- **NHA Pharmacy Technician Certification:**
  - Certified Pharmacy Technician (CPT)
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As of August 23, 2016

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M.S., University of Kansas

Jayne Bacon Garrison
Chief Operating Officer

Kathryn DiGiorgio
Executive Assistant to the President and CEO

EXECUTIVE LEADERSHIP TEAM

Jack Bacon, A.A.S.
Vice President
A.A.S., P.I.T.

Michael Testa, A.S.T.
Director of Information Technology

Laura A. Blomgren, M.B.A.
Director of Financial Aid
B.S., Goldey-Beacom College
M.B.A., Goldey-Beacom College

Annamarie Cassidy, CPA
Chief Financial Officer
B.S., West Chester University

H. Matthew Meyers
Director of Admissions
B.A., Muhlenberg College

Dona Marie Fabrizio, Ed.D.
Dean of Student Services
B.S. Saint Joseph’s University
M.Ed. Widener University
Ed.D. Widener University

Robert E. Hancox, Ph.D.
Provost
B.A., Lycoming College
M.B.A., Fairleigh-Dickinson University
Ph.D., Pace University

Craig M. Jacobs, M.A.
Registrar
B.S., Drexel University
M.A., Temple University

ACADEMIC AFFAIRS

Robert E. Hancox, Ph.D.
Provost
B.A., Lycoming College
M.B.A., Fairleigh-Dickinson University
Ph.D., Pace University

Lea L. Capobianco, M.D.
Assistant Dean of Academic Affairs
B.S., University of the Philippines
M.D., University of the Philippines

Rachelle Chaykin
Assistant Dean of Academic Affairs
B.S., University of Delaware
M.A., Rutgers University

Terri Walklett
Executive Assistant to the Provost
M.A., Widener University

Program Managers

Academic Enrichment Program
Michele K. Long
B.S., Pennsylvania State University

Allied Health
Lea L. Capobianco, M.D.
B.S., University of the Philippines
M.D., University of the Philippines

Behavioral Health
Vacant

Communications
Rachelle Chaykin
Assistant Dean of Academic Affairs
B.S., University of Delaware
M.A., Rutgers University
Biomedical Equipment Engineering
Gerald C. Gambs, P.E.
B.S.M.E., Villanova University
M.S.M.E., Villanova University

Business Management
Robert E. Hancox, Ph. D.
B.A., Lycoming College
M.B.A., Fairleigh-Dickinson University
Ph.D., Pace University

Computer Support Engineering
Vacant

Computer Science
Abbas Abdulmalik
B.S., Thomas Edison State College

Engineering
Gerald C. Gambs, P.E.
B.S.M.E., Villanova University
M.S.M.E., Villanova University

General Studies
Rachelle Chaykin
Assistant Dean of Academic Affairs
B.S., University of Delaware
M.A., Rutgers University

Health Care Management
Michele K. Long
B.S., Pennsylvania State University

Health Science
Michele K. Long
B.S., Pennsylvania State University

Mathematics and Physics
Rachelle Chaykin
Assistant Dean of Academic Affairs
B.S., University of Delaware
M.A., Rutgers University

Physical Therapist Assistant Program
Kathryn Slezak, MSPT
Program Manager, Physical Therapist Assistant Program
B.A., University of Arizona

MSPT, Virginia Commonwealth University
Medical College of Virginia

Charles H. Hewlings, PT, M.Ed., ATC
Academic Clinical Coordinator
B.S. University of Delaware
PT University of Pennsylvania
M.Ed., University of Delaware

Kelly Thompson, MHA, B.S., PTA, ATC
Instructor, Physical Therapist Assistant Program
B.S., West Chester University
PTA, Central Penn College

Lynn Sturgill, PT, DPT
Instructor, Physical Therapist Assistant Program

Practical Nursing Program
Margie Hamilton, R.N., M.S.N.
Director, Practical Nursing Program
B.S.N., Sonoma State University
M.S.N., Widener University

Sarajo MacColl
Department Coordinator

Ann Horan, R.N., M.S.N.
Instructor, Practical Nursing Program
M.S.N., Immaculata University

Anne-Marie Antoliolo, M.S.N.
Instructor, Practical Nursing Program

Geralyn Swindell, M.S.N.
Instructor, Practical Nursing Program

School of Professional Programs
Jeanne Whitehead
Instructor, Allied Health Program
B.S. The College of New Jersey
**Full-Time Faculty**

**Ronald Barrett, LPN**  
Instructor, Clinical Medical Assistant Program  
Diploma, Eastern Center for Arts and Technology

**Jenifer T. Daley**  
Instructor, Allied Health Program  
B.A., LaSalle University

**Geralyn Swindell, R.N., B.S.N.**  
Instructor, Practical Nursing Program  
B.S.N., Thomas Jefferson University

**Jeanne Whitehead**  
Instructor, Allied Health Program  
B.S. The College of New Jersey

**Charmaine Gibson**  
Academic Coordinator  
A.S., Pennsylvania Institute of Technology

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**STUDENT SERVICES**

**Dona Marie Fabrizio, Ed.D.**  
Dean of Student Services  
B.S. Saint Joseph's University  
M.Ed. Widener University  
Ed.D. Widener University

**Lynea Anderman**  
Director of the Library  
B.A., Lycoming College  
M.S.L.S., Drexel University  
Professional Librarian Certification, Pennsylvania Department of Education

**Kamira Evans**  
Executive Assistant to the Dean of Student Services & Coordinator for the Student Support Services Grant  
B.S., Drexel University

**Teresa Flemming**  
Academic Support and Financial Literacy Counselor  
B.A. Neumann College

---

**Heather DiLalla**  
Job Placement and Externship Coordinator for S.P.P.

**Garrison Lockley**  
Program Coordinator for ACT 101 Grant and Academic Support and Financial Literacy Counselor  
B.A., Widener University  
M.Ed., Widener University

**Roswitha Marcher**  
Academic Support and Financial Literacy Counselor  
B.A. Widener University  
M.J. Widener University School of Law
IMPORTANT COLLEGE NUMBERS

Unless otherwise noted, the College offices listed serve BOTH the Media Campus and the Center City Location of P.I.T.

General Information --
Media Campus: (610) 892-1500; FAX: (610) 892-1533

Academic Affairs: (610) 892-1562; FAX: (610) 892-1577

Academic Records: (610) 892-1526; FAX: (610) 892-1522

Admissions --
Media Campus: (610) 892-1500; FAX: (610) 892-1533

Business Office --
Student Accounts: (610) 892-1517 or (610) 892-1596; FAX: (610) 565-6768

Extern Placement Services --
Media Campus: (484) 442-1273; FAX: (484) 442-1254

Financial Aid:
Media Campus: (610) 892-1536; FAX: (610) 892-1537

Job Placement Services --
Media Campus: (610) 892-1565 or (610) 892-1560

Library: (610) 892-1524; FAX: (610) 892-1523; email: library@pit.edu

Practical Nursing Program – Media Campus: (610) 892-1568

School of Professional Programs – (484) 442-1273 or (484) 442-1254

Innovation Center –
Media Campus: (610) 892-1503

Student Services: (610) 892-1504; FAX: (610) 892-1516

Transfer Services --
Media Campus: (610) 892-1500

SNOW CLOSING CODES

- Media Campus: KYW 1060 Snow Code – Day 504; Evening 2504
- Center City Philadelphia Location: KYW 1060 Snow Code – Day 1179; Evening 2179
- Check the College websites: http://www.pit.edu or http://my.pit.edu.
- Call the General Information numbers listed above.
DIRECTIONS TO P.I.T.

MEDIA CAMPUS:
The P.I.T. Media Campus is conveniently located at 800 Manchester Avenue in Media, Pennsylvania, approximately ½ mile from Baltimore Pike.

By Car:
- From Philadelphia, PA and Camden, NJ:
  From either the Benjamin Franklin or Walt Whitman Bridges
  I-95 South to I-476 North (Blue Route) towards Plymouth Meeting
  I-476 North to Exit 3 (SWARTHMORE-MEDIA)
  *Turn left at the end of the exit ramp towards Media on Baltimore Pike
  Proceed to the 5th traffic light
  Turn left onto Manchester Avenue (Dunkin’ Donuts on left)
  P.I.T. is approximately ½ mile on the right

- From the Pennsylvania Turnpike (I-276):
  PA Turnpike (I-276) to I-476 South (Blue Route) towards Chester
  I-476 South to Exit 3 (SWARTHMORE-MEDIA)
  **Turn right at the end of the exit ramp towards Media on Baltimore Pike
  Proceed to the 4th traffic light
  Turn left onto Manchester Avenue (Dunkin’ Donuts on left)
  P.I.T. is approximately ½ mile on the right

- From the Schuylkill Expressway (I-76):
  Schuylkill Expressway to I-476 South (Blue Route) towards Chester
  I-476 South to Exit 3 (SWARTHMORE-MEDIA)
  **Follow directions for Pennsylvania Turnpike (I-276) above

- From Delaware:
  I-95 North to I-476 North (Blue Route) towards Plymouth Meeting
  I-476 North to Exit 3 (SWARTHMORE-MEDIA)
  *Follow directions Philadelphia, PA and Camden, NJ above

- From Southern New Jersey (Gloucester and Salem Counties):
  From the Commodore Barry Bridge, take I-95 North to I-476 North (Blue Route) towards Plymouth Meeting
  I-476 North to Exit 3 (SWARTHMORE-MEDIA)
  *Follow directions Philadelphia, PA and Camden, NJ above

By Train:
SEPTA Media-Elwyn Line: P.I.T. is adjacent to the Moylan-Rose Valley station of the SEPTA Media-Elwyn Regional Rail Line.

By Trolley:
SEPTA 101 Trolley: There are two (2) stops relatively close to P.I.T.:
- The Providence Road-Bowling Green Station (Corner of Providence Road and State Street). The P.I.T. Shuttle Service makes scheduled stops between the Media Campus and the Providence Road-Bowling Green stop.
- The SEPTA 101 Trolley also stops at the corner of Manchester Avenue and State Street.

By Bus:
SEPTA 118: P.I.T. is across the street from the Wallingford-Vernon stop of the SEPTA 118 Bus.
SEPTA 110: P.I.T. is several blocks from the Baltimore Avenue and Manchester Avenue stop of the SEPTA 110 Bus.
CENTER CITY PHILADELPHIA LOCATION:
The P.I.T. Center City Philadelphia Location is at the Curtis Center, 601 Walnut Street, Suite 703, near Independence Square.

By Car:
- From Delaware County:
  Take Route 95 North to Exit 22 (Callowhill Street)
  The exit ramp is on left off Route 95
  Follow fork in ramp to the right onto Callowhill Street and proceed until 6th Street
  ***Turn left onto 6th Street
  Follow 6th Street to Walnut Street (across from Washington Square Park)
  Turn right on Walnut Street (the Curtis Center building is on the corner of 6th and Walnut Streets)

- From Bucks County:
  Take Route 95 South to Exit 22 (Callowhill Street)
  The exit ramp is on your right off Route 95
  Turn right onto Callowhill Street and proceed until 6th Street
  ***Follow directions above for Delaware County

- From Southern New Jersey (Camden, Gloucester, and Salem Counties):
  Route 42 becomes I-76 West
  Merge onto I-676 North towards Camden-Benjamin Franklin Bridge (toll)
  Take the I-676 West-US 30 – West exit on the left
  Turn right onto North 7th Street
  ***Take the 6th Street South ramp towards Independence Hall
  Turn right onto North 6th Street and continue to Walnut Street
  Turn right onto Walnut Street (the Curtis Center building is on the corner of 6th and Walnut Streets)

- From Central New Jersey (Burlington and Mercer Counties):
  Take Route 295 South and merge onto I-76 West (Philadelphia)
  Merge onto I-676 towards Camden/Benjamin Franklin Bridge (toll)
  Take the I-676 West-US 30 West exit on the left
  Turn right onto North 7th Street
  ***Follow directions above for Southern New Jersey

By Train: P.I.T. is several blocks from the SEPTA Market East Station, which is the first point of departure for all SEPTA Regional Rail Lines.

By PATCO High Speed Line: P.I.T. is within walking distance of the 8th and Market Streets stop of the PATCO High Speed Line.

By SEPTA Market-Frankford Line: P.I.T. is within walking distance of the 5th and Market Streets stop of the Market-Frankford El.

By SEPTA Broad-Ridge Spur: P.I.T. is within walking distance of the 8th and Market Streets stop of the SEPTA Broad-Ridge Spur.

By Bus: P.I.T. is within walking distance of numerous cross-town SEPTA and New Jersey Transit bus stops.
PROGRAMS OF STUDY

Across the Curriculum
The College’s Across the Curriculum program prepares students for academic success by including the following elements in the learning outcome requirements for all courses:

- Collaborative Learning
- Communications
- Computer Literacy
- Critical Thinking and Problem Solving
- Ethical Behavior
- Information Literacy and Research
- Mathematical Proficiency
- Professional Competency
- Scientific Reasoning

The Academic Programs of P.I.T. are organized into Associate Degree and Certificate options. The degree option is for students who wish to develop skills for entry-level employment, as well as those who wish to transfer to a four-year institution. The certificate option is designed for students who wish to develop skills for entry-level employment. The certificate programs consist of courses which can be applied as part of the A.S. degree programs.

Associate Degrees:
P.I.T. offers two-year associate degrees in Allied Health - Clinical Medical Assistant, Allied Health - Medical Billing and Coding, Allied Health - Pharmacy Technician, Allied Health - Physical Therapist Assistant, Allied Health – Practical Nursing, Business Administration, Communications, Computer Science, Electronic Health Records, Engineering, General Studies, and Health Sciences.

Certificates:
- Practical Nursing Certificate:
The Practical Nursing program is a three-semester curriculum which prepares graduates to sit for the Practical Nursing (NCLEX-PN®) examination. After passing the exam, graduates are qualified for entry-level positions requiring LPN licensure. Practical Nursing graduates may further their education at P.I.T. by completing additional required courses for an A.S. in AHT-Practical Nursing degree.

- School of Professional Programs Certificates:
  - Clinical Medical Assistant
  - Medical Billing and Coding
  - Pharmacy Technician

  These three-term programs prepare graduates to sit for industry certification examinations. Graduates of these Allied Health certificates may further their education at P.I.T. by completing additional required courses for the respective A.S. in AHT degrees.

General Education (Gen Ed) Requirements – Required in Associate Degree Programs:

The Gen Ed program is required of students who expect to graduate with an A.S. degree. The Gen Ed component is designed to assist students to:

- Apply values and ethics in decision making
- Evaluate cultural and global aspects in a sensitive way
- Examine context to analyze situations
- Analyze and synthesize information using scientific reasoning
- Write satisfactory academic documents
Each Gen Ed course carries three (3) credits. It is necessary for Associate Degree students to earn a minimum of 21 credits in Gen Ed requirements:

- Two (2) courses in English (6 credits)
- Two (2) courses in Mathematics (6 credits), **AND**
- Three (3) courses in the Humanities and Social Sciences (9 credits).

**English Competencies** -- Required: 6 credits
- ENG 104 Composition I (all students)
- ENG 203 Business Communications - *OR*
- ENG 204 Composition II

**Mathematics Competencies** -- Required: 6 credits
- **Allied Health**
  - MOT 130 Mathematics for Health Care Professionals - *OR*
  - MTH 121 Business Mathematics
  - MTH 207 Statistics
- **Business Administration**
  - MTH 121 Business Mathematics
  - MTH 207 Statistics
- **Computer Science**
  - MTH 150 Discrete Mathematics I
  - MTH 155 Discrete Mathematics II
- **Engineering**
  - MTH 145 College Algebra and Trigonometry
  - MTH 225 Calculus I

**Humanities and Social Science Competencies** - Required: 9 credits
- ENG 160 Introduction to Literature
- ENG 170 American Literature
- HIS 150 Western Civilization
- HIS 160 Culture and Technology
- HIS 170 The History of Architecture
- HIS 180 History of Religion
- HUM 120 Critical Thinking
- HUM 299 An Interdisciplinary Approach to Humanities
- MOT 115 Health Care in a Transcultural Environment
- PLS 150 American Federal Government
- PLS 160 Introduction to Global Studies
- PSY 105 Introduction to Psychology
- PSY 109 Human Growth and Development
- SOC 103 Introduction to Sociology

**Interdisciplinary (ITD) Courses**

In order to broaden students' knowledge of relationships that exist between disciplines, the College has created several interdisciplinary courses that may serve as substitutes for specific courses in programs of study. Students should consult their Academic Advisor when interested in registering for these interdisciplinary courses:

- ITD 201 Fact, Fiction and Fraud: Critical Thinking in the Modern Age
- ITD 203 Creating Memorable Professional Presentations
- ITD 205 Interactive Project Management
- ITD 207 Understanding Financial Statements: Gaining the Advantage
- ITD 209 Ethics in Today’s Complex Society
- ITD 211 Social Media: Contemporary Applications

**Note:** Successful completion of ITD 201, ITD 203, ITD 209 or ITD 211 will meet a three (3) credit requirement for the nine (9) credit humanities and social science requirement.

Not all courses will be offered every term.

The Gen Ed courses can also be found in the *Recommended Course Sequence* for each associate degree program. The Gen Ed and ITD courses are described in the *Course Description* section of this catalog.

**SOAR Program – Students Occupationally and Academically Ready**

The Pennsylvania Institute of Technology, in cooperation with the State of Pennsylvania, participates in the SOAR Program (Students Occupationally and Academically Ready). The goal of the SOAR program is to “prepare students for college and careers in a diverse, high-performing workforce,” something fully in line with P.I.T.’s mission as a college. The College currently offers advanced credits to participating high schools’ students who complete their program of study in the fields of Computer Systems Networking and Telecommunications, Drafting & Design Technology and Medical Assisting. For more information regarding the college’s participation, contact an admissions representative.
ALLIED HEALTH (AHT)
Associate in Science (A.S.)

Clinical Medical Assisting, Medical Billing and Coding, and Pharmacy Technician:
Location: Media Campus and Center City Philadelphia Location
Format: Traditional Term
Scheduling: Media Campus – Full-Time and Part-Time, Day and Evening Divisions
Scheduling: Center City Philadelphia Location – Full-Time and Part-Time, Day and Evening Divisions

Practical Nursing:
Location: Media Campus
Format: Traditional Semester
Scheduling: Media Campus – Full-Time

Students pursuing an A.S. Degree in AHT can expect maximum opportunities for health care professionals in Clinical Medical Assisting, Medical Billing and Coding, Pharmacy Technician or Practical Nursing by continuing their collegiate education. The A.S. in AHT Degree provides students with additional knowledge, skills, attitudes, and values that will enhance their career mobility in the health care setting. This degree also prepares students to pursue further education at the bachelor’s degree level.

Objectives
The major objectives of an A.S. Degree in AHT are as follows:
• Provide students the opportunity to explore the allied health field prior to committing to a specific clinical discipline
• Provide graduates of P.I.T. Certificate programs in Clinical Medical Assisting, Medical Billing and Coding, Pharmacy Technician, and Practical Nursing the opportunity to gain the added expertise needed to expand their professional roles in the health care system
• Broaden the knowledge base in the health care professional's discipline
• Enable students to build a curriculum in concert with their personal, educational, and employment goals
• Provide students with a seamless transition to continue their education at the bachelor’s degree level

A.S. Allied Health Degrees:
• Clinical Medical Assistant
• Medical Billing and Coding
• Pharmacy Technician
• Practical Nursing

Flexibility Achieving an A.S. in AHT Degree:
When pursuing an A.S. in AHT Degree, students may choose either to complete the Certificate or General Education courses first; students would then complete the remaining requirements of the program.

Students should consult with the AHT Program Manager to design an appropriate educational plan.
# ALLIED HEALTH (AHT)  
*Associate in Science (A.S.)*  
Recommended Course Sequence

<table>
<thead>
<tr>
<th>TERM</th>
<th>Hours</th>
<th>Lecture</th>
<th>Lab</th>
<th>Credits</th>
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<td>Analytical Writing</td>
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<td>MTH 121</td>
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<tr>
<td>Or MTH 130</td>
<td>Mathematics for Health Care Professionals</td>
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<tr>
<td>PSY 105</td>
<td>Introduction to Psychology</td>
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<td>PSY 109</td>
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<tr>
<td>BIO 135</td>
<td>Anatomy and Physiology I</td>
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<td>MOT 115</td>
<td>Health Care in a Transcultural Environment</td>
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<td>Anatomy and Physiology II</td>
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<td>HCM 117</td>
<td>Introduction to Healthcare Informatics</td>
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</table>

| PROGRAM TOTAL | 59 | 12 | 64 |
# ALLIED HEALTH (AHT) – CLINICAL MEDICAL ASSISTANT (CMA) EXTERNSHIP TRACK

Associate in Science (A.S.)

Recommended Course Sequence

<table>
<thead>
<tr>
<th>TERM 1</th>
<th>Lecture</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Term 1</td>
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<tr>
<td>BIO 105 General Biology</td>
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<td>HUM 140 Critical Thinking in the Modern Age</td>
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# ALLIED HEALTH (AHT) – CLINICAL MEDICAL ASSISTANT (CMA) INTERNSHIP TRACK

## Associate in Science (A.S.)

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# ALLIED HEALTH (AHT) – MEDICAL BILLING AND CODING (MBC) EXTERNSHIP TRACK
Associate in Science (A.S.)
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| PROGRAM TOTAL | **51** | **30** | **62** |
# ALLIED HEALTH (AHT) – MEDICAL BILLING AND CODING (MBC) INTERNSHIP TRACK

Associate in Science (A.S.)

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| PROGRAM TOTAL | 55 | 34 | 68 |
ALLIED HEALTH (AHT) – PHARMACY TECHNICIAN (PHT)  
EXTERNSHIP TRACK  
Associate in Science (A.S.)  
Recommended Course Sequence

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| ENG 108 | Composition | 3 | 0 | 3 |
| HUM 140 | Critical Thinking in the Modern Age | 3 | 0 | 3 |
| SIT 203 | Basic Office Software Applications | 2 | 2 | 3 |

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| ENG 215 | Analytical Writing | 3 | 0 | 3 |
| MTH 121 | Business Mathematics | 3 | 0 | 3 |
| OR | | |
| MTH 130 | Mathematics for Health Care Professionals | 3 | 0 | 3 |
| PSY 109 | Human Growth and Development | 3 | 0 | 3 |

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| PHT 115 | Dosages and Calculations | 2 | 2 | 3 |
| PHT 119 | Therapeutic Response in Body Systems I | 2 | 2 | 3 |
| PHT 125 | Pharmacy Technology I | 2 | 2 | 3 |

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| PHT 209 | Advanced Dosages and Calculations | 2 | 2 | 3 |
| PHT 213 | Pharmacy Technology II | 2 | 2 | 3 |
| PHT 215 | Pharmacy Records and Billing | 2 | 2 | 3 |

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| PHT 224 | Pharmacy Technician Externship | 0 | 12 | 6 |

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**PROGRAM TOTAL**  
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### ALLIED HEALTH (AHT) – PHARMACY TECHNICIAN (PHT) INTERNSHIP TRACK
Associate in Science (A.S.)
Recommended Course Sequence

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| PROGRAM TOTAL | 48 | 39 | 68 |
# ALLIED HEALTH (AHT) – PRACTICAL NURSING (PN)
Associate in Science (A.S.)
Recommended Course Sequence

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BEHAVIORAL HEALTH (BEH)
Associate in Science (A.S.)

Location: Media Campus
Format: Term, Fall, Winter, Spring and Summer
Scheduling: Full-time Day, Part-Time Night

Students who are interested in working in the dynamic and fulfilling field of Health Services will benefit from our Behavioral Health program. Our program provides a solid foundation and understanding of behavior, mental disorders, social programs, and treatment options in the United States.

Students who major in Behavioral Health study a number of treatment models and theories that emphasize the collaborative nature of health services. Coursework emphasizes the way behavioral health has evolved since health professionals identified disorders and began to understand that treatment was a vital role in improving the individual as well as society as a whole. Political issues, such as the war on drugs, the deficiency of government funding for mental health programs, and the rise of public awareness, are addressed. Specific attention is paid to the way science has changed the way behavioral health issues are understood and treated. Additionally, the ability to communicate effectively is highlighted as a way to improve connections between families, individuals, cultural groups, and behavioral health specialists.

Employment Opportunities: Graduates of this program are often employed in entry-level positions in a range of different fields, including Substance Abuse Counselors, Behavioral Disorder Counselors, Social Service Assistants, Program Administrators, and Human Service Assistants.

Bachelor’s Degree: Graduates in this program of study may choose to further their education by pursuing a bachelor’s degree at a number of universities.

Student Learning Outcomes:

Upon successful completion of this program of study, graduates should be able to:

- Demonstrate an understanding of the evolution of how mental health has been perceived in the United States over the past hundred years.
- Exhibit the highest levels of professional communication skills and intercultural behaviors.
- Develop a critical self-awareness to understand the influence of personal biases and values when interacting with diverse groups.
- Identify ways in which oppression, privilege, discrimination, and social and economic disadvantage contribute to inequalities and injustices within the health services system.
- Critically evaluate issues and concepts related to behavioral health.
- Evaluate the credibility of research data as well as sources of information.
- Foster the development of ethical standards.
- Identify appropriate methods for working with clients to improve their psycho-social experiences and daily living.
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| PROGRAM TOTAL | **56** | **16** | **63** |

**NOTE:** *Elwyn, Inc. employees receive advanced standing for BEH 101, Introduction to Behavioral Health, and BEH 105, CPR and First Aid.*
BIOMEDICAL EQUIPMENT ENGINEERING (BME)
Associate in Science (A.S.)

Location: Media Campus
Format: Traditional Term, Fall, Spring and Summer
Scheduling: Full-time Day Division

Health care facilities depend more and more on technology in the diagnosis, monitoring of care, and the treatment of diseases. Biomedical equipment is used to improve the quality of healthcare for patients at hospitals, acute care centers, clinics, long-term care facilities, and at the offices of other health care providers.

Manufacturers of biomedical equipment and executives of healthcare facilities report that the number of job openings for qualified professionals continually outpaces the number of qualified candidates.

The Biomedical Equipment Engineering (BME) program at the Pennsylvania Institute of Technology prepares students for careers in this rapidly expanding field. Students learn the functionality of biomedical equipment, safely perform maintenance and repair on biomedical equipment, maintain this equipment for optimal utilization, calibrate medical equipment and instrumentation, as well as troubleshooting, diagnosing and repairing non-functioning biomedical equipment.

The Biomedical Equipment Engineering program is inter-disciplinary, providing students with a foundation for understanding how a medically-oriented business and/or a healthcare organization operates and manages its human resources in a highly complex environment.

Students work on actual biomedical equipment, applying what they have learned in class. This "hands on" approach to learning enables students to practice what they have learned in class. The capstone course in the program enables students to demonstrate proficiency in troubleshooting, diagnosing and repairing biomedical equipment as a member of a student team. Biomedical equipment manufacturers and the advisory board help establish the standards for judging team performance in diagnosing and solving equipment malfunctions.

Employment Opportunities: Graduates in this program of study are generally employed in entry-level professional positions for biomedical equipment manufacturers, wholesalers and retailers. They are also employed by hospitals, clinics, long-term care facilities and other healthcare organizations.

Bachelor’s Degree: Graduates in this program of study may choose to further their education by pursuing a bachelor degree at a number of universities.

Student Learning Outcomes:
Upon successfully completing this program of study, graduates should be able to:
1. Demonstrate knowledge of safety principles and actions, and identify safety hazards associated with electro-mechanical devices,
2. Demonstrate technical skills in the performance of Programmable Logic Controllers and similar processors,
3. Demonstrate technical skills in AC-DC, RLC and digital circuits,
4. Understand the instrumentation needed to operate advanced imaging equipment,
5. Competently utilize testing equipment, as well as troubleshoot and calibrate biomedical equipment.
6. Understand the business operations of a complex organization and the management of employees,
7. Diagnose and repair most biomedical equipment that is not hermetically sealed.

BIOMEDICAL EQUIPMENT ENGINEERING (BME)
### Associate in Science (A.S.)

**Recommended Course Sequence**

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<td>Biomedical Equipment Calibration &amp; Repair</td>
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<td>Testing Equipment &amp; Troubleshooting</td>
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<td><strong>BUS 131</strong></td>
<td>Business Management</td>
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| PROGRAM TOTAL |  | 54 | 24 | 66 |
BUSINESS MANAGEMENT (BUS)
Associate in Science (A.S.)
Location: Media Campus
Format: Traditional Term
Scheduling: Full-Time, Day Division

There is an exploding demand by corporations, not-for-profits and small businesses for business leaders, who have skills in management, finance, marketing and accounting.

Whether you are seeking a leadership career in a large corporation or seeking to start your own business, P.I.T.’s Business Management can get you there!

Entrepreneurship skills are needed by leaders in all types of organizations – large or small. P.I.T.’s Business Management program focuses in teaching you the important skills so that you succeed as an entrepreneurial leader.

**Why Business Management?** Every organization needs leaders who understand the complexities of today’s enterprise – large corporation, not-for-profit agencies, small businesses or start-up businesses.

Leaders need strong skills in order to leverage accounting, finance, marketing, and management for organizational success.

**Learning through Experience:** Starting with the first business courses, you will gain immediate skills that are transferrable to the workplace. Courses in P.I.T.’s Business Management program immerse you right in learning and practicing entrepreneurial skills.

This “hands-on” approach is referred to as Experiential Learning that includes:

- **Actual interaction with local businesses.** You don’t just learn business skills; you practice these skills working with local businesses helping them become more successful.
- **Developing an actual business plan.** This learning opportunity provides you with the skills to launch a new business.
- **Perform the duties of a business executive.** Case studies put you in the seat of business executives solving problems and leading the enterprise toward financial success.

P.I.T. Business Management program is modeled after the area’s best business programs at major universities. Prestigious business leaders ensure that course content meets the needs of businesses.

**Career Opportunities:** The Business Management program enables you to immediately join the workforce in an entry-level position and/or earn a bachelor degree in the field at many of the area’s colleges and universities.

Many of P.I.T.’s Business Management graduates who have entered the workforce immediately after graduation have found positions in:

- Accounting
- Advertising
- Finance
- Human Resources
- Management
- Marketing
Sales

**Bachelor’s Degree:** P.I.T. has many transfer and degree-completion agreements with regional colleges and universities enabling graduates to complete a bachelor degree in two years or less.

**Student Learning Outcomes:**
Upon completion of Business Management associate degree program, graduates should be able to:

- Utilize the fundamental concepts of critical thinking in problem solving.
- Apply the basic principles of business management within an organizational structure.
- Perform on-line functions including Internet access, file management, spread sheets and data search.
- Effectively convey thoughts, ideas and proposals through written communications and demonstrate proficiency in making persuasive oral presentations.
- Apply the concepts of accounting in an organizational context and understand, analyze and interpret balance sheets, income statements and other essential financial reports.
- Demonstrate an understanding of the principles of marketing and the impact the Internet and social marketing has on marketing and sales performance.
- Develop skills in managing projects through all the systemic stages including the statement of work, project development, implementation of the project and the assessment of project results.
- Apply financial concepts associated with the management of an enterprise including understanding the role that positive cash flow plays in organizational success and the concept of financial risk and return as well as other important aspects of required to attain strong financial achievement.
- Demonstrate an understanding of the concept of organizational sustainability by balancing economic survival within the context of social and environmental environments.
- Develop and implement sound business strategies essential for organizational viability in a dynamic competitive business environment.

Effectively apply entrepreneurial methods for the sustained profitability of existing organizations and new start-up businesses regardless of size or complexity.
## BUSINESS MANAGEMENT
### Associate in Science (A.S.)
#### Recommended Course Sequence

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**PROGRAM TOTAL** | 58 | 10 | 63 |
COMPUTER-AIDED DESIGN (CAD)  
Associate in Science (A.S.)  
Location: Media Campus  
Format: Traditional Semester  
Scheduling: Full-Time and Part-Time, Day Division

CAD graduates prepare scaled, electronic drawings using the ideas, sketches, and calculations of professionals such as architects, surveyors, and engineers. CAD specialists develop their designs and plans using various CAD software packages and specialized equipment such as plotters and scanners. Graduates also prepare cost estimates, bidding documents, contracts, and technical reports. Some CAD specialists customize CAD packages and provide helpdesk support for companies.

P.I.T.’s CAD programs emphasize architectural, civil and mechanical design. ACT CAD specialists prepare detailed drawings of buildings and other structures. Graduates may specialize in a type of structure, such as commercial or residential, or a type of material, such as timber or reinforced concrete. Graduates interested in mechanical design prepare detailed diagrams of machinery and mechanical devices. Graduates also prepare and provide instructions regarding the fabrication, assembly, and use of mechanical equipment, parts, and devices.

All students develop a practical knowledge of the standards and codes for drawings, building materials, construction processes, engineering mechanics, and engineering graphic design. In addition to freehand drawing skills, students become proficient using the latest CAD software including AutoCAD®, Autodesk 2012®, Revit®, and Autodesk Inventor®.

Team Design Project (EGR 299): Eligible final semester students enroll in this capstone course which simulates an industry environment. Working in teams, students select a design problem, develop a solution, and present it to P.I.T. guests at the end of the semester.

Employment Opportunities: CAD graduates generally work in an office at a computer workstation. Employers include architectural, engineering, and construction firms, as well as manufacturing industries. Entry-level job titles include CAD Operator, CAD Designer, CAD Specialist and Architectural/Civil Drafter. Career potential includes positions such as CAD Manager, Lead Design Drafter, and CAD Instructor.

Bachelor’s Degree: Program graduates who choose to further their education may transfer to a baccalaureate degree program.

Optional Certification: Graduates of the A.S. in CAD program may choose to sit for the ADDA (American Design Drafting Association) Drafter Certification Examination.

Student Learning Outcomes:

- Create two and three-dimensional drawings and design models.
- Establish a methodology for solving a design/drafting problem by using freehand sketching.
- Develop detailed and working drawings using the principles of geometric construction and descriptive geometry.
- Develop layouts and technical designs for the architectural and machining industries by integrating the use of multi-views, assembly, and solid modeling drawings.
- Create drawings for the architectural and mechanical industries using advanced parametric software.
- Demonstrate the ability to utilize a geometric form by a photo rendering to present and describe a design.
- Convey technical information effectively in graphic form.

The Computer-Aided Design (CAD) program is discontinued effective July 1, 2013. Students currently enrolled in this program may complete the program of study.
# COMPUTER-AIDED DESIGN (CAD)  
Associate in Science (A.S.)  
Recommended Course Sequence

## SEMESTER 1
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<td>EGR 198</td>
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<td>EGR 278</td>
<td>CAD II</td>
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<td>EGR 289</td>
<td>Three-Dimensional CAD</td>
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<td>Business Communications</td>
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**SEMESTER TOTAL**  
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**PROGRAM TOTAL**  
49   27   62

The Computer-Aided Design (CAD) program is discontinued effective July 1, 2013.  
Students currently enrolled in this program may complete the program of study.
Students who are interested in working in the exciting world of mass media, public relations, or advertising can benefit from our Communications program. Communications gives the students the opportunity to learn how to craft and present concise messages using logic and emotion within an ethical framework.

Students who major in Communications study a number of rhetorical models that combine to form persuasive messages that appeal to a variety of audiences. Coursework emphasizes the way communication is used in business as well as in mass media and in marketing. As technology continues to evolve, the need to communicate effectively is also evolving, so specific attention is paid to how communication is adapted to web-based platforms. Additionally, the ability to deliver the message in an innovative way is also stressed as students learn different types of presentation techniques. Students who study Communications often find that these skills lead them to being better problem solvers as well as having superior interpersonal skills.

Employment Opportunities: Graduates of this program are often employed in entry-level positions in a range of different fields, including Public Relations, Social Media Writer/Manager, Account Executive, Sales, Copywriters, Marketing/Advertising, and Event Coordinator.

Bachelor’s Degree: Graduates in this program of study may choose to further their education by pursuing a bachelor’s degree at a number of universities.

Student Learning Outcomes:

Upon successful completion of this program of study, graduates should be able to:

- Evaluate, discuss and critique various rhetorical models and theories.
- Assess the best methodologies for communicating with specific audiences.
- Evaluate persuasive writing to identify logic and evidence.
- Demonstrate effective use of technology as a tool for designing and delivering oral, written, and visual messages to influence audiences.
- Apply research techniques to organize and integrate data into oral, written, and visual messages.
- Evaluate the credibility of research data as well as sources of information.
- Demonstrate proper citation of sources.
- Assess how culture, gender, age, and race influence the way a message is delivered and how it is received by these various demographic groups.
### COMMUNICATIONS (COM)
Associate in Science (A.S.)
Recommended Course Sequence

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<td>COM 209 Desktop Publishing</td>
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| **PROGRAM TOTAL** | **59** | **8** | **63** |
Computer Science (CSC)
Associate in Applied Science (A.A.S.)

Location: Media Campus
Format: Traditional Term
Scheduling: Full-Time and Part-Time, Day Division

Software engineers design computer programs by using the most effective and efficient modern techniques. Being able to craft secure, maintainable, high performance applications for mobile devices, for the Internet, and for desktop computers, is a highly desirable skill in growing demand.

The Computer Science major prepares students as software engineers for the job market, and for further studies, with the latest software engineering techniques after building a solid foundation in Computer Science fundamentals. Students are trained for, and expected to obtain at least one of several industry standard certifications, including Oracle’s Java SE 7 Programmer certification. In addition, students will build a creditable portfolio through their final terms capstone projects.


Employment Opportunities: Employees with good software skills work in fast-paced, modern job settings. Job titles might include: mobile app developer, web app developer, code tester, quality assurance coder, systems analyst, desktop application developer, computer support technician, network support technician, and network administrator.

Bachelor’s Degree: Program graduates who choose to further their education may transfer to a baccalaureate degree program in Computer Science and Software Engineering.

Student Learning Outcomes:

Computer Science graduates should be able to:

- Create a marketable application for a mobile device
- Create a client-side and server-side web application for LAMP
- Create working, useful desktop applications
- Troubleshoot code in an Integrated Development Environment
- Build a full, normalized database from the ground up
- Write secure code for database transactions
- Write test code for program quality assurance
- Write shell scripts for Unix administration
- Demonstrate readiness to sit for Oracle’s Java SE 7 Programmer certification exam
- Explain and use team-oriented, customer-centered iterative development techniques such as Agile
# COMPUTER SCIENCE (CSC)

*Associate in Science (A.S.)*

## Recommended Course Sequence

### TERM 1

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<td>CSC 213</td>
<td>Database Systems</td>
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**PROGRAM TOTAL**

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COMPUTER SUPPORT ENGINEERING (CSEN)
Associate of Science Degree
Location: Media Campus and Center City Philadelphia Location
Format: Traditional Term
Scheduling: Full-Time Day Division

The purpose of this STEM-based (Science, Technology, Engineering and Mathematics), program is to teach students to troubleshoot, upgrade, and repair a variety of computing devices, including desktop computers, laptops, mobile phones, tablets, and wearable technology. This program prepares graduates to start their own business, work for a business enterprise or transfer credits to a university to earn a Bachelor's Degree – or all of these opportunities! The hands-on approach to instruction enables students to learn important skills and then practice those skills in the classroom and laboratory under the direct observation and coaching of a qualified instructor. At the completion of this program, students will be prepared to take the certification exams for computer support and network support (A+ Certification and Network+ Certification).

**Student Learning Outcomes:**

Upon completion of this program, students will be able to:

1. Install and support small to medium-sized computer networks.
2. Install and configure computer operating systems (Windows, Linux, Apple).
3. Protect against viruses and repair systems that have been infected.
4. Troubleshoot and repair computer hardware and software problems.
5. Diagnose problems in electronic systems using testing equipment.
6. Comprehend technical literature to find solutions.
7. Configure networking services on a server.
9. Identify and understand the elements of a computer and other computing devices.
10. Achieve a working knowledge of processors, memory, and control systems in a networked environment.
12. Understand the basic elements of a web page (HTML, CSS, JS).
13. Achieve the knowledge to be prepared to take certification examinations.
## COMPUTER SUPPORT ENGINEERING (CSEN)
### Associate in Science (A.S.)
#### Recommended Course Sequence

**TERM 1**

<table>
<thead>
<tr>
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<td>SIT 203</td>
<td>Basic Office Software Applications</td>
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**TERM TOTAL**

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<td>CSC 120</td>
<td>Network Fundamentals</td>
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<td>PC Support</td>
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<td>Cyber Law, Ethics and Society</td>
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<td>Peripheral Devices</td>
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<td>CSE 229</td>
<td>Mobile Devices</td>
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<td>Critical Thinking in the Modern Age</td>
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<td>Entrepreneurship and New Ventures</td>
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<td>CSC 250</td>
<td>Certification Preparation</td>
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**PROGRAM TOTAL**

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</table>
Students who are interested in working in the challenging arena of criminal justice will benefit from our Criminal Justice program. Our program provides a solid foundation and understanding of crime and justice in the United States.

Students who major in Criminal Justice study a number of legal models and theories that combine to form a comprehensive view of our modern police and court system. Coursework emphasizes the way criminal justice has evolved since the United States gained its independence, the role of the constitution in formulating and adapting the law of the land, and understanding how social policy influences the demands of the system. As technology continues to evolve, the need to manage crime differently is an ongoing issue, so specific attention is paid to the way science has changed the way evidence is used in the justice system. Additionally, the ability to communicate effectively is highlighted as a way to improve relations between the public and the representatives of the legal system, especially within the context of different cultures.

Employment Opportunities: Graduates of this program are often employed in entry-level positions in a range of different fields, including Police Officer, Corrections Officer, Paralegal, Bailiff, Dispatchers, Investigators, Legal Assistants, and Security Guards.

Bachelor's Degree: Graduates in this program of study may choose to further their education by pursuing a bachelor's degree at a number of universities.

Student Learning Outcomes:

Upon successful completion of this program of study, graduates should be able to:

- Demonstrate an understanding of the origins of criminal behavior, society's response to crime, and the consequences of crime in society.
- Exhibit the highest levels of professional communication skills and intercultural behaviors.
- Develop a critical self-awareness to understand the influence of personal biases and values when interacting with diverse groups.
- Identify ways in which oppression, privilege, discrimination, and social and economic disadvantage contribute to inequalities and injustices within the criminal justice system.
- Critically evaluate issues and concepts related to criminal justice.
- Evaluate the credibility of research data as well as sources of information.
- Foster the development of ethical standards.
# CRIMINAL JUSTICE (CRJ)

**Associate in Science (A.S.)**

*Recommended Course Sequence*

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<thead>
<tr>
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<tr>
<td>CRJ 101</td>
<td>Introduction to Criminal Justice</td>
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<td>Basic Office Software Applications</td>
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<td>Introduction to Criminal Law</td>
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<td>Analytical Writing</td>
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<td>Introduction to Psychology</td>
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<tr>
<td>CRJ 222</td>
<td>Intercultural Communications</td>
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<td>CRJ 111</td>
<td>Essentials of Criminology</td>
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<td>CRJ 201</td>
<td>Theories of Juvenile Delinquency</td>
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<td>CRJ 205</td>
<td>Introduction to Corrections</td>
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<td>CRJ 210</td>
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<td>MTH 207</td>
<td>Statistics</td>
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<td>SOC 103</td>
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<td>Elements of Criminal Investigation</td>
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<td>CSC 239</td>
<td>Cyber Law and Ethics</td>
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<td>Society and Finance</td>
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<td>Introduction to Scientific Crime Detection</td>
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**PROGRAM TOTAL** | **61** | **6** | **64** |
ENGINEERING (AEN)
Associate in Science (A.S.)
Location: Media Campus
Format: Traditional Term
Scheduling: Full-Time and Part-Time, Day Division

AEN graduates assist engineers and other professionals with the design, testing, and manufacturing of industrial machinery, tools, and mechanical equipment. Graduates create drawings of parts and prepare layouts of the assembly process. They also estimate equipment cost, labor costs, and equipment life, as well as troubleshoot and repair various types of mechanical devices.

The Engineering coursework emphasizes the application of basic engineering principles to machines and manufacturing. In addition to the standards and codes for mechanical design, students develop a practical knowledge of engineering mechanics, material properties, metrology (the science of weights and measures), theory of machines, and manufacturing processes. Through laboratory experiments, students learn how to record data, analyze results, and apply the results to suggest improvements to a product.

Students become proficient using the latest Computer-Aided Design, Computer-Aided Manufacturing (CAD-CAM) software to create drawings and diagrams. Those preparing for a CAD career may take EGR 278 CAD II or MET 278 SolidWorks. Local field trips augment classroom learning.

Employment Opportunities: AEN graduates generally work in an office, manufacturing factory, or engineering laboratory. Graduates are employed by industrial and manufacturing facilities, laboratories, and governmental agencies. Entry-level job titles include: Mechanical Design Specialist, Machine Parts Designer, Manufacturing Specialist, Machine Operator, Mechanical Test Specialist, and Plant Engineer Assistant. Career potential includes advancing to positions such as Senior Designer, Project Manager, or Technical Writer.

Bachelor’s Degree: Program graduates who choose to further their education may transfer to a baccalaureate degree program.

Student Learning Outcomes:
AEN graduates should be able to:

- Explain safety rules related to the manufacture and operation of tools and machinery.
- Perform foundational structural analyses.
- Demonstrate fundamental knowledge of standard and advanced technology manufacturing processes that use electromechanical, pneumatic and hydraulic system components.
- Read, interpret and develop schematics and detailed specifications that relate to tool and machine design.
- Explain and apply the principles and limitations of measurement techniques and instruments.
## Recommended Course Sequence

### TERM 1

<table>
<thead>
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<td>Engineering Graphic Design I</td>
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<td>EGR 198</td>
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<td>Introduction to Nanotechnology</td>
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GENERAL STUDIES (GEN)
Associate in Science (A.S.)
Location: Media Campus
Format: Traditional Term - Fall, Spring, Summer
Scheduling: Full-Time, Day Division

Students who are seeking a broad, multi-disciplinary learning experience can benefit significantly from the General Studies program. General Studies gives students the opportunity to learn about a variety of fields while building their critical thinking skills and their analytical techniques.

There are many career and transfer opportunities for people who pursue a General Studies degree. Students can move into multidisciplinary fields, such as website management or technical writing. By combining business classes, communication classes, and computer science classes, students are able to build a program that works exclusively for them. This program is also beneficial for students who are unsure what major they want to pursue. Students can take a wide selection of classes their first or second term, and then realizing where their interest lies, can change majors to pursue a specific major.

Employment Opportunities: Graduates of this program are often employed in entry-level positions in a range of different fields, including banking, customer service specialist, administration, public relations, marketing as well as many web-based jobs that require multiple skills.

Bachelor’s Degree: Graduates in this program of study may choose to further their education by pursuing a bachelor’s degree at a number of universities.

Student Learning Outcomes:

Upon successful completion of this program of study, graduates should be able to:

- Identify, analyze, and integrate information as part of appropriate tasks,
- Evaluate principles of critical thinking in the process of developing solutions,
- Communicate effectively and efficiently in a variety of methods, including written, oral, persuasive, and process-oriented formats,
- Analyze cultural and social issues within a national and global context,
- Demonstrate effective use of technology appropriate to the task,
- Demonstrate the ability to locate sources, evaluate validity, and ensure appropriateness,
- Use and document sources and evidence in an ethical manner,
- Apply mathematical techniques to the analysis of quantitative problems, and
- Describe how the scientific method is used to generate new knowledge.
## GENERAL STUDIES (GEN)
### Associate in Science (A.S.)
#### Recommended Course Sequence

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| PROGRAM TOTAL | 59 | 5 | 61 |
HEALTH CARE MANAGEMENT (HCM)
Associate in Science (A.S.)
Location: Media Campus and Center City Location
Format: Traditional Term
Scheduling: Full-Time, Day Division

Health Care Managers perform various managerial roles in a myriad of health care organizations. They primarily plan, direct and oversee the operations and employees of a health care enterprise. P.I.T.’s Health Care Management is an innovative approach to provide students with fundamental skills in management, business, health care information, anatomy and physiology, health care law and ethics, medical billing and coding and insurance and reimbursement – all essential functions required to be a successful health care manager.

The health care management field depends upon confident leaders capable of leading health care organizations. In addition, P.I.T.’s Health Care Management program provides students with skills in critical thinking, oral and written communication, computer applications, understanding financial statements, managing complex projects and managing a health care organization toward financial sustainability.

The Health Care Management curriculum provides students with the most relevant business skills, a thorough understanding of complex health care issues and confidence in addressing complex issues in the management of a health care organization today and in the future.

**Employment Opportunities**
Graduates of this program of study are generally employed as entry-level managers and supervisors in hospitals, nursing homes, physician practices, clinics, health insurance firms, mental health agencies, rehabilitation centers, skilled nursing facilities and other similar type of organizations.

**Bachelor’s Degree**
Program graduates who choose to further their education may transfer to a baccalaureate degree program.

**Student Learning Outcomes**
Health Care Management graduates should be able to:
- Comprehend the breadth and scope of health care management,
- Understand the fundamentals of anatomy and physiology,
- Apply critical thinking skills to courses in the program of study,
- Demonstrate competency in basic office software applications,
- Effectively communicate orally and in writing,
- Demonstrate competency in mathematics commonly used in the health care profession,
- Understand the basic classification of diseases and apply the applicable codes for reimbursement to these diseases,
- Demonstrate an understanding the cultural differences applicable to the delivery of health care services,
- Understand the importance of health care laws and ethical behavior,
- Apply the fundamentals of sound management practices,
- Develop and provide the leadership of important projects,
- Understand financial statements and the principles of financial sustainability
- Apply the principles of strategic management in health care.
# HEALTH CARE MANAGEMENT (HCM)
## Associate in Science (A.S.)
### Recommended Course Sequence

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| PROGRAM TOTAL | 62 | 6 | 65 |
HEALTH SCIENCE (HSC)

Associate in Science (A.S.)

Location: Media Campus

Format: Tradition, Consecutive Terms, Blended-Learning

Scheduling: Full-Time and Part-Time, Day and Evening Divisions

The Health Science program prepares students for admissions in nursing programs, physical therapist assistant programs and other highly competitive medically-related programs. Top grades in this program prove to colleges and universities that students have the stamina, perseverance, drive and academic skills to succeed in rigorous clinical patient care programs. In many instances, there are only a limited number of vacancies – only the top candidates are accepted.

Graduates of the Health Science program are also qualified for many non-clinical positions with health care providers including, health specialists, health and wellness counselors, addiction counselors, community relations specialists, health services coordinators, just to name a few.

The Pennsylvania Institute of Technology has transfer agreements with a number of colleges and universities in the Philadelphia area. These educational institutions will accept the credits earned in P.I.T.’s A.S. Health Science program. Students will be able to earn bachelor degrees in health care administration, health care counseling, managed care and other similar programs.

Employment Opportunities: Graduates of this program of study are frequently employed in entry-level, clinical and non-clinical positions for health care employers including hospitals, specialty care facilities, clinics, private practices, insurance companies and pharmaceutical manufacturers.

Bachelor’s Degree: Graduates in this program of study may choose to further their education by pursuing a bachelor’s degree at a number of universities.

Student Learning Outcomes

Upon the successful completion of this program of study, graduates should be able to:

- Demonstrate a strong foundation in health-related sciences, applied mathematics, English, humanities and social sciences that are required in health care professions,
- Identify the anatomical structure and functions of the human body,
- Demonstrate an understanding of the fundamental molecular, cellular, and genetic principles characterizing plants and animals,
- Identify the properties of matter, atomic structure, molecular geometry, periodic table arrangements, and chemical bonding and ionization,
- Understand the functional anatomy of the human body and associated kinesiology,
- Gain an appreciation for the delivery of health care with the environment of continuously changing vulnerable, racial, ethnic and cultural demographics.
- Demonstrate the principles of critical thinking in the process of problem resolution.
# Health Science (A.S.)

## Associate in Science (A.S.)

### Recommended Course Sequence

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<td>HCM 221 Introduction to Health Care Statistics</td>
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<td>SIT 203 Basic Office Software Applications</td>
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| PROGRAM TOTAL | 59 | 12 | 65 |
PHYSICAL THERAPIST ASSISTANT (PTA)*
Associate in Science (A.S.)
Location: Media Campus
Format: Traditional Semester
Scheduling: Full Time Day Division

The Mission
The mission of the Pennsylvania Institute of Technology’s PTA Program is to graduate well-prepared, professional and responsible entry-level clinicians. The Program provides physical therapy education that is evidence-based. Students are provided with classroom and clinical instruction using relative and current practices. The PTA Program faculty cares about the success of its students, and encourages them to remain life-long learners as they make an immediate impact on the surrounding community and continue to make meaningful contributions to the profession and to society.

The Vision
The P.I.T. PTA Program seeks to develop and produce the region’s most mature, successful, professional, and skillful entry-level Physical Therapist Assistants who will provide exceptional patient care.

Program Philosophy
The underlying philosophy of the P.I.T. PTA Program is to ensure adherence to the criteria and performance expectations outlined in detail in A Normative Model of Physical Therapist Education published by the Commission on Accreditation in Physical Therapy Education (CAPTE). Complying with these criteria and performance expectations ensures that students will receive a solid foundation in the skills to be successful PTAs under the supervision of Physical Therapists.

The PTA program integrates general education courses and professional course work throughout the curriculum. Students build upon the knowledge and skills acquired in basis courses as they advance through the curriculum. Further, many non-laboratory courses in the PTA Program incorporate both didactic and “hands-on” learning experiences enabling students with different learning styles to acquire the appropriate knowledge.

iPAD Required for A.S. Physical Therapist Assistant Program
An integral learning tool in the A.S. Physical Therapist Assistant programs is the use of an iPAD that is compatible with the requirements specified by each program of study.

It is the policy of the College that students are required to possess a compatible iPAD on the first class meeting of these programs of study. The curricula for these programs include on-line learning, out-of-class assignments, documentation while at clinical sites, learning-outcomes assessment as well as 3-dimensional education applications. Students who do not possess a compatible iPAD are at risk of failing individual courses in the program of study.

Students who do not have the availability of an iPAD for learning purposes prior to the start of the program of study are encouraged to make an appointment with the Financial Aid Department. In many instances the cost of an iPAD may be covered through an individual student’s financial aid program.

iPAD Requirements: iPAD with Safari browser only

The Physical Therapist Assistant Program at the Pennsylvania Institute of Technology is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, VA 22314; phone 703-706-3245; accreditation@apta.org; website: http://www.capteonline.org

*Graduation from a physical therapist assistant education program accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, VA 22314; phone 703-706-3245: accreditation@apta.org is necessary for eligibility to sit for the licensure examination, which is required in all states.
### PHYSICAL THERAPIST ASSISTANT (PTA)*  
**Associate in Science (A.S.)**  
Recommended Course Sequence

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
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<tbody>
<tr>
<td><strong>BIO 135</strong></td>
<td>Anatomy &amp; Physiology I</td>
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<td><strong>ENG 104</strong></td>
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<td>Health Care in a Transcultural Environment</td>
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<tr>
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<td>Mathematics for Health Care Professionals</td>
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<td>Anatomy &amp; Physiology II</td>
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<td><strong>BIO 230</strong></td>
<td>Functional Anatomy * Kinesiology</td>
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<td><strong>ENG 204</strong></td>
<td>Composition II</td>
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<tr>
<td><strong>PTA 101</strong></td>
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<td><strong>PTA 115</strong></td>
<td>Therapeutic Procedures I</td>
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<tr>
<td><strong>PTA 129</strong></td>
<td>Diseases of the Human Body</td>
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<tr>
<td><strong>PTA 227</strong></td>
<td>Clinical Practice I (4 Weeks)</td>
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<td><strong>PTA 225</strong></td>
<td>Orthopedic and Neurological Rehabilitations (11 Weeks)</td>
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<tr>
<td><strong>PTA 229</strong></td>
<td>Rehabilitation Techniques (11 Weeks)</td>
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<td><strong>PTA 231</strong></td>
<td>Therapeutic Exercise (11 Weeks)</td>
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<td>Special Populations (11 Weeks)</td>
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<td><strong>PTA 247</strong></td>
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<td><strong>PTA 249</strong></td>
<td>PTA Seminar (2 Weeks)</td>
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<td></td>
<td>57</td>
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Note: All courses are 15 weeks unless noted otherwise on the syllabus. Clinical Practice I, II, and III courses are all full time, 40 hours per week in a clinical setting (600 hours clinical practice total.)
CERTIFICATE PROGRAMS

PRACTICAL NURSING (PN)

SCHOOL of PROFESSIONAL PROGRAMS (SPP)

CLINICAL MEDICAL ASSISTANT (CMA)

MEDICAL BILLING and CODING (MBC)

PHARMACY TECHNICIAN (PHT)
PRACTICAL NURSING (PN) - CERTIFICATE PROGRAM

Location: Media Campus
Format: Traditional Semester
Scheduling: Full-Time

This program is designed to prepare the student for a successful Licensed Practical Nursing (LPN) career and employment in the health care field, to facilitate personal growth experience, and to provide transfer opportunities to a Registered Nurse (RN) program. The 12-month, full-time program (while the program is primarily during the day, evening clinical assignments are possible) consists of integrated lectures, laboratory, and clinical experiences. Students who graduate from the program will be eligible to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN®) for licensure in the State of Pennsylvania as a Licensed Practical Nurse (LPN.) This program is approved by the Pennsylvania State Board of Nursing.

Graduates receiving a PN Certificate should be able to:

- Utilize knowledge, skill, and abilities to provide nursing care for individuals and families under the supervision of an experienced RN, physician, or dentist
- Use the nursing process as the framework to assist in identifying and meeting the basic needs of individuals and families with diverse needs across the lifespan
- Function within the ethical, legal, and professional standards of practice for the practical nurse as developed by national nursing organizations and the state
- Use effective therapeutic communication, and interpersonal and technological skills with individuals, families, and members of the health care team
- Utilize basic critical thinking skills to provide safe, therapeutic nursing care to clients
- Collaborate with other members of the health care team to meet the basic needs of clients
- Assist in utilization of the teaching/learning process to promote, maintain, and restore health to individuals and families
- Demonstrate leadership abilities in the long-term care setting by organizing and delegating client care under the supervision of a RN
- Function as a patient advocate
- Establish a pattern of personal responsibility, self-development, and life-long learning
- Sit for the NCLEX-PN®

To be admitted to the PN Program, an applicant must:

- Be at least 17 years of age.
- Have an official high school transcript or GED diploma with scores; or, if a high school graduate from a foreign country, or have an out-of-state GED, must obtain a Certificate of Preliminary Education (CPE) from the Pennsylvania Department of Education. A CPE is not required with evidence (an official transcript) of satisfactory completion of post-secondary work in an approved educational institution.
- Demonstrate satisfactory performance on the pre-admission test, Assessment Technologies Institute Test of Essential Academic Skills (TEAS®), an on-line computer-proctored examination.
- Provide a satisfactory background check for Criminal and Child Abuse History. A FBI background check is required*
- Undergo a satisfactory physical examination, showing evidence of good mental and physical health and documenting immunization and tuberculosis screening.
- Satisfactory drug screening (i.e. indicates no evidence of drug use.)

* The Pennsylvania State Board of Nursing requires the Program to inform applicants that a person involved in a legal issue involving alcohol, or substance abuse, or convicted of a misdemeanor or a felonious act may be denied licensure or the privilege of sitting for the licensure exam.

*iPAD or Android Tablet Required in Practical Nursing Program
An integral learning tool in the Practical Nursing program is the use of either an iPad or Android tablet that is compatible with the requirements specified by each program of study.

It is the policy of the College that students are required to possess a compatible iPad or Android tablet on the first class meeting of these programs of study. The curricula for these programs include on-line learning, out-of-class assignments, documentation while at clinical sites, learning-outcomes assessment as well as 3-dimensional education applications. Students who do not possess a compatible iPad or Android tablet are at risk of failing individual courses in the program of study.

Students who do not have the availability of an iPad or Android tablet for learning purposes prior to the start of the program of study are encouraged to make an appointment with the Financial Aid Department. In many instances the cost of an iPad or Android tablet may be covered through an individual student’s financial aid program.

**iPad or Android Tablet Requirements**

- iPad with Safari browser
- or-
  - Android tablet
### PRACTICAL NURSING (PN)
Certificate Program
Course Sequence

#### SEMESTER 1

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<tr>
<th>Course Code</th>
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<th>Lab Hrs/Week</th>
<th>Clinical Hrs/Week</th>
<th>Credits</th>
<th>Hours</th>
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<tr>
<td>BIO 133</td>
<td>Human Anatomy &amp; Physiology for Practical Nurses</td>
<td>3.2</td>
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<tr>
<td>NUR 105</td>
<td>Introduction to Nursing Practice</td>
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<td>NUR 115</td>
<td>Pharmacology for Practical Nurses</td>
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<td>1.1</td>
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**SEMESTER TOTAL CREDITS & HOURS**

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#### SEMESTER 2

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<td>Nursing Practice I</td>
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**SEMESTER TOTAL CREDITS & HOURS**

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#### SEMESTER 3

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<th>Clinical Hrs/Week</th>
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<td>Nursing Practice II</td>
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<td>NUR 116</td>
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**SEMESTER TOTAL CREDITS & HOURS**

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**PROGRAM TOTALS**

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**Note:** Admission into the Practical Nursing Program is highly competitive. Meeting the admission requirements is not a guarantee of acceptance into the program.

**To graduate with a Practical Nursing certificate, a student must:**

1. Complete the approved curriculum satisfactorily, i.e., pass every nursing course with a grade greater than or equal to 75% and achieve a “PASS” on the Clinical Evaluation Record in, NUR 105, NUR 102, and NUR 103.

2. Pass the NUR 115 Pharmacology for Practical Nurses Pharmaceutical Mathematical Calculations Exam with a grade greater than or equal to 90%.

3. Meet the clinical attendance requirements.
SCHOOL OF PROFESSIONAL PROGRAMS (SPP) - CERTIFICATE PROGRAMS

P.I.T.’s SPP offers certificates in Clinical Medical Assistant (CMA), Medical Billing and Coding (MBC) and Pharmacy Technician (PHT). These full-time, three term programs prepare graduates to sit for industry certification examinations. These programs are also offered as part-time programs three evenings per week and are administered through The National Healthcareer Association (NHA). The NHA is a nationally approved and recognized certifying organization. The NHA is the largest Allied Health Care Certification Agency in the United States [www.nhanow.com](http://www.nhanow.com).

The College’s Mission for student success provides students with a unique opportunity to strengthen essential skills required in today’s health care workplace at no additional cost. Students who are identified as needing skill strengthening in arithmetic, reading comprehension, and sentence structure are required to attend mandatory Academic Enrichment Program (AEP) sessions until proficiency to succeed in the workplace has been demonstrated. AEP sessions are held during normal College hours.

Every student in SPP must complete an externship or internship associated with the field of study. This capstone experience provides students with opportunities to demonstrate mastery of their course work and its application in a health care setting. Graduates of the certificate program enter the workforce well-prepared to meet the evolving Allied Health career opportunities.

Certificate graduates may further their education at P.I.T. by completing additional required courses for the respective A.S. in AHT degrees.

The college-level courses in CMA, MBC and PHT programs are sequentially built, enabling students to continually strengthen knowledge and skills learned in previous courses. The hands-on approach to instruction enables students to learn important skills and then practice those skills in the classroom under the direct observation and coaching of a qualified instructor.

Students attend classes five (5) days a week for three (3) terms. The program is taught by term with students learning skills in a standardized format. The externship course enables students to practice their skills at the offices of a health care provider while the internship course provides a simulated environment to allow students to hone their skills. The direct and on-going communication between the health care provider and the Externship Coordinator enables the College to improve skills that need strengthening.

In addition to specific program skills, the College prepares students in mathematics, English, and reading comprehension skills that are required in the workplace. At the same time students are taking courses in the program of study; many students are strengthening these important skills working directly with specialized instructors. Commonly called workplace “soft skills,” such as professionalism, teamwork, attendance and punctuality, critical thinking, conflict resolution, oral and written communications are embedded in the curriculum.
The purpose of the CMA Program is to prepare students for employment in a variety of clinical positions in the health care field. Graduates are prepared to work in various health care settings, including medical offices, nursing homes, hospitals, and rehabilitation centers. Employment opportunities exist as clinical medical assistants, EKG specialists, phlebotomists, and other related jobs. Five nationwide certifications are provided within this program: Certified Clinical Medical Assistant (CCMA), Certified Phlebotomist Specialist (CPT), Certified EKG Specialist (CET), and Certified Medical Administrative Assistant (CMAA), CPR and First Aid. Certification examinations are administered through the National Healthcareer Association (NHA), an international accreditation agency.

The college-level courses in the CMA Program are sequentially built, enabling students to continually strengthen knowledge and skills learned in previous courses. The hands-on approach to instruction enables students to learn important skills and then practice those skills in the classroom under the direct observation and coaching of a qualified instructor.

Student Learning Outcomes

CMA Certificate graduates should be able to:
- Communicate effectively in oral, including listening, and written forms
- Follow directions from senior medical staff
- Outline and explain the structure of the medical field
- Discuss medical law and ethics
- Explain health information management
- Label the human body systems
- Explain the anatomy and physiology of these body systems
- Discuss the common illness associated with these systems
- Demonstrate mastery of common medical facility responsibilities
- Observe patient behavior and note behavior on patient chart
- Understand and explain patient charting
- Perform the skills of a phlebotomist
- Perform the skills of a Medical Administrative Assistant
- Perform the skills of an EKG technician
- Apply life-long workplace skills
## CLINICAL MEDICAL ASSISTANT (CMA) - EXTERNSHIP

### Certificate Program

#### Recommended Course Sequence

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<th>Lecture</th>
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# CLINICAL MEDICAL ASSISTANT (CMA) - INTERNSHIP Certificate Program

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MEDICAL BILLING AND CODING (MBC) CERTIFICATE PROGRAM

Location: Media Campus and Center City Philadelphia Location
Format: Traditional Term
Scheduling: Full-Time Day Division and Part-Time, Evening Division

The MBC Certificate is designed to prepare students to excel in a health care provider office as both a Certified Billing and Coding Specialist and a Certified Medical Administrative Assistant.

The three-term, college-level courses in the MBC Program are sequentially built, enabling students continually to strengthen knowledge and skills learned in previous courses. The hands-on approach to instruction enables students to learn important skills and then practice those skills in the classroom under the direct observation and coaching of a qualified instructor. Students spend over 70% of classroom time on college computers practicing medical billing and coding skills.

At the outset of the program of study, students begin to learn how to use one of the most comprehensive and popular computerized medical billing software programs used in medical offices. Students become proficient using patient accounting systems for billing insurance carriers and for keeping track of patient accounts. Students practice their computerized billing and coding skills throughout the program of study.

In an integrated approach, students learn the fundamentals of medical terminology, the body systems, and the diseases of the human body. Additionally, students are taught the importance of seeking essential medical information in order to make correct billing and coding decisions. A capstone course sharpens student skills in solving billing and coding issues as they arise.

ICD-9-CM and CPT-4 coding is the core of this program of study. Students learn and practice these important skills in the majority of the courses. Students will be introduced to ICD-10-CM and ICD-11-CM and should be able to transition to these pending new coding classifications when they become available. Medicare, Medicaid, and TRICARE billing are also taught in this program.

When students complete this program of study they are: proficient in medical billing and coding; adept in the important skills of medical office administration; competent in workplace skills such as mathematics, English, and reading comprehension; proficient in billing and coding in a medical office during the externship; and recognized as prepared for employment with a health care provider by satisfactorily passing the examinations to be Certified Billing and Coding Specialists and Certified Medical Administrative Assistants.

Student Learning Outcomes:

MBC Certificate graduates should be able to:

- Communicate effectively in oral and written forms
- Follow directions
- Demonstrate computer skills
- Demonstrate mastery of word processing applications/spreadsheets
- Label the human body systems
- Explain the anatomy and physiology of these body systems
- Discuss the common illnesses associated with these systems
- Describe the role of a medical office professional
- Explain the structure of the medical field
- Discuss medical law and ethics
- Explain health information management
- Explain the principles of medical billing coding practice
- Demonstrate the ability to manage insurance and patient payments for medical services
- Apply life-long workplace skills
# MEDICAL BILLING AND CODING (MBC) WITH EXTERNSHIP CERTIFICATE PROGRAM

## Recommended Course Sequence

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**PROGRAM TOTAL** | **22** | **22** | **30**
## MEDICAL BILLING AND CODING (MBC) WITH INTERNSHIP

### Certificate Program

**Recommended Course Sequence**

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| PROGRAM TOTAL | 26 | 26 | 36 |
PHARMACY TECHNICIAN (PHT) CERTIFICATE PROGRAM

Location: Media Campus and Center City Philadelphia Location
Format: Traditional Term
Scheduling: Full-Time Day Division and Part-Time, Evening Division

The purpose of the PHT Program is to prepare students to assist registered pharmacists with dispensing prescription medications at retail, hospital, and other dispensing pharmacies. Upon the successful completion of this program, students will possess the knowledge to stock and inventory medications, count or pour medications into dispensing containers, prepare prescription labels, prepare insurance forms, prepare intravenous medications, and other similar tasks. Students are also provided with an externship opportunity of practicing pharmacy technician skills under the mentoring of an experienced registered pharmacist. This program will meet the requirements of the American Society of Health System Pharmacists and the Pharmacy Specialist Education Council. Students are also prepared to take the nationwide Pharmacy Specialist Certification Examination.

Students attend three (3) terms of classes in a standardized format. The college-level courses in the PHT Program are sequentially built, enabling students to continually strengthen knowledge and skills learned in previous courses. The hands-on approach to instruction enables students to learn important skills and then practice those skills in the classroom under the direct observation and coaching of a qualified instructor.

Student Learning Outcomes:

PHT graduates should be able to:

- Communicate effectively in oral and written forms
- Follow directions
- Explain the laws and regulations governing the pharmaceutical industry
- Demonstrate infection control, hazardous waste management, and sanitation management
- Define pharmaceutical terminology including generic and brand medications
- Calculate drug dosages
- Demonstrate the duties of a pharmacy technician
- Describe the therapeutic response of medications to the body systems
- Demonstrate computer literacy
- Operate word processing applications
- Utilize the Internet to search and compile information
- Use pharmaceutical software
- Compute pharmaceutical billing and coding
- Communicate effectively in oral and written forms
- Apply life–long workplace skills
PHARMACY TECHNICIAN (PHT) WITH EXTERNSHIP
Certificate Program
Recommended Course Sequence

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**PHARMACY TECHNICIAN (PHT) WITH INTERNSHIP Certificate Program**  
**Recommended Course Sequence**

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<td>PHT 224 Advanced Pharmacy Technician Internship</td>
<td>0</td>
<td>12</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>TERM TOTAL</strong></td>
<td><strong>4</strong></td>
<td><strong>16</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

| PROGRAM TOTAL | 24 | 28 | 36 |
COURSE DESCRIPTIONS – EXPLANATIONS and DEFINITIONS

Explanations:

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Lecture Hours per Week</th>
<th>Lab/Clinical Hours per Week</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG</td>
<td>104</td>
<td>Composition I</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Prerequisite(s):** ENG 110 English Comprehension Skills for College Success or placement testing.

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Lecture Hours per Week</th>
<th>Lab/Clinical Hours per Week</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR</td>
<td>102</td>
<td>Nursing Practice II</td>
<td>120</td>
<td>120/264</td>
<td>16</td>
</tr>
</tbody>
</table>

**Prerequisite(s):** NUR 105 Nursing Practice I

The three-letter **Course Prefix** identifies the discipline; i.e., ENG = English and NUR = Nursing

The three-digit **Course Number** identifies a specific course within a discipline/program and indicates the course level:
- Courses numbered 101-199 are usually first-year courses
- Courses numbered 200-299 are usually second-year courses
- Courses numbered 300-399 are usually Work Experience, Directed Study, or Special Topics

The **Course Title** describes the subject matter of a course; i.e., Composition I and Nursing Practice II

The numbers below the course description list the **Lecture hours** per week; the **Laboratory and/or Clinical hours** per week, and the **Credit Hours** awarded for successful completion of the course. For example:
- ENG104 Composition I consists of 3 lecture hours per week and 0 laboratory hours per week. Students who successfully complete the course earn 3 credit hours.
- NUR102 Nursing Practice II consists of 120 lecture hours and 120 laboratory hours and 264 clinical hours. Students who successfully complete the course earn 16 credit hours.

Definitions:

A **Prerequisite** is a successfully completed lower level course or its equivalent that a student must have taken before enrolling in a higher level, related course.

A **Co-requisite** is a course that must be taken at the same time as another course.

A **Directed Study course** is a substitute for a required course which is not offered in the term in which a student needs to take it. Under the guidance of a faculty member, a student individually studies the material covered in the standard course. Students who successfully complete a Directed Study course earn credits equal to the standard course for which it is being substituted.

A **Special Topics course** is one in which a student, under the guidance of a faculty member, independently studies a topic not covered in the required courses of a program of study (i.e. Project Management). Based on the depths of the learning objectives, students may enroll for 1-4 credits for Special Topics courses. The Program Manager and student decide on the objectives, time needed, and credits for enrollment. Special Topics courses may be taken more than once for credit when based on varying learning objectives.

**Electives** are student-chosen courses required for degree completion; some programs (i.e. BUS, AHT) may have program-specific or interdisciplinary electives to enhance four-year college transfer opportunities and prepare students for successful careers.
COURSE DESCRIPTIONS

Some course description information may change because of revisions by the Academic Affairs Department.

ALLIED HEALTH (AHT)

AHT 144 STRENGTHENING HEALTH CARE SKILLS I
The course is designed to strengthen English, mathematics, and reading comprehension skills essential for success in the health care field. Students continue to be selected for mandatory enrollment in this course based upon diagnostic evaluation of skills in English, mathematics, and reading comprehension at the time of enrollment. Students take this specific course simultaneously with taking courses in the Program of study. The instructor and student establish an individual plan to strengthen needed skills using a variety of instructional methodologies. Students attend scheduled class sessions and complete assignments as required. During class sessions, students have the opportunity to demonstrate proficiency in the required skill area. Once students have demonstrated the required skill proficiency, the requirements for this course will be satisfied. Note: The grade earned in this course will apply to the student’s cumulative GPA, but credits from this course are not applicable towards an associate degree.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

AHT 146 STRENGTHENING HEALTH CARE SKILLS II
This course is a continuation of AHT 144 Strengthening Health Care Skills I. The course is designed to strengthen English, mathematics and reading comprehension skills essential for success in the health care field. Students continue to be selected for mandatory enrollment in this course based upon diagnostic evaluation of skills in English, mathematics, and reading comprehension at the time of enrollment. Students take this specific course simultaneously with taking courses in the Program of study. The instructor and student establish an individual plan to strengthen needed skills using a variety of instructional methodologies. Students attend scheduled class sessions and complete assignments as required. During class sessions, students have the opportunity to demonstrate proficiency in the required skill area. Once students have demonstrated the required skill proficiency, the requirements for this course will be satisfied. Note: The grade earned in this course will apply to the student’s cumulative GPA, but credits from this course are not applicable towards an associate degree.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

ARCHITECTURE and CIVIL ENGINEERING (ACT)

ACT 151 CONSTRUCTION TECHNOLOGY
The focus of this course is the building process and its components. Some of the topics covered include: soil preparation and drainage, construction materials (cement materials, concrete, brick, stone, wood, metals, plastics, and glass), their properties and use in construction, construction cost estimating, preparation of an estimate, plan reading, specifications, and estimation surveying and excavation.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

ACT 173 CONSTRUCTION SURVEYING
This course teaches surveying fundamentals, such as control, preliminary and construction surveys, random and systematic errors, accuracy, and precision field notes. Concepts covered are: taping techniques; errors and corrections; types of levels; leveling rods; profile and cross-section leveling; vertical and horizontal angles; instrument adjustment; principles of electronic distance measurement (EDM); practical field applications and field notes; meridians; bearing; azimuth balancing field angles; latitudes and departures; rectangular coordinates, areas of closed transverse; global positioning systems (GPS); and land and geographic information systems (LIS,GIS).

Contact Hours: Lecture–2, Lab–3, Credits–3
Prerequisite(s): MTH 145 College Algebra and Trigonometry

ACT 218 ARCHITECTURAL DESIGN STUDIO
Two design projects, one of 10 weeks and one of shorter duration, are the key components of this course. The short project involves designing a residence. Commercial and multi–family problems on a specific subject may be included. Research into the areas of design such as layout and elements of a restaurant, library, and auditorium is required. The Americans with Disabilities Act (ADA) is also addressed. Presentation drawings or a model are required.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): ACT 151 Construction Technology

ACT 225 CIVIL ENGINEERING-SITE DESIGN
The Civil Engineering-Site Design course presents a detailed outline of the steps involved in the site design process and familiarizes the student with the knowledge and skills needed to shepherd a project through the design and approval phases. The technical focus includes understanding the information needed on the design drawings, how that information is determined, and how the presentation of that information is as important as the accuracy of the information. Field trips are included to assist the
student in comprehending the fact that two-dimensional designs on paper must be able to be constructed in three dimensions in the field.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** ACT 151 Construction Technology

### ACT 255 STRUCTURAL DESIGN I, STEEL
This foundational course for all structural engineering technology students emphasizes the properties and production of structural steel components; code requirements, the behavior of beams, tension stiffness; and the design of beams, columns, and floor systems.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** STR 134 Engineering Mechanics and MTH 225 Calculus I

### ACT 265 STRUCTURAL DESIGN II, CONCRETE
This foundation course emphasizes the properties and production of concrete components. Reinforcing, code requirements, behavior of beams, and tension stresses are studied. Students design and size structural members.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** STR 134 Engineering Mechanics and MTH 225 Calculus

### ACT 321 SPECIAL TOPICS
This course is for students who wish to explore issues and projects that are not covered in any of the regular Architectural/Civil Engineering courses. Students may pursue an individual design, analysis of a problem, or the development of a specific project that developed during regular class work and for which there was not adequate time to pursue its conclusion. Students work under the close guidance of an instructor during the course. Students must make all arrangements for such a course with their Program Manager and the instructor.

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** Successful completion of technical courses and permission of the Program Manager and Assistant Dean of Academic Affairs

### ACT 364 CO–OPERATIVE WORK EXPERIENCE
The co-operative work experience provides an opportunity for students to experience the career field they have chosen. Students spend 11 or more hours each week working in an architectural or civil engineering work setting. This on-the-job experience integrates classroom training with the workplace and provides students with a close look at the actual duties involved in their occupations. During this co-operative education experience, students will attend scheduled meetings with their Program Managers.

### BEHAVIORAL HEALTH (BEH)

#### BEH217 Behavioral Approaches
This course provides students an overview of major theoretical approaches to counseling, including psychoanalytic, person-centered, cognitive-behavioral, and solution-focused theories. Students will begin to develop an understanding of the process for selecting appropriate counseling interventions, consistent with current research standards and parameters.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

#### BEH221 Resolution-Based Counseling Skills
Students will explore the methods used in counseling individuals with a focus on applicability to different client needs in a variety of settings. The relationship between specific theories and their counseling applications will also be assessed. Students will learn the importance of adjusting counseling techniques for various individuals to reflect their diverse backgrounds and ages.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

#### BEH229 Family Counseling
In this course, students will study the counseling within the family perspective. The course will include an introduction to theories of family therapy as well as research in family counseling and family functioning. Through the analysis of the research on family development and common family issues across the familial life cycle, students will be introduced to counseling strategies and techniques.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

#### BEH231 Applied Health Care Statistics
In this course, students will learn how to compile, analyze, and review health care statistics and research protocols and techniques. Students will then determine how research data is applied within a counseling context. Topics include basic statistical principles, databases, descriptive statistics, causation, correlation, research protocol monitoring, and Institutional Review Board processes.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

#### BEH239 Behavioral Health Practicum
Students will work in an approved behavioral health setting under the supervision of an approved professional. Periodic conferences between the Supervisor and Practicum instructor occur in order to evaluate the student's progress. At the end of the term, students will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice.

**Contact Hours:** Lecture–0, Lab–10, Credits–5  
**Prerequisite(s):** All courses in curriculum must be successfully completed

Revised: August 30, 2016
BIOLOGY (BIO)

BIO 105 GENERAL BIOLOGY
This course examines the fundamental molecular, cellular, and genetic principles characterizing plants and animals. Areas of study include: scientific method and experimental design, computer graphing of data, cell structure and function, the metabolic processes of respiration, and photosynthesis, as well as cell reproduction and basic concepts of heredity.

Contact Hours: Lecture–3, Lab–1, Credits–3
Co-requisite(s): BIO 106 General Biology Laboratory

BIO 106 GENERAL BIOLOGY LABORATORY
This course is designed to enhance the principles taught in BIO 105 General Biology.

Contact Hours: Lecture–0, Lab–2, Credits–1
Co-requisite(s): BIO 105 General Biology

BIO 130 ANATOMY AND PHYSIOLOGY OF SYSTEMS
This course offers a presentation of the structure and function of the human body using a systematic approach. It introduces the proper general terminology used to describe the relative position of body parts, body sections and body regions. Laboratory instruction and activities include the study of human anatomy via computer software and quantitative studies of physiological processes.

Contact Hours: Lecture–2, Lab–2, Credits–4
Prerequisite(s): None

BIO 133 HUMAN ANATOMY AND PHYSIOLOGY FOR PRACTICAL NURSES
This course is a systems approach to basic concepts of human anatomy and physiology including overall structure and function of the human body. Emphasis is placed on the organs that comprise each human body system and the common diagnoses and procedures for each body system. Basic principles of chemistry and microbiology are included.

Contact Hours: Lecture–48, Lab–32, Clinical–0, Credits–4
Prerequisite(s): None

BIO 135 ANATOMY AND PHYSIOLOGY I
Presentation of basic concepts of human anatomy and physiology, and an introduction to proper anatomical and directional terminology, positioning of body parts, cell structure, tissue and body systems. Content includes structure and function of skeletal, muscular, integumentary, and nervous systems. Laboratory component consists of instruction and activities that include the study of human anatomy and physiology via software and quantitative study.

Online demonstrations and student-learning exercises are an integral component of this course. Students are expected to have access to a smartphone, tablet, or computer in order to access this material. For students who do not have access to one of these devices, there are computers available for use in the Innovation Center and the Library.

Contact Hours: Lecture–3, Lab–2, Credits–4
Prerequisite(s): High school biology

BIO 136 ANATOMY AND PHYSIOLOGY II
This course is a continuation of BIO 135, Anatomy and Physiology I, and presents basic concepts of human anatomy and physiology of the overall structure and function of the human body. Content includes basic anatomy and physiology of the endocrine, cardiovascular, respiratory, lymph, immune, urinary, and reproductive systems. Laboratory component consists of instruction and activities that include the study of human anatomy and physiology via software and quantitative study.

Online demonstrations and student-learning exercises are an integral component of this course. Students are expected to have access to a smartphone, tablet, or computer in order to access this material. For students who do not have access to one of these devices, there are computers available for use in the Innovation Center and the Library.

Contact Hours: Lecture–3, Lab–2, Credits–4
Prerequisite(s): BIO 135 Anatomy & Physiology I

BIO 230 FUNCTIONAL ANATOMY AND KINESIOLOGY
This course offers an interactive presentation of the musculoskeletal and neuromuscular structures and function in the human body. This course is an in-depth study of the human skeleton and muscles with an integrated laboratory component focusing on the functional interaction of these systems in producing movement. Students will be introduced to static and dynamic postures.

Online demonstrations and student-learning exercises are an integral component of this course. Students are expected to have access to a smartphone, tablet, or computer in order to access this material. For students who do not have access to one of these devices, there are computers available for use in the Innovation Center and the Library.

Contact Hours: Lecture–3, Lab–2, Credits–4
Prerequisite(s): BIO 130 Anatomy and Physiology of Systems

BIOMEDICAL EQUIPMENT ENGINEERING (BME)

BME 103 PRINCIPLES OF ELECTRONICS
Students will demonstrate the theoretical knowledge and technical skills in the performance of electronic Equipment testing in the laboratory (specialized knowledge/applied learning); demonstrate error recognition and the ability to integrate and interpret analytical data and establish a course of action to
solve problems (critical thinking); apply mathematical calculations and statistical methods to ensure the accuracy of laboratory test results (quantitative fluency). Students must also be able to analyze electronic data for assessment and evaluate the data to be used in decision making.

Students must be able to apply safety principles; enforce safety rules in the laboratory; use a systematic approach to troubleshooting, identify and identify safety hazards associated with electro-mechanical devices and perform corrective maintenance procedures in a systematic way. Students will also study all applicable local and national electrical safety regulations including the National Electrical Safety Code (NESC).

**Contact Hours:** Lecture – 2, Lab – 2, Credits – 3

**Prerequisite(s):** None

**BME 105 AC-DC ELECTRONICS**
A basic introduction to the Alternating Current (AC) electronic components of medical equipment is presented. The properties of Basic AC Theory, Complex Numbers, Reactance – Inductance, Impedance – capacitance, R-L-C Circuits, Resonance, Mixed Frequency, Filters, Transformers, Polyphase, Power Factor, AC Meters, AC Motors, and Transmission Lines are explained. Students are further introduced to the various medical equipment and components and associated equipment operations.

**Contact Hours:** Lecture – 2, Lab – 2, Credits – 3

**Prerequisite(s):** None

**BME 107 BIOMEDICAL ELECTRONIC DEVICES**
Students will learn to describe the electrical and logical characteristics and operation of processors, memory, and control systems; design and draw schematics for a simple embedded system; design a simple motor control system; connect a stepper motor with a rotary encoder to a power supply and exercise the motor in both a clockwise and counter clockwise direction; and use IEEE connectors to connect robotic arms to PLCs.

**Contact Hours:** Lecture – 2, Lab – 2, Credits – 3

**Prerequisite(s):** None

**BME 207 ELECTRONIC PRINCIPLES OF ROBOTICS**
Students will learn to describe the electrical and logical characteristics and operation of basic digital circuits as they apply to robotic operating equipment; diagnose problems with servomotors, stepper motors, motor encoders and electronic systems using test equipment including the ladder logic monitor mode, DMM’s and oscilloscopes; draw and explain robotic schematics and pictorial circuits, understand the use of operational amplifiers in typical applications; and design simple electronic analog systems.

**Contact Hours:** Lecture – 2, Lab – 2, Credits – 3

**Prerequisite(s):** None

**BME 213 MAGNETIC RESONANCE IMAGING (MRI) THERMOMETRY EQUIPMENT**
Students will gain a strong knowledge of advanced radiographic studies as it relates to the field of radiography and the radiology department; the student will be able to demonstrate advanced patient positioning and have a broad knowledge of human anatomy; understand the physics and instrumentation needed to operate advanced imaging equipment; and demonstrate communication skills through a collaborative case presentation. The student will explore laser-induced heating of medium under investigation which is irradiated with laser light. The laser-induced heating is measured using MRI techniques.

**Contact Hours:** Lecture – 2, Lab – 2, Credits – 3

**Prerequisite(s):** None

**BME 215 BIOMEDICAL EQUIPMENT CALIBRATION AND REPAIR**
This course provides students with the opportunity to calibrate specialized biomedical equipment using standard metrological principles and practices. Additionally, students will learn the skills necessary to, repair and provide preventative maintenance on actual biomedical equipment in various types of health care settings. Suppliers for spare parts will be identified and the need for critical spare parts inventory will be emphasized. Students will be working on diagnostic as well as other types of equipment.

**Contact Hours:** Lecture – 2, Lab – 2, Credits – 3

**Prerequisite(s):** None

**BME 217 TESTING EQUIPMENT & TROUBLESHOOTING**
Students will demonstrate the startup, operation, and power down programming sequences for an automated robotic system in a medical laboratory; apply automated troubleshooting programs to locate/identify fault for medical equipment production and its different systems; evaluate inspection requirements, planning, medical equipment testing and measurements, control limit corrections in a production environment for aerospace systems and apply mathematical calculations and statistical methods to ensure the accuracy of laboratory test results (qualitative fluency).

**Contact Hours:** Lecture – 2, Lab – 2, Credits – 3

**Prerequisite(s):** None

**BME 221 BIOMEDICAL ENGINEERING CAPSTONE**
In this last course in the curriculum, students will work in groups troubleshooting medical equipment failures, developing a plan to solve the problems, actually repairing the equipment so that it is fully functioning safely and documenting the procedures. Students will also calibrate medical equipment and demonstrate preventive maintenance skills. Upon completion of this last course in the entire sequence of courses, students are prepared to take the Certified Biomedical Equipment Technician (CBET) certification sponsored...
BUS 113 Introduction to Business
This course introduces students to a wide variety of areas in business including: economics, finance, accounting, marketing, business law, management, entrepreneurship, forms of business organizations, social responsibility, and business ethics.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

BUS 114 Introduction to Human Resources
This course examines the role of human resource management within an organization. Topics include: job analysis and design, employee recruitment, selection, orientation, training, motivation, performance review, and benefits.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): BUS 113 Introduction to Business

BUS 131 Business Management
This course explores management processes such as planning, organizing, staffing, influencing, controlling, and establishing operating principles and policies through examination of case material

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): BUS 114 Introduction to Human Resources

BUS 201 Organizational Sustainability
This course introduces students to the broad concept of organizational sustainability, including the capacity of the organization to economically survive while directly contributing to the social and environmental environments. Further, this course introduces students to the concept of a multiple goals of organizational success in which social responsibility and environmental protection are equally essential that leads to organizational profitability.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): BUS 131 Business Management

BUS 211 Financial Accounting
This course introduces students to basic accounting concepts including transaction analysis, journal entries, and financial statements in a manual environment. Areas covered include: general ledger, balance sheet and income statement analysis, and accounts payable and receivable.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

BUS 218 Managerial Accounting
This course introduces the managerial tools and models available for planning, controlling, and decision making for partnerships and corporations. Specialized topics include: budgeting, product costing, analytical performance, and appraisal ratios. Students utilize electronic work papers to solve problems.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): BUS 211 Financial Accounting and SIT 203 Basic Office Software Applications

BUS 226 Principles of Marketing
This is a course in which the main functions, institutions, and concepts of marketing are studied. This course provides students with an understanding of the marketing function. Topic areas include: the traditional areas of product, price, promotion, and placement—plus the growth of ethnic marketing and marketing ethics. Case studies are used to relate lecture topics to the real business world.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

BUS 231 Business Law
This course examines the contemporary legal environment as it relates to business. Among the topics covered are: the origins of law and the legal system, the ethics and social responsibility of business, contracts, agency relationships, and the Uniform Commercial Code.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

BUS 234 Introduction to Project Management
This course introduces students to a formalized, systematic process of managing major organizational projects. Students will gain an understanding of essential elements of the project management process including: creating a statement of work, creating a reasonable schedule, establishing a budget, assessing the quality of work, allocating financial and human resources, communicating the status of the project, managing the inherent risks in any project, and meeting project goals timely. Exercises and projects are major components of this course.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

BUS 239 Principles of Finance
This course explores the concepts of financial management in all types of organizations. Students are introduced to understanding and analyzing financial statements, the management of cash flow, the concept of financial risk and return, the importance of time value of money, the concept of organizational budgeting and capital structure and the cost of capital.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None
BUS 243 ADVERTISING
This course presents the theories and practices related to the purchase and use of advertising as part of the marketing process. Emphasis is placed on marketing research techniques and on practical applications in message development and campaign management. Also considered are various media, including the Internet, in terms of their cost and effectiveness.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

BUS 247 PRINCIPLES OF MACRO-ECONOMICS
This course provides students with an overview of macroeconomics including exploring fundamental economic concepts and economic systems. Students will be exposed to the concepts of income formation, the fluctuations in economic systems, money, banking, and fiscal policies. Additionally, students will study the theory of economic growth and development, comparative economic systems, and economic stabilization policies.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

BUS 290 ENTREPRENEURSHIP AND NEW VENTURES
This course prepares students to initiate new business ventures and prepare a business plan that may be used to generate financing and to begin operations in a new business enterprise. Students will gain an understanding of the critical factors that are involved in the idea formation, conception, and development of new business ventures. Course topics will include analyzing the market potential for new products and services, the acquisition of capital to finance new ventures, and the organization and operation of the new business.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

BUS 295 ENTREPRENEURSHIP
This capstone course focuses on the organization of an entrepreneurial venture with emphasis on writing the business plan. This course will require that the student utilize all course work completed to date. Areas covered will include studying the entrepreneurial perspective; various forms of business organizations; and creating, starting, and financing a new venture. Each student will prepare a formal business plan to be presented to a board of business professionals.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): Successful completion of the first three (3) terms course work

CHEMISTRY (CHM)

CHM 105 GENERAL CHEMISTRY
This course is an introduction to the fundamentals of chemistry. Areas of study include: scientific method and experimental design, computer graphing of data, metric measurements, properties of matter, atomic structure, molecular geometry, periodic chart arrangement, chemical bonding, ionization, stoichiometry, and solutions.

Contact Hours: Lecture–3, Lab–1, Credits–3
Co-requisite(s): CHM 106 General Chemistry Laboratory

CHM 106 GENERAL CHEMISTRY LABORATORY
This course is designed to enhance the principles taught in CHM 105 General Chemistry.

Contact Hours: Lecture–0, Lab–2, Credits–1
Co-requisite(s): CHM 105 General Chemistry

CLINICAL MEDICAL ASSISTING (CMA)

CMA 109 CLINICAL MEDICAL ASSISTANT
This course introduces students to the field of healthcare professions and the various healthcare settings. Students will learn the general procedures and skills that occur in a medical office. Students will be introduced to electronic health records and its major functions and will be able to demonstrate competencies in conducting patient interviews, taking vital signs, patient charting, scheduling patients, properly documenting and preparing medical facilities for the examination of patients. In addition, students will be introduced to EHR/PM program including the entire medical office workflow.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

CMA 115 IMMUNOLOGY AND PHARMACOLOGY
This course focuses on the anatomy, physiology, and pathology of the immuno-lymphatic body system. Aseptic techniques are studied including cold and autoclave sterilization and the sanitary wrapping of medical instruments. Students gain a working knowledge of medications and the administration of oral, rectal, and sublingual medications. Students demonstrate proficiency in administering intradermal, subcutaneous, and intramuscular injections.

Contact Hours: Lecture–3, Lab–1, Credits–3
Prerequisite(s): None

CMA 145 HUMAN BODY SYSTEMS I
This course integrates medical terminology with anatomy and physiology. Students will learn the component parts of medical terminology: word roots, prefixes, and suffixes. They will learn how to construct and analyze medical terms that relate to the skeletal, muscular, and integumentary systems. In addition, they will learn the anatomy, physiology, and pathology of these systems, and the diagnostic, therapeutic, symptomatic, and pathologic terminology.

Contact Hours: Lecture–3, Lab–1, Credits–3
Prerequisite(s): None
CMA 146 - HUMAN BODY SYSTEMS II
This course integrates medical terminology with anatomy and physiology. Students will learn the component parts of medical terminology: word roots, prefixes, and suffixes. They will learn how to construct and analyze medical terms that relate to the male and female reproductive, endocrine, and nervous systems, as well as special senses (eye and ear). In addition, they will learn the anatomy, physiology, and pathology of these systems, and the diagnostic, therapeutic, symptomatic, and pathologic terminology.

Contact Hours: Lecture–3, Lab–1, Credits–3
Prerequisite(s): None

CMA 207 MEDICAL LABORATORY PROCEDURES
This clinical course introduces and develops the essential clinical skills associated with medical laboratory procedures and testing methods. This course focuses on the urinary system while the student learns the clinical applications and theory involving body specimen collection. The clinical significance of obtained test results and its effects on medical decision-making and patient care are also discussed.

Contact Hours: Lecture–1, Lab–3, Credits–3
Prerequisite(s): NONE

CMA 209 ELECTROCARDIOGRAM AND CARDIOVASCULAR SYSTEM
This course brings together the anatomy, physiology, and pathology of the cardiovascular system and how it pertains to the electrocardiograph procedure (ECG). Students will learn how to safely prepare and obtain an ECG printout using a multi-channel ECG machine. In addition, basic cardiac arrhythmia recognition, waveform measurement, patient treatment modalities, and patient safety will also be practiced. The last week will be reserved for the nationwide certification review and taking the actual examination.

Contact Hours: Lecture–0, Lab–3, Credits–3
Prerequisite(s): NONE

CMA 215 PATIENT CARE TECHNICIAN
In this course, students will learn technical skills needed to perform direct patient care and learn how to implement patient care plans including various medical procedures and services. Students will also learn basic nursing assisting, surgical and medical care. In addition, students will study medical terminology, medical law and ethics, anatomy and physiology as well as the application of applied and clinical EKG and phlebotomy. The last week will be reserved for the nationwide certification review and taking the actual examination.

Contact Hours: Lecture–0, Lab–3, Credits–3
Prerequisite(s): NONE

CMA 217 PHLEBOTOMY
This course provides the fundamentals for clinical blood collection procedures, personal and patient safety as well as methods of laboratory testing involving collected blood samples. Students will learn, implement and develop phlebotomy skills, proper handling and storage of collected samples as well as documentation procedures. The last week will be reserved for nationwide certification review and taking the actual examination.

Contact Hours: Lecture–0, Lab–3, Credits–3
Prerequisite(s): NONE

CMA 220 CLINICAL MEDICAL ASSISTANT INTERNSHIP
Students develop and refine clinical medical assistant skill sets by working in a simulated environment using the latest medical assisting simulation software under the supervision of faculty. Fulfillment of the requirements for this course includes taking the examination to earn the Certified Clinical Medical Assistant, Certified Patient Care Technician, Certified EKG Technician and Certified Patient Care Technician national certifications. NOTE: Students must meet all the requirements in this course in order to satisfactorily complete the program of study.

Contact Hours: Lecture–0, Lab–12, Credits–6
Prerequisite(s): All required course work; CMA 209 and 217 may be taken concurrently

CMA 224 ADVANCED MEDICAL ASSISTANT INTERNSHIP
During the first half of the course, students will engage in the practical application of all skills learned in the classroom and laboratory to a simulated clinical environment using the ActivSim software. The second half of the course will focus on reviewing high yield topics and questions most likely encountered in the certification exam. Practice test questions and answers will be reviewed to improve retention and recall. The last day will be reserved for the nationwide certification examination, Certified Clinical Medical Assistant (CCMA).

Note: Students must meet all the requirements in this course in order to satisfactorily complete the program of study.

Contact Hours: Lecture–0, Clinical–12, Credits–6
Prerequisite(s): Completion of all required courses in the program of study

CMA 230 Clinical Medical Assistant Externship
Students explore their clinical skill sets by working in an actual medical environment. The student is closely monitored by both the Clinical Externship Coordinator and the Externship Site Manager.

Contact Hours: Lecture-0, Clinical-12, Credits-6
Prerequisite(s): Completion of all required courses in the program of study.
COMMUNICATIONS (COM)

COM 108 COMMUNICATIONS AND SOCIAL INTERACTION
Through the extensive use of oral presentations, the class will examine the process of how messages are created and interpreted, with a specific focus on how culture, age, gender, and ethics influence our understanding of information. We will compare and contrast verbal and non-verbal communication as well as how to manage the information being delivered. Students will also complete a resume, reference list, cover letter and thank you letter before practicing their interview skills. Ultimately, the student will understand how to engage with others, present messages in a concise way, and understand how to effectively present and market themselves in the professional arena.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

COMPUTER AND COMMUNICATION (CCT)

CCT 101 INTRODUCTION TO TELECOMMUNICATIONS
This course introduces the field of telecommunications by examining, from management and technical perspectives, various technologies and how applications of those technologies work together to form functioning systems and networks.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

CCT 120 COMPUTER SYSTEMS ARCHITECTURE
This course includes a broad overview of computer systems architecture and operating systems including the concepts of the PC, DOS, and Windows. The interaction between the hardware and operating system software is examined. Topics include: system components, CPUs, memory, bus architecture, operating systems, the boot sequence, the user interface (including command line interfaces and GUIs), memory management and mapping, and secondary storage management (file systems), as well as diagnostic and troubleshooting software.

Contact Hours: Lecture–3, Lab–2, Credits–4
Prerequisite(s): None

CCT 180 HOME AND SMALL BUSINESS NETWORKING
This course teaches students the skills needed to obtain entry–level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, cable installers, and help desk technicians. It provides a hands–on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments.

Contact Hours: Lecture–3, Lab–2, Credits–4

CCT 181 INTRODUCTION TO NETWORKING
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP–IP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, as well as media, and operations are introduced to provide a foundation for the curriculum.

This is the first of four courses preparing students for the Cisco Certified Network Associate (CCNA®) examination.

Contact Hours: Lecture–3, Lab–2, Credits–4
Prerequisite(s): None

CCT 182 INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS (PLCs)
Geared toward persons with little or no experience in computers and machine control systems, this course illustrates how to build basic digital ladder logic diagrams (LLD) on a personal computer, download the LLD to a PLC, connect inputs and outputs to analog input sensors and output devices, and make the controlled system function properly.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

CCT 183 ROUTER CONFIGURATION
This course describes the architecture, components, and operation of routers and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. By the end of the course, students recognize and correct common routing issues and problems.

This is the second of four courses preparing students for the CCNA® examination.

Contact Hours: Lecture–3, Lab–2, Credits–4
Prerequisite(s): CCT 181 Introduction to Networking

CCT 184 SWITCH AND WIRELESS CONFIGURATION
This course provides a comprehensive, theoretical, and practical approach to learning the technologies and protocols needed to design and implement a converged switched network. Students learn about the hierarchical network design model and how to select devices for each layer. The course explains how to configure a switch for basic functionality and how to implement Virtual LANs, VTP, and inter–VLAN routing in a converged network. The different implementations of Spanning Tree Protocol in a converged network are presented, and the students develop the knowledge and skills necessary to implement a WLAN in a small–to–medium sized network.
This course is the third of four courses preparing students for the CCNA® examination.

**Contact Hours:** Lecture–3, Lab–2, Credits–4  
**Prerequisite(s):** CCT 181 Introduction to Networking

**CCT 185 WAN DESIGN**
This course discusses the WAN technologies and network services required by converged applications in enterprise networks. The course uses the Cisco Network Architecture to introduce integrated network services and explains how to select the appropriate devices and technologies to meet network requirements. Students learn how to implement and configure common data link protocols and how to apply WAN security concepts, principles of traffic, access control, and addressing services. Finally, students learn how to detect, troubleshoot, and correct common enterprise network implementation issues.

This course is the final of four courses preparing students for the CCNA® examination.

**Contact Hours:** Lecture–3, Lab–2, Credits–4  
**Prerequisite(s):** CCT 183 Router Configuration and CCT 184 Switch and Wireless Configuration

**CCT 186 INTRODUCTION TO MICROPROCESSORS**
The nature and history of the microprocessor is examined at the architectural level. Special emphasis is given to the currently prevalent Pentium processor including hardware, software, and programming.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** ETT 106 Digital Electronics and ETT 107 Digital Electronics Laboratory

**CCT 220 PERIPHERAL DEVICES**
This course covers the operation, installation, and troubleshooting of system components and peripheral devices, including hard, floppy, and optical (CD-DVD) disk drives; upgrading CPUs, motherboards, and memory; video and audio hardware; serial, parallel, USB, and IEEE–1394 ported hardware; telecommunications devices; and power supplies.

**Contact Hours:** Lecture–3, Lab–2, Credits–4  
**Prerequisite(s):** CCT 120 Computer Systems Architecture

**CCT 240 NETWORK SECURITY I**
This course focuses on the overall security processes in a network with an emphasis on hands–on skills. Topics include security policy design and management; security technologies, products, and solutions; firewall and secure router design, installation, configuration, and maintenance; AAA implementation using routers and firewalls; and securing the network at layers 2 and 3 of the OSI model.

This course is the first of two courses that prepare students to take the CCNA® Security examination.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** CCT 183 Router Configuration, CCT 184 Switch and Wireless Configuration  
**Co-requisite(s):** CCT 185 WAN Design

**CCT 241 NETWORK SECURITY II**
This course builds on the topics introduced in the CCT 240 course. Additional emphasis is placed on intrusion prevention implementation and VPN implementation, using routers and firewalls.

This course is the second of two courses that prepare students to take the CCNA® Security examination.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** CCT 240 Network Security I

**CCT 315–8 SPECIAL TOPICS**
These special topics courses are reserved for students to explore issues and projects not covered in any of the regular CCT courses. Students may elect to take one to four hours of credit in each of the courses and may take more than one special topics course during their program of study. Special Topics may include work within or external to the College. Students work under the close guidance of an instructor during the course.

**Contact Hours:** Lecture–1, Lab–Variable, Credits–1–4  
**Prerequisite(s):** Successful completion of technical courses, approval of Program Manager, and permission of instructor, Program Manager, and the Assistant Dean of Academic Affairs

**COMPUTER SCIENCE (CSC)**

**CSC 101 COMPUTER SCIENCE FUNDAMENTALS**
This course introduces fundamental ideas in computer science and information technology. Many facets of the field are explored, starting with the concept of information, up through technologies of data storage and manipulation, encryption, graphics, programming language concepts, operating systems, computing devices, computer networks, computer security, cloud computing, and computer ethics.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

**CSC 102 COMPUTER SYSTEMS ARCHITECTURE**
This course includes a broad overview of computer systems architecture and operating systems, focusing on the PC. The interrelation between the hardware and operating system software is examined. Topics include system components, CPUs, memory, bus architecture, operating systems, the boot sequence, user interfaces (including command line interfaces and GUIs), memory management and mapping, and secondary storage management (file systems), as well as diagnostic and troubleshooting software.

**Contact Hours:** Lecture–3, Lab–2, Credits–4
**Prerequisite(s):** None

**CSC 103 UNIX**
This is an introduction to UNIX using terminal emulation to connect to a Linux server. The most useful UNIX commands are used to explore, create, and search directories and files, and to set permissions. Useful shell scripts are written for administrative tasks using several editors including vi. Various shells are explored as well as important administrative tools, such as AWK and grep.

**Contact Hours:** Lecture–2, Lab–2, Credits–3
**Prerequisite(s):** None

**CSC 110 PROGRAMMING FUNDAMENTALS**
This course uses an intuitive and largely graphical approach to teaching fundamental software design. The students will develop games and fun, useful applications. This practical yet rigorous course will teach students fundamental programming principles and techniques that serve as the foundation for higher level programming courses. The content and methods are updated each term to remain state-of-the-art.

**Contact Hours:** Lecture–2, Lab–2, Credits–3
**Prerequisite(s):** None

**CSC 120 NETWORK FUNDAMENTALS**
This course introduces the architecture, structure, functions, components, and models of computer networks. It uses the OSI and TCP-IP layered models to examine the nature and roles of protocols and services at all layers of a network. Students learn the principles and structures of IP addressing and the fundamentals of Ethernet and various media, providing a foundation for more advanced network courses.

This is the first of four courses preparing students for the Cisco Certified Network Associate (CCNA®) examination.

**Contact Hours:** Lecture–3, Lab–2, Credits–4
**Prerequisite(s):** None

**CSC 130 CYBERSECURITY I**
This course introduces computer and network security including fundamental concepts and terminology. Students will learn the goals of security including availability, integrity, accuracy, and confidentiality. Additionally, students will be able to identify the specifics of computer and network security exposure and the countermeasures available to prevent breaches and other system vulnerabilities.

**Contact Hours:** Lecture–2, Lab–2, Credits–3
**Prerequisite(s):** None

**CSC 210 PROGRAMMING CERTIFICATION PREP**
This course prepares the student for the Oracle Certified Associate (OCA) Java certification exam, currently SE 7. The certification objectives measure your day-to-day programming skills, and your ability to manage situations you are likely to encounter on a real world projects. The OCA Java SE 7 certification requires successfully completing a single exam: 1Z0-803.

**Contact Hours:** Lecture–2, Lab–3, Credits–3
**Prerequisite(s):** CSC 214 Java II or equivalent

**CSC 211 WEB PROGRAMMING**
The fundamentals of JavaScript, HTML5, and CSS are used together with current APIs to produce modern client-side applications. The basics of Google Web Toolkit (GWT) are explored and applied. A server-side language, such as Python, is used to access databases for the student’s web applications.

**Contact Hours:** Lecture–2, Lab–2, Credits–3
**Co-requisite(s):** CSC 212 Java I

**CSC 212 JAV A I**
This course teaches the basics of Object-Oriented Programming using Java. Topics include Java’s basic API, syntax and data types, writing methods, decision logic, loops, arrays and other universally useful elements of programming. Students apply Object-Oriented concepts such as abstraction, inheritance, polymorphism to write basic command-line applications. Writing GUI applications using Swing is also introduced.

**Contact Hours:** Lecture–2, Lab–2, Credits–3
**Prerequisite(s):** CSC 110 Programming Fundamentals or equivalent

**CSC 213 DATABASE SYSTEMS**
Students will create and query existing relational databases using SQL, and also create, configure and manipulate their own database tables on a server. Other target skills include creating and managing login accounts, assigning and enforcing security policies and access permissions, optimizing server performance, and troubleshooting transaction errors.

**Contact Hours:** Lecture–2, Lab–2, Credits–3
**Prerequisite(s):** None

**CSC 214 JAV A II**
Students create GUI-based applications in this advanced Java course using Swing components, and write code to handle events and exceptions. Students refine their abstraction skills for building logical, maintainable classes; collaborate in designing multi-threaded network applications, and use databases for data storage and manipulation. Students learn to use the built-in tools of an IDE to troubleshoot their code.

**Contact Hours:** Lecture–2, Lab–2, Credits–3
**Prerequisite(s):** CSC 212 Java I or equivalent

**CSC 215 PROGRAMMING MOBILE DEVICES**
Programming for mobile devices is first approached by designing web applications specifically optimized for mobile devices and made native for multiple platforms using a third party converter, such as PhoneGap or Sencha. Native Android apps are then developed.
directly using Java with the Android Development Tools (ADT) for the Eclipse IDE.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** CSC 212 Java I, CSC 211 Web Programming

**CSC 216 SOFTWARE ENGINEERING CAPSTONE**  
Students collaborate to develop maintainable code using the software engineering techniques of Agile, Scrum and Extreme Programming. After producing several small coding projects as training exercises, students develop a larger capstone project of their choosing. The students will assemble a collection of personal projects as a portfolio of their basic achievements in software development.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** CSC 214 Java II

**CSC 220 NETWORK CERTIFICATION PREP**  
This course will prepare the student for Cisco’s CCNA® certification exams 640-822 ICND1 and 640-816 ICND2 or the composite exam 640-802 CCNA®. The student is required to sit for at least one network certification exam at the end of the course. The student can opt to sit for CompTIA’s Network+ exam or the Microsoft® Active Directory or Network Infrastructure Exam.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** CSC 224 WAN Design

**CSC 221 LAN SERVER ADMINISTRATION**  
Students learn to create, configure and maintain a server’s directory database, which includes security accounts, administrative units, printers, workstations, others servers, and all other network resources under the server’s control. Important administrative skills, such as creating and configuring group policies, creating backups, disaster recovery, configuring DNS, and managing Digital Certificates are also covered. This course prepares students for the Configuring Microsoft® Active Directory certification exam.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** CSC 120 Network Fundamentals

**CSC 222 ROUTER CONFIGURATION**  
Students will be able to describe the architecture, components, and operation of routers and explain the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols RIPv1 and RIPv2, EIGRP, and OSPF. Students will be able to identify and correct common routing issues and problems. This is the second of four (4) courses preparing students for the CCNA® examination.

**Contact Hours:** Lecture–2, Lab–3, Credits–3  
**Prerequisite(s):** CSC 120 Network Fundamentals

**CSC 223 SWITCH AND WIRELESS CONFIGURATION**  
This course provides a theoretical and practical approach to learning the technologies and protocols for designing and implementing converged switched networks. Students learn about the hierarchical network model and how to select devices for each layer, configure a switch for basic functionality, implement Virtual LANs, VTP, and inter-VLAN routing in a converged network. The student will be able to implement Spanning Tree Protocol in a converged network, develop the knowledge and skills used to implement a wireless LAN in a small-to-medium sized network. This course is the third of four courses preparing students for the CCNA® examination.

**Contact Hours:** Lecture–2, Lab–3, Credits–3  
**Prerequisite(s):** CSC 120 Network Fundamentals

**CSC 224 WAN DESIGN**  
Students learn WAN technologies and network services required by converged applications in enterprise networks. The course uses the Cisco Network Architecture to introduce integrated network services and explains how to select the appropriate devices and technologies to meet network requirements. Students learn how to implement and configure common data link protocols and how to apply WAN security concepts, traffic principles, access control, and addressing services. Additionally, students learn how to detect, troubleshoot, and correct enterprise network implementation issues. This course is the final of four courses preparing students for the CCNA® examination.

**Contact Hours:** Lecture–2, Lab–3, Credits–3  
**Prerequisite(s):** CSC 222 Router Configuration and CSC 223 Switch and Wireless Configuration

**CSC 225 LAN INFRASTRUCTURE ADMINISTRATION**  
The student learns the advanced skills of: establishing a Dynamic Host Configuration Protocol (DHCP) server, creating and activating scopes, implementing and managing name resolution through DNS, creating lookup zones, administering security policies, installing security updates, securing network traffic with IPsec, configuring routing and remote access, among other topics. This course prepares candidates for the Configuring Microsoft Server Network Infrastructure certification exam.

**Contact Hours:** Lecture–2, Lab–3, Credits–3  
**Prerequisite(s):** CSC 221 LAN Server Administration

**CSC 230 CYBERSECURITY CERTIFICATION PREP**  
This course will prepare students to take the CompTIA Security+ and/or (ISC)² SSCP certification. Additional certifications in computer and network security and forensics will be explored.

**Contact Hours:** Lecture–2, Lab–3, Credits–3  
**Prerequisite(s):** CSC 236 Cybersecurity II

**CSC 231 DIGITAL FORENSICS I**

Revised: August 30, 2016
Students will gain knowledge of the fundamental methodologies and processes used in the field of digital forensics. Key skills required in digital forensics are identified and explored. Students will understand forensic topics such as effective keyword searches, the File Allocation Table File System (FAT), NTFS, file header formats, and forensic imaging methods. Students will also be introduced to the forensics of digital devices including mobile telephones and digital cameras.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): CSC 102 Computer Systems Architecture

CSC 232 COMPUTER SECURITY AND FORENSICS I
Introducing forensics, this course further examines the details of computer security. The course covers such topics as Open Source tools, an overview of computer crime, preparing media for sterile environments, the overall security of networks, and an array of security technologies, products, and solutions. Students will explore security and forensics tools including EnCase and the Forensic ToolKit (FTK).

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): CSC 130 Cybersecurity I

CSC 233 DATA RECOVERY
This basic course introduces students to the processes used for constructing new data points outside a discrete set of known data points for lost data. Students will understand how forensic specialists use various techniques including linear and polynomial extrapolation tools, as well as other approaches, to gain knowledge of incomplete data.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

CSC 234 COMPUTER SECURITY AND FORENSICS II
Students will expand their understanding of computer security and forensics gained in the earlier course, CSC 232 Computer Security and Forensics I. The focus of this course is in recovering Internet usage data, firewalls, protecting small office and home office (SOHO) networking, the preservation of original data and media, and the recovery of memory extension files including swap files, temporary files, and cache files.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): CSC 232 Computer Security and Forensics I

CSC 235 DIGITAL FORENSICS II
This course is a continuation of the course CSC 231 Digital Forensics I. Students will explore advanced forensics topics such as the structure and layout of NTFS file system, the Windows Registry, INFO2 files, and event logs. Additional topics included are data hiding techniques, dealing with encryption and passwords, and E-mail analysis. The focus of the course is not only on computers and computer networks, but also on other digital devices including mobile telephones, digital cameras, and other devices.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): CSC 231 Digital Forensics I

CSC 236 CYBERSECURITY II
This course emphasizes hands-on defensive measures against network intrusion and malware. Topics include designing security policies, using security technologies, products and solutions, and securing networks at layers 2 and 3 of the OSI model by implementing AAA on routers and firewalls. File backup and recovery strategies are also covered.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): CSC 130 Cybersecurity I

CSC 239 CYBER LAW, ETHICS AND SOCIETY
Students will gain an understanding of the interplay of human behavior, legislation, laws, and regulations regarding Cybersecurity and computer ethics and explore the impact of these interactions on modern society.

COMPUTER SUPPORT ENGINEERING (CSE)

CSE 201 A+ Hardware & Software
In this course the student will disassemble a computer, identify parts, be able to reassemble, and practice upgrading parts. Students will also learn about installation, maintenance, troubleshooting and repair of information and communication technology hardware and software.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

CSE 213 PC Support
This course addresses and recommends strategies for working in a help desk or technology support position. Topics will include hierarchical standards for problem resolution, customer service, timeliness, performance metrics, and managing the troubleshooting process. Practical exercises, including role playing, will assist the student in developing real-world skills.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

CSE 225 Peripheral Devices
In this course, students will learn installation and configuration processes for peripheral devices. Additional topics include troubleshooting and repairing common problems, device drivers, hardware diagnostics and resolution. This course will also explore the principles of communication between peripheral device controllers and peripheral devices. Upon completion of the course, students should be able to upgrade and maintain peripherals in networked and non-networked environments.
## CONSTRUCTION MANAGEMENT (CMT)

**CMT 124 CONSTRUCTION MANAGEMENT I**
The primary goal is to cover Construction Management concepts and practices, the management system, construction planning and programming, total quality management, and ethics in construction management. The course finishes with a practical module using scheduling software in Microsoft Project and Excel.

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** None

**CMT 220 CONSTRUCTION METHODS AND MATERIALS II**
This course covers concrete, reinforced concrete, site cast and pre-cast concrete, brick and concrete masonry, reinforced masonry, the properties of these materials, and the construction methods associated with them.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** None

## CRIMINAL JUSTICE (CRJ)

**CRJ 101 Introduction to Criminal Justice**
In this course, students will receive an overview of the criminal justice system from arrest through to the parole process. The primary elements of police, courts, and public opinion influence policy and practice. Ethical considerations are addressed, specifically focusing on juvenile justice, institutional racism, and historical interpretations of the Constitution.

**Contact Hours:** Lecture-3, Lab-0, Credits-3  
**Prerequisite(s):** None

**CRJ111 Essentials of Criminology**
In this course, students will learn to assess the nature and extent of crime, explains its causes, and examines the reasons for and effectiveness of society’s responses to it. The topic of criminology will be explored by identifying the different types of crimes. This course will also address different theories of why crime occurs and why people become criminals.

**Contact Hours:** Lecture-3, Lab-0, Credits-3  
**Prerequisite(s):** None

**CRJ115 Introduction to Criminal Law**
In this course, students will explore the characteristics of crimes against people, property, and the state. Emphasis is placed on defining criminal conduct, criminal intent, and legal causality. Additionally, major judicial decisions will be analyzed to identify how evolving criminal activity is addressed through the Constitution and the penal code.

**Contact Hours:** Lecture-3, Lab-0, Credits-3  
**Prerequisite(s):** None

**CRJ201 Theories of Juvenile Delinquency**
In this course, students analyze current sociological and psychological factors contributing to delinquent behavior that occurs during the period between childhood and adulthood. Specific aspects addressed include law, race, gender, geography and socio-economic status within the context of juvenile delinquency. Finally, issues such as restorative justice versus punitive justice will be discussed in terms of how maturity impacts decision making and impulse control.

**Contact Hours:** Lecture-3, Lab-0, Credits-3  
**Prerequisite(s):** None

**CRJ205 Introduction to Corrections**
In this course, students will survey the historical evolution of the corrections system in the United States from its earliest days through the development
of the penitentiary, and into today’s privatization of prisons. How a correctional institute is organized is discussed as well as the various levels of population threat are identified. The purpose behind corrections will be analyzed and modern theories of rehabilitation are examined.

**Contact Hours:** Lecture-3, Lab-0, Credits-3  
**Prerequisite(s):** None

**CRJ210 Policing in the United States**  
In this course, students will study the history of policing in the United States. The role of police culture, career opportunities and advancement, social and legal restraints on police practices, police discretion in practice, and community policing will also be discussed. Contemporary issues that police face will be examined extensively, especially the use of force and coercion, ethical problems, and violence against police.

**Contact Hours:** Lecture-3, Lab-0, Credits-3  
**Prerequisite(s):** None

**CRJ225 Elements of Criminal Investigation**  
In this course, students will learn the fundamental theories and techniques of criminal investigation for law enforcement officers. Issues that are addressed include personal conduct at the crime scene, evidence, procedures and protocols, conduct of interviews and investigations, and note taking and report writing. Finally, an examination of investigative techniques during the conduct of specific felony offenses will be discussed.

**Contact Hours:** Lecture-3, Lab-0, Credits-3  
**Prerequisite(s):** None

**CRJ235 Private Security Procedures**  
In this course, the focus is on the protection of life, assets, and facilities outside of the context of a public police or security force. The steps in the security process will be studied, as well as an examination of the operational and technical security devices that may be necessary to protect facilities and people. This course focuses on the special requirements of private first responders and others who are assigned safety, security or emergency management responsibilities.

**Contact Hours:** Lecture-3, Lab-0, Credits-3  
**Prerequisite(s):** None

**CRJ245 Introduction to Scientific Crime Detection**  
In this course, students learn what types of evidence are admissible in a criminal trial, including a comprehensive analysis of the most frequently used types of evidence. Readings and discussions pertaining to the nature of real, testimonial, hearsay and circumstantial evidence will explore the evolution of science in the field of criminal justice, specifically with regard to fingerprinting, DNA analysis, and other biomarkers that have become the norm in criminal court cases.

**Contact Hours:** Lecture-2, Lab-2, Credits-3  
**Prerequisite(s):** None

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**ELECTRONIC HEALTH RECORDS (EHR)**

**EHR 107 HEALTH INFORMATION TECHNOLOGY I**  
This course introduces the student to specific aspects of managing health care data across the spectrum of health care provision. Basic computing terminology, an overview of computer design, how data is translated into programming languages, and the impact of networking communication will be studied. The requirements and types of systems for information security and the forensics relating to system integrity will all be addressed.

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** None

**EHR 113 ELECTRONIC HEALTH RECORDS I**  
Health care initiatives impart upon today’s provider the necessity and value of Electronic Health Records. This course provides the student with an overview of the history and importance of various initiatives relating to Electronic Health Records including the federal government’s efforts toward a national health information network (NHIN). The student will learn the major components and capabilities of the electronic health record as well as the benefits and challenges posed during adoption and implementation. The course will introduce the student to the various members of the health care spectrum – including physicians, hospital systems, the continuous care component, and public health providers. The student will become familiar with the content requirements of the electronic health record and how to manage the information during a patient visit. The student will be capable of discerning meaningful use of Electronic Health Records in various settings.

**Contact Hours:** Lecture-3, Lab-1, Credits-3  
**Prerequisite(s):** None

**EHR 121 HEALTH CARE DOCUMENTATION**  
The student will explore the purpose of, and regulatory requirements related to, documentation in various settings. Source documents commonly used in health care will be defined and explored. Documentation standards and formats will be introduced. The student will be given the opportunity to develop, critique, and identify appropriate revisions to actual documentation. The implications of how and what the transference of the information to a database may impact are demonstrated. Documentation relating to pharmacology will be defined with respect to legal and best practice health care requirements. The recognition and application of appropriate medical terminology is an expected objective of this course.

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** None

**EHR 207 HEALTH INFORMATION TECHNOLOGY II**
This course builds upon the content of EHR 107 Health Information Technology I by expounding on the student’s responsibilities relating to in-depth data management and movement. Direct application of functional, content, and vocabulary standards will be practiced along with experiencing threats to information stability, and security and error management. Information related to transfer of information to and/or communication with payment sources will be outlined. Students will be instructed regarding workflow process analysis and redesign relating to practice implementation as well as process assessment, validation, and change management. Students will learn to appreciate the usefulness of accurate evidence and the relationship it can have to significant health care improvements. Using electronic health record information as a key component to exchange data and link providers, patients, labs, and researchers is explored.

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** EHR 107 Health Information Technology I

**EHR 213 ELECTRONIC HEALTH RECORDS II**  
This course builds upon the content of EHR 113 Electronic Health Record I by introducing the student to how various segments of health care information are best managed electronically. Workflow, functional, content, and vocabulary standards are explained with respect to examination notes, problem lists, medication orders and lists, and treatment plans. The requirement of verification and validity of data and information prior to transmission will be instilled during this course. The student will be prepared to navigate and prepare information for research and reportable events. Interpretation of applicable information will also be explored.

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** EHR 113 Electronic Health Records I

**EHR 215 DE-CODING THE MYSTERY OF CODING**  
Various coding processes drive the development and management of the digital health record as well as the billing component of health care provision. During this course, the role of the medical biller will be defined. The student will learn how workflow from the initial point of contact to the accounts receivable department impacts specific outcomes and how medical necessity applies in various health care settings. Students will become keenly aware of the necessity and methodology utilized to verify validity of information prior to submission to source data correlating and payment systems. Definition of key coding terms and the respective settings for use will be introduced as well as various types/categories of codes (CPT, ICD, HCPCS, ICF, DRG, NDC, CDT, DSM-IV-TR, RUGs, HIPPS).

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** None

**EHR 221 CAPSTONE FOR ELECTRONIC HEALTH RECORDS PROFESSIONALS**  
This course helps prepare students for a career in Electronic Health Records with topics such as time and stress management, critical thinking, problem solving, self-management, and building strong interpersonal relationships. Students also acquire skills in self-marketing and strengthen presentation skills. An employment search portfolio will be developed and the student will be required to successfully meet the requirements of the Capstone assessment. The Capstone assessment provides the student with the opportunity to apply and display critical thinking skills within their scope of knowledge, based on their exposure to various topics during their course of study, to specific scenarios that may be encountered during employment.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s) or Co-requisite(s):** Either completion or current enrollment in all courses within the program of study

**ENGINEERING GRAPHIC DESIGN (EGR)**

**EGR 138 ENGINEERING GRAPHIC DESIGN I**  
This course covers the study of drafting orthographic, sectional, and auxiliary views of machine parts from pictorial production drawings of basic machines from the assembly; detail, and tabular format; dimensioning, tolerance practices and procedures; basic manufacturing, foundry, machining, and welding operations and symbols; ANSI standards; and utilization of various drawing media.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** None

**EGR 198 COMPUTER-AIDED DESIGN (CAD) I**  
This course provides an introduction to CAD and drafting principles, techniques, and equipment using the AutoCAD® program. Students learn the use of basic commands, including drawing and editing commands, layers, text, hatching, dimensioning, and plotting. Emphasis is given to understanding the basic features of the CAD software and hardware, and the production of simple orthographic and axonometric drawings.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** CTT 099 Computer Fundamentals or equivalent

**EGR 212 REVIT® ARCHITECTURE I**  
This introductory course on Autodesk Revit® introduces each student to this parametric 3D modeling software and its applications to architecture. Utilizing Revit®’s Building Information Modeling (BIM) develops student awareness of an innovative method to seamlessly bridge communication within the architecture, engineering, and construction industries.

**Contact Hours:** Lecture–2, Lab–2, Credits–3
Co-requisite(s): EGR 278 CAD II
Co-requisite(s): EGR 198 CAD I

EGR 252 INVENTOR I
This introductory course allows the student to become proficient in developing fundamental 3D feature-based parametric solid models. This 3D digital software helps students visualize, simulate, and analyze how a design works under real-world conditions before a product or part is ever built.

Contact Hours: Lecture–2, Lab–2, Credits–3
Co-requisite(s): EGR 198 CAD I

EGR 278 CAD II
This course provides the student with advanced operations and CAD software customization techniques. Emphasis is placed on the creation and modification of pull-down menus and toolbars, the development of custom macros, and the loading and use of pull-down menu files. Additionally, the applications for creating and deleting custom toolbars, files, and icons are introduced.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): EGR 198 CAD I

EGR 289 THREE–DIMENSIONAL CAD
This course provides advanced CAD drafting techniques used in the construction of 3D models. Emphasis is placed on the development of creating and managing UCS systems, wireframes, surface modeling, solid modeling, and rendering techniques. Additionally, the development of three-dimensional orthographic, isometric, and auxiliary views, along with assembly drawing is studied.

Contact Hours: Lecture–2, Lab–2, Credits–3
Co-requisite(s): EGR 278 CAD II

EGR 292 COMPUTER–AIDED GRAPHIC DESIGN
This course covers the advanced CAD applications for engineering graphic design. Emphasis is placed on applied drafting concepts appropriate for conveying graphical representations for the architectural and mechanical industries.

Contact Hours: Lecture–2, Lab–2, Credits–3
Co-requisite(s): EGR 278 CAD II

EGR 299 TEAM DESIGN PROJECT
Students are provided with an opportunity to work together as a design team on a project emulative of an industrial environment situation. Design team members participate to complete the design project by solving a systems design or product design problem using a current engineering design methodology. Design teams make formal presentations of their solutions to guests.

Contact Hours: Lecture–1, Lab–5, Credits–3
Prerequisite(s): EGR 138 Engineering Graphic Design I and MTH 145 College Algebra and Trigonometry

EGR 365 CO–OPERATIVE WORK EXPERIENCE
The co–operative work experience provides students with an opportunity to work together as a design team on a project emulative of an industrial environment situation. Design team members participate to complete the design project by solving a systems design or product design problem using a current engineering design methodology. Design teams make formal presentations of their solutions to guests.

Contact Hours: Lecture–1, Lab–11, Credits–3
Prerequisite(s): Successful completion of course requirements for the Program, references from faculty, and permission of the Program Manager and the Assistant Dean of Academic Affairs

ENGLISH (ENG)

ENG 104 COMPOSITION I
Students learn to write clear, organized academic essays. Students apply rhetorical modes, such as comparison/contrast, cause and effect, process, and definition to essay writing assignments. Discussions of text essays as examples are included. Grammar exercises are incorporated to give students an intensive review of the rules of English grammar. Group presentations are required. Testing includes writing assignments and grammar tests. A short research paper is required as well.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): Grade of "C" or better in ENG 115
Basic English and Writing or surpass threshold scores on Accuplacer test

ENG 108 COMPOSITION
In this course, students learn to write clear, organized academic essays. Students apply rhetorical modes, such as comparison/contrast, cause and effect, process, and descriptive narration to essay writing assignments. Grammar exercises are incorporated to give students an intensive review of the rules of English grammar. Assessments are based on writing assignments, homework, and grammar exercises. A short expository research paper is required as well, with a concentration on integrating academic sources into the paper.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): Grade of "C" or better in ENG 110
English Comprehension Skills for College Success or surpass threshold scores on Accuplacer test

ENG 110 ENGLISH COMPREHENSION SKILLS FOR COLLEGE SUCCESS
This course is designed to strengthen English skills essential for success in college and career. Students learn to write clear, organized paragraphs, preparing them to write documents for college level work. Students learn the writing process which includes pre-writing, writing, revising, and proofreading. Grammar
exercises are incorporated into the course to give students an intensive review of the rules of English grammar. Testing includes writing assignments as well as grammar tests. Students receive three credits; however, credits from this course are not applicable towards a degree.

**Contact Hours**: Lecture–3, Lab–0, Credits–3  
**Prerequisite(s)**: None

**ENG 160 INTRODUCTION TO LITERATURE**  
Students study literature because society makes meaning through its writing. Analyzing literature is also an intellectual exercise that forces the learner to create connections between ideas. The purpose of this course is to assist students to develop and to expand their ability to critically analyze a variety of literary texts. Students read a combination of poetry, drama, and short stories to form their own aesthetic opinions, as well as to exercise their ability to interpret meaning. Literary themes, structures, and imagery are studied as a means to recognizing abstract concepts.

**Contact Hours**: Lecture–3, Lab–0, Credits–3  
**Prerequisite(s)**: None

**ENG 170 AMERICAN LITERATURE**  
Through the study of archetypes, students evaluate how American literature has represented the unique characteristics of the American people. This course traces this perspective from the Puritanical beginnings, to the fervor of independence, to the equality movements and the sexual revolution of the 19th and 20th centuries. Furthermore, a key component in the American identity is the struggle to achieve wealth by embracing the capitalist model. An examination of The Great Gatsby demonstrates this consistent theme through modern American society. The contemporary issues of assimilation and cultural identity serve as the final frame in this study of the American experience.

**Contact Hours**: Lecture–3, Lab–0, Credits–3  
**Prerequisite(s)**: None

**ENG 203 BUSINESS COMMUNICATIONS**  
This course offers a study of the fundamental principles of oral and written communication in a business environment. Emphasis is placed on proper English usage in the context of written reports, memoranda, and letters used in business organizations. Additionally, students demonstrate skills in delivering oral presentations.

**Contact Hours**: Lecture–3, Lab–0, Credits–3  
**Prerequisite(s)**: ENG 104 Composition I

**ENG 204 COMPOSITION II**  
Students write more in-depth academic papers. Students’ writing assignments are based on course readings. Grading is based on class discussion of course readings, essay assignments, research papers, journals, and summaries. Group presentations and oral reporting are emphasized as well. A command of English grammar is expected.

**Contact Hours**: Lecture–3, Lab–0, Credits–3  
**Prerequisite(s)**: ENG 104 Composition I

**ENG 210 HEALTH CARE COMMUNICATIONS**  
This course explores learning and communication styles. Students have an opportunity to learn about appropriate community and Internet resources.

**Contact Hours**: Lecture–3, Lab–0, Credits–3  
**Prerequisite(s)**: ENG 104 Composition I

**ENG 215 ANALYTICAL WRITING**  
In this course, students will write essays that require analysis and reasoning, using data, statistics, and expert opinion to validate their interpretations. Students will also craft written responses to reading assignments. Analytical essays will include: classification, definition, and argument. Students will also discuss key components to consider when analyzing visual messages. Students will complete an Analytical Argument Research Paper with valid academic sources to demonstrate proficiency in academic exploration.

**Contact Hours**: Lecture–3, Lab–0, Credits–3  
**Prerequisite(s)**: None

**HEALTH CARE MANAGEMENT (HCM)**

**HCM 107 Introduction to Health Care Management**  
Students will explore the expanding field of health care management. Special emphasis is placed on the key strategies, principles and practices in the field. Students will gain an understanding of the different types of patient delivery systems and enterprises including hospitals and health systems, physician practices and clinics, urgent care facilities public and governmental health organizations and other types of organizations providing health care.

**Contact Hours**: Lecture – 3, Lab – 0, Credits – 3  
**Prerequisite(s)**: None

**HCM 117 Introduction to Health Care Informatics**  
This course provides students with an introduction to the role of data and data management in the delivery of patient care in the health care industry. The thrust of the course will be on information technology in health care including issues related to organization, management, data integration, selection of software, and the overall management of health care information. Students will be introduced to the expanding role of data management, emerging standards of patient information to improve the quality and cost associate with health care.

**Contact Hours**: Lecture - 3, Lab – 0, Credits – 3  
**Prerequisite(s)**: None

**HCM 212 Classification and Coding Systems**  
This course explores the medical coding and classification systems including ICD-10-CM/PCS. In
addition, students will gain an understanding of important medical terms and the classification of diseases. Upon successfully completing this course, students will be able to identify, comprehend and use medical codes applicable to most health care organizations including Medicare and governmental agencies.

**HCM 218 Health Insurance and Reimbursement**
This course examines health insurance and managed care products in order to finance the delivery of health care services. Students examine the required forms, procedures and general practices of insurance, third-party, managed care and other types of reimbursement and payment systems. Additionally, students explore Medicare and Medicaid and pay for performance systems.

**Contact Hours:** Lecture – 2, Lab – 2, Credits – 3  
**Prerequisite(s):** None

**HCM 219 Health Care Law and Ethics**
This course addresses the legal, policy and ethical issues encountered by health care professionals. In a continually evolving health care environment, health care professionals encounter issues surrounding HIPPA compliance, state and federal government regulations, patient consent, refusal of treatment, privacy and confidentiality, fraud and abuse, mental health issues as well as a myriad of other issues that require prudent management skills.

**Contact Hours:** Lecture – 3, Lab- 0, Credits - 3  
**Prerequisite(s):** None

**HCM 221 Introduction to Health Care Statistics**
Students in this course will gain an understanding of the fundamentals of health care statistics including statistical application, interpretation and utilization in health care organizations. In addition students will be able to collect, data, compile, analyze data for decision making. Topics include providing statistical data on mortality, morbidity, occupancy, facility utilization, infection rates and other important information.

**Contact Hours:** Lecture – 3, Lab – 0, Credits - 3  
**Prerequisite(s):** None

**HCM 227 Emerging Issues in Health Care**
This course examines developing issues in health care that directly impact the delivery of health services. The Affordable Health Care Act and other regulations are studied in terms of how they are reshaping the health care field. The aging population, the increasing cost of health care, the rise in litigation in health care, the decentralization of health care, and other issues are explored. Organizational responses to these emerging issues are also studied.

**Contact Hours:** Lecture – 3, Lab – 0, Credits – 3  
**Prerequisite(s):** None

**HCM 231 Financial Management of Health Care Organizations**
Students develop critical skills needed to make rationale financial decisions that increase the economic value of health care organizations in this course. Students study the relationship that exists between financial rewards versus financial risk. In addition, students learn how to read and interpret health care financial statements, managing financial risk, and the application of other valuable financial tools.

**Contact Hours:** Lecture – 3, Lab – 0, Credits – 3  
**Prerequisite(s):** None

**HCM 235 Strategic Management of Health Care Organizations**
This course develops critical skills required for the achieving a competitive advantage in health care organizations. Topics include assessing a health care organization’s strengths and vulnerabilities, developing strategies to overcome vulnerabilities, the identification of potential strategic health care partners and establishing a strategic roadmap toward organizational success. Case studies are used throughout the course.

**Contact Hours:** Lecture – 3, Lab – 0, Credits - 3  
**Prerequisite(s):** None

**HIS 150 WESTERN CIVILIZATION**
This course examines and interprets the major events and figures from Ancient Mesopotamia to the middle of the 20th century. Students critically observe the historical, religious, scientific, and political issues that have shaped the history of Europe and North America. Specific attention is paid to how certain events or people influenced world events to such an extent that the world changed forever. By comparing contemporary events to historical ones, this class demonstrates that history does, in fact, repeat itself.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

**HIS 160 CULTURE AND TECHNOLOGY**
From the development of the wheel to modern day science and computer and engineering advancements, society has been shaped by the technology of its times and vice versa. The purpose of this class is to examine the connection between great historical cultures and their technological achievements. Students learn how a society adapts its technology based on the stability of its leadership and government, the success or failure of its economy, and the basic needs of the people who live in that society. Students study the corollary on how technology influences society (technological determinism).

**Contact Hours:** Lecture–3, Lab–0, Credits–3
what we believe. To be an effective critical thinker, a social, and biological influences that shape much of our thoughts are a complex collection of psychological, to develop the potential that all students have validity. This course defines what critical thinking is, what is false? Critical thinking is the process of information. How can we determine what is true and In the age of the Internet, we are bombarded with AGE HUM 140 CRITICAL THINKING IN THE MODERN AGE
This course provides an analytical survey of both Western and non–Western architectural achievements, standards, and design elements. Study begins with pre–civilizations during the Paleolithic and Neolithic eras and moves through the following civilizations and periods: Mesopotamian, Mayan, Egyptian, Far Eastern (Japanese and Chinese), Greek, Roman, Byzantine, Medieval, Gothic, and Renaissance, ending with the Industrial Revolution and the modern era of high rises and architecture that also function as art. Specific emphasis is placed on urban planning and how building materials impacted the style of a civilization’s architecture.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

HIS 170 THE HISTORY OF ARCHITECTURE
This course focuses on the historical aspect of the major religions of the world Buddhism, Hinduism, Islam, Christianity, Judaism, and Zoroastrianism. It will also examine the timeline and evolution of religion and how various religions have splintered off and created their own religious movement. This course will ask students to analyze the role of religion within a political context as well as in historical terms. Images, myths, metaphors, symbols, and rituals relating to the history and practice of religion will be compared from religion to religion. Marginalized religions, ancient religions, and modern-day religious cults will also be discussed during this course. Lastly, we will examine how religion shapes the modern world.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

HIS 180 HISTORY OF RELIGION
This course focuses on the historical aspect of the major religions of the world Buddhism, Hinduism, Islam, Christianity, Judaism, and Zoroastrianism. It will also examine the timeline and evolution of religion and how various religions have splintered off and created their own religious movement. This course will ask students to analyze the role of religion within a political context as well as in historical terms. Images, myths, metaphors, symbols, and rituals relating to the history and practice of religion will be compared from religion to religion. Marginalized religions, ancient religions, and modern-day religious cults will also be discussed during this course. Lastly, we will examine how religion shapes the modern world.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

HUMANITIES (HUM)

HUM 120 CRITICAL THINKING
This introductory course teaches critical thinking skills and dispositions including the analysis of arguments, the deconstruction of meanings and definitions, evaluation of informal fallacies, and the application of causal reasoning.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

HUM 140 CRITICAL THINKING IN THE MODERN AGE
In the age of the Internet, we are bombarded with information. How can we determine what is true and what is false? Critical thinking is the process of assessing and evaluating information to determine its validity. This course defines what critical thinking is, and how to develop the potential that all students have to be good critical thinkers. We need to recognize that our thoughts are a complex collection of psychological, social, and biological influences that shape much of what we believe. To be an effective critical thinker, a person must learn how to discipline their thinking. This requires a purposeful, conscious effort. Through a variety of readings and case studies, students will learn how to identify what is fact, what is false, and what belongs to the realm of opinion.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

HUM 299 AN INTERDISCIPLINARY APPROACH TO HUMANITIES – HONOR COURSE
Humanities is the study of intellectual and cultural themes found throughout Western civilization. This Honors course will provide a variety of strategies for doing so, including the ethical and legal issues involved. Ultimately, this course will allow the student to synthesize research into a combination of short and long assignments.

Contact Hours: Lecture–3, Lab-5, Credits–3
Prerequisite(s): Completion of two (2) terms, cumulative GPA of 3.5, completion of a minimum of two (2) Humanities or Social Sciences course, and recommendation from Program Managers.

INTERDISCIPLINARY (ITD)

ITD 201 FACT, FICTION AND FRAUD: CRITICAL THINKING IN THE MODERN AGE
In the age of the Internet, we are bombarded with information. How can we determine what is true and what is false? Critical thinking is the process of assessing and evaluating information to determine its validity. This course defines what critical thinking is, and how to develop the potential that all students have to be good critical thinkers. We need to recognize that our thoughts are a complex collection of psychological, social, and biological influences that shape much of what we believe. To be an effective critical thinker, a person must learn how to discipline their thinking. This requires a purposeful, conscious effort.

The successful completion of this course will meet a 3-credit requirement for Humanities and Social Science.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

ITD 203 CREATING MEMORABLE PROFESSIONAL PRESENTATIONS
This course will provide students with both strong communication skills and the tools necessary to create creative and clear presentations. Through the development and delivery of computer-assisted presentations, students will learn the value of

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organization, analysis, problem solving, and how to build a persuasive message. The goal of this class is to meet the needs of the business world by training students to be confident, concise and interesting speakers.

The successful completion of this course will meet a 3-credit requirement for Humanities and Social Science.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

**ITD 205 INTERACTIVE PROJECT MANAGEMENT**  
This course prepares students to define, plan, and manage both large and small projects in a variety of industries. Students will develop organizational workflow plans that take into account business priorities and interdependence of project activities. By using software for project management, students will gain insight into the demands of budgets and deadlines.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

**ITD 207 UNDERSTANDING FINANCIAL STATEMENTS: GAINING THE ADVANTAGE**  
This course shows students how to interpret and analyze financial statements. Documents such as the balance sheet, the income statement, the cash flow report, and the shareholder’s equity statement are investigated to demonstrate how to use the information they contain. Issues such as profitability, valuation, budgets and reading between the lines will be examined as students become more comfortable with these statements.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

**ITD 209 ETHICS IN TODAY’S COMPLEX SOCIETY**  
This course examines how to make effective judgments in today’s multi-layered world. We examine the most significant historical approaches to ethics to help students develop a framework for answering these often morality-based questions. Students will practice and assess their own approaches by studying a variety of ethical conundrums within business practices.

The successful completion of this course will meet a 3-credit requirement for Humanities and Social Science.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

**ITD 211 SOCIAL MEDIA: CONTEMPORARY APPLICATIONS**  
This course examines the rise of social media and how it has influenced modern business practices. The second part of the class will investigate the different social media platforms, the pros and cons of each, and the psychology behind their use. Lastly, students will learn the essential elements of a PR/Social Media campaign as well as how to effectively measure, monitor and audit the insights provided by these social media platforms.

The successful completion of this course will meet a 3-credit requirement for Humanities and Social Science.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

**MATHEMATICS (MTH)**

**MTH 111 ALGEBRA SKILLS FOR COLLEGE SUCCESS**  
Students learn basic mathematics and critical thinking skills while learning skills necessary for basic applications of algebra. Students learn the evaluation and multiplication of algebraic expressions; distributive property; combining like terms; solving equations; product rule of exponents; simplifying fractional expressions; adding, subtracting, and multiplying polynomials; and factoring out the greatest common factor. Note: Students receive three credits; however, credits from this course are not applicable towards a degree.

**Contact Hours:** Lecture–2, Lab–1, Credits–3  
**Prerequisite(s):** None

**MTH 112 MATHEMATICS SKILLS FOR COLLEGE SUCCESS**  
Skills taught in this course include fundamental operations with whole numbers, fractions, and decimals, ratio and proportion, percent, rational numbers, and introduction to algebra. Students who complete this course have the basic mathematics skills and vocabulary necessary to succeed in future mathematics and technical courses.

Note: Students receive three credits; however, credits from this course are not applicable towards a degree.

**Contact Hours:** Lecture–2, Lab–1, Credits–3  
**Prerequisite(s):** None

**MTH 121 BUSINESS MATHEMATICS**  
Students build basic mathematics and problem-solving skills while learning the vocabulary and skills necessary for basic business applications of mathematics. Students develop an understanding of arithmetic operations including working with whole numbers, fractions, decimals, and percents. After students have gained these skills, business applications, such as keeping banking records, performing payroll calculations, and applying percentages to purchasing and pricing decisions, are covered. The emphasis in the second portion of the class is on practical examples and problem solving.
Contact Hours: Lecture–3, Lab–0, Credits–3  
Prerequisite(s): None

MTH 121 Business Mathematics

This course introduces and develops the concepts and tools used for precise analytical thinking. Methods of proof are introduced and used extensively. Set theory, Boolean algebras, functions and relations and their properties are explored. Classical problems and contemporary applications to the field of computer science are also covered.

Contact Hours: Lecture–3, Lab–0, Credits–3  
Prerequisite(s): None

MTH 145 College Algebra and Trigonometry

This course involves descriptive and graphic analysis and presentation of data for sampling purposes. Other topics include: probability analysis; normal distributions; standard deviations; mean, median, mode; variability; sampling errors; and the central limit theorem.

Contact Hours: Lecture–3, Lab–0, Credits–3  
Prerequisite(s): MTH 112 Mathematics Skills for College Success or surpass threshold scores on placement test

MTH 130 MATHEMATICS FOR HEALTH CARE PROFESSIONALS

Student’s progress during this course from mathematic fundamentals to more advanced functions applicable within various health care settings. The course will expand from numerical and measurement systems to a focus on fractions, decimals, ratios and proportions, and conversions and calculations. Practical application of learned skills will be accomplished using health care-related scenarios.

Contact Hours: Lecture–3, Lab–1, Credits–3  
Prerequisite(s): None

MTH 150 DISCRETE MATHEMATICS I

This course introduces and develops the concepts and tools used for precise analytical thinking. The connection between ordinary speech and mathematical rigor is established. The foundations of logic- AND, OR, NOT, Conditional and Biconditional operators, truth tables, DeMorgan’s laws, etc. are explained and developed. Concepts are applied to digital logic circuits and to binary number systems. Set theory, set notation, rules of inference, and mathematical proofs are also included.

Contact Hours: Lecture–3, Lab–0, Credits–3  
Prerequisite(s): None

MTH 155 DISCRETE MATHEMATICS II

Discrete Mathematics II expands and develops the concepts and tools used for precise analytical thinking. Methods of proof are introduced and used extensively. Set theory, Boolean algebras, functions and relations and their properties are explored. Classical problems and contemporary applications to the field of computer science are also covered.

Contact Hours: Lecture–3, Lab–0, Credits–3  
Prerequisite(s): MTH 155 Discrete Mathematics I

MTH 207 STATISTICS

This course involves descriptive and graphic analysis and presentation of data for sampling purposes. Other topics include: probability analysis; normal distributions; standard deviations; mean, median, mode; variability; sampling errors; and the central limit theorem.

Contact Hours: Lecture–3, Lab–0, Credits–3  
Prerequisite(s): MTH 121 Business Mathematics

MTH 225 CALCULUS I

Students become familiar with the rectangular and polar systems of coordinates, the principles of analytic geometry, and the concept of limits. Students also use differential calculus to solve practical problems and to sketch figures describing these functions, to use the concept of the differential and its application to integral calculus, and to solve indefinite integrals.

Contact Hours: Lecture–4, Lab–0, Credits–4  
Prerequisite(s): MTH 145 College Algebra and Trigonometry

MECHANICAL ENGINEERING (MET)

MET 156 INTRODUCTION TO METROLOGY

This course is an introductory study of metrology and physical measurements emphasizing the theory and proper use of equipment for measuring length, mass, roughness, optics, screws, gauges, and control. Data collection and statistics are also emphasized. Field trips and an overview of careers in metrology are included.

Contact Hours: Lecture–2, Lab–2, Credits–3  
Prerequisite(s): None

MET 157 ADVANCED METROLOGY

Having gained an overview of basic metrology principles, the student gains a sharper focus on the physical mechanisms of fluid flow meters, resistance temperature detectors, thermocouples, strain gauges, load cells, pressure gauges, transducers, accelerometers, lab standard volts, storage scopes, and other instruments and transducers. In addition, an overview of metallurgical failure analysis and forensic research is presented.

Contact Hours: Lecture–2, Lab–2, Credits–3  
Prerequisite(s): MET 156 Introduction to Metrology

MET 203 THEORY OF MACHINES

This course covers the analyses of mechanisms, cam design, dynamics of rigid bodies, computer applications, the inertia tensor, rotating reference frames, journal bearings, rolling element bearings, diesel engines, steam turbines, and gas turbines.

Contact Hours: Lecture–2, Lab–2, Credits–3  
Prerequisite(s): None

MET 256 MANUFACTURING PROCESSES

A basic introduction to the traditional manufacturing processes including casting, molding, rolling, forging, bending, drawing, heat treatment, and forming is presented. The properties of ferrous and non-ferrous materials, as well as methods of inspection and computer controls, are explained. Students are introduced to the various manufacturing processes and associated equipment operations including lathe, boring mills, abrasive cutting, broaching, grinding, screw threads, powder metallurgy, presses, polishing, electromechanical cleaning, and welding. Non-metallic materials and thermosetting compounds also are discussed.

Contact Hours: Lecture–2, Lab–2, Credits–3  
Prerequisite(s): None

MET 277 FLUID MECHANICS

Contact Hours: Lecture–0, Lab–0, Credits–0  
Prerequisite(s): None
This course covers general physical properties of fluids, kinetics of fluid motion, material derivative, airfoils, and dynamics of fluids, Bernoulli’s Equation, continuity equation, and deviation of conservation laws in control volume form with applications.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** MTH 225 Calculus I

**MET 278 SOLIDWORKS**

Students learn about solid modeling of mechanical components and assemblies. Discussions of text readings are included. Exercises are incorporated to give students an intensive review of solid modeling. Testing includes writing assignments as well as oral tests. A short PowerPoint presentation is also required.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** EGR 198 CAD I

**MEDICAL BILLING AND CODING (MBC)**

**MBC 108 INTRODUCTION TO BILLING AND CODING**

This course introduces students to the Medical Billing and Coding profession. The profession is an important income generator for the health care provider. Students gain an appreciation of the important role Medical Billing and Coding Specialists play in a successful health care organization or individualized medical practice. Medical billers and coders are responsible for the collection of physician charges and patient data to ensure that claims are submitted to insurance carriers accurately and in the most efficient and expeditious manner. Students gain an understanding of the types of health care organizations, the fundamental economics of health care, the legal aspects of Medical Coding, and the excellent careers existing in this fast-growing profession.

**Contact Hours:** Lecture–4, Lab–0, Credits–3  
**Prerequisite(s):** None

**MBC 110 HUMAN BODY SYSTEMS AND DISEASES I**

This course integrates medical terminology with anatomy and physiology of the skeletal, muscular and integumentary systems as it relates to Medical Billing and Coding. Students are introduced to the ICD-9-CM Manual and CPT-4 Manual applicable to the systems. Students will learn the component parts of medical terminology: word roots, prefixes, and suffixes and learn how to construct and analyze medical terms that relate to the skeletal, muscular, and integumentary systems. In addition, they will learn the anatomy, physiology, and pathology of these systems, and the diagnostic, therapeutic, symptomatic, and pathologic terminology.

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** None

**MBC 111 HUMAN BODY SYSTEMS AND DISEASES II**

This course integrates medical terminology with anatomy and physiology of the skeletal, muscular and integumentary systems as it relates to Medical Billing and Coding. Students are introduced to the ICD-9-CM Manual and CPT-4 Manual applicable to the systems. Students will learn the component parts of medical terminology: word roots, prefixes, and suffixes and learn how to construct and analyze medical terms that relate to the male and female reproductive, endocrine, and nervous systems, as well as special senses (eye and ear). In addition, they will learn the anatomy, physiology, and pathology of these systems, and the diagnostic, therapeutic, symptomatic, and pathologic terminology.

**Contact Hours:** Lecture–3, Lab–1, Credits–3  
**Prerequisite(s):** None

**MBC 176 INTRODUCTION TO BILLING AND CODING (MBC)**

**MBC 208 FUNDAMENTALS OF ICD–9–CM CODING AND PRACTICUM**

This hands–on course introduces students to the International Classification of Disease – Clinical Modification (9th revision). This system provides codes to classify diseases, symptoms, abnormal findings, complaints, and external causes of injury or disease. Students acquire the skills and knowledge required to review thoroughly medical documentation in order to assign the correct ICD-9-CM diagnostic code. In addition, students learn the diagnostic–related groups, commonly referred to as DRGs, ensuring the assignment of proper codes in order to receive payment from third–party payers. Students spend a considerable amount of class time practicing coding.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** MBC 108, MBC 117

**MBC 209 FUNDAMENTALS OF CPT–4 CODING AND PRACTICUM**

This hands–on course introduces students to the Current Procedural Terminology (CPT–4) coding
system used to identify medical care and services provided by physicians, trauma centers, and other health care facilities. Students are introduced to compliance and reimbursement issues related to HCFA Healthcare Common Procedural Coding System (HCPCS), the commonly used physician–based coding system. Students spend a considerable amount of class time strengthening coding skills.

**Contact Hours:** Lecture–2, Lab–2, Credits–3

**Prerequisite(s):** MBC 108, MBC 110 MBC 117

**MBC 211 HEALTH INSURANCE CLAIMS AND SPECIALIZED BILLING**

This hands–on course introduces students to the relationship among patient, health care provider, and insurance carrier specifically as it relates to fee–for–service and capitation payment reimbursement systems. Students acquire and practice the skills necessary to process insurance claims forms and related forms such as referrals, pre–authorizations, registrations, and the CMS–1500 Provider Billing Claim form. Students study the difference between health care and medical care and learn the different managed care models. They facilitate the registration insurance claims process for a new or established patient and differentiate between manual and electronic claims processing procedures. Students also learn to understand the remittance advice process and explanation of benefits. This course also provides students with the skills required to accurately bill Medicare, Medicaid, and TRICARE for health care provider reimbursement. Students learn the health care coverage offered by Medicare Parts A–D and the integral requirements for reimbursement.

**Contact Hours:** Lecture–2, Lab–2, Credits–3

**Prerequisite(s):** MBC108, MBC 117

**MBC 215 PROBLEM SOLVING IN MEDICAL BILLING AND CODING**

This capstone course identifies billing and coding issues that may arise from time to time. Students learn important problem–solving skills by diagnosing the symptoms, collecting important data, identifying alternatives for the purpose of resolving the issue, and recommending reasonable solutions. The course demonstrates to students the need to be proactive in issue resolution for the benefit of both the patient and the health care provider. Students strengthen problem resolution skills by completely solving actual case studies both individually and in small groups. Students audit each other's work to determine the reasonableness of the recommendations and to identify areas in need of improvement.

**Contact Hours:** Lecture 2, Lab–2, Credits–3

**Prerequisite(s):** MBC 108, MBC 110, MBC 111, MBC 117

**MBC 220 MEDICAL BILLING AND CODING SPECIALIST INTERNSHIP**

Students develop and refine billing and coding administrative skill sets by working in a simulated environment with a variety of the most updated medical billing and coding software under the supervision of faculty. Fulfillment of the requirements for this course includes taking the examination to earn the Certified Medical Administrative Assistant and Certified Biller and Coding Specialist national certifications. Note: Students must meet all the requirements in this course in order to satisfactorily complete the Program of study.

**Contact Hours:** Lecture–0, Lab–12, Credits–6

**Prerequisite(s):** All required course work; MBC 209 and 215 may be taken concurrently.

**MBC 224 ADVANCED MEDICAL BILLING AND CODING INTERNSHIP**

In this course, students will engage in the practical application of all skills learned in the classroom and the laboratory to a simulated coding and billing environment using the Capstone Simulation for Coding and e-Medsys Software. The second half of the course will focus on reviewing high yield topics and questions most likely encountered in the certification exam. Practice test questions and answers will be reviewed to improve retention and recall. The last day will be reserved for the certification examination Certified Billing and Coding Specialist (CBCS). Note: Students must meet all the requirements in this course in order to satisfactorily complete the program of study.

**Contact Hours:** Lecture–0, Lab–12, Credits–6

**Prerequisite(s):** All required course work.

**MBC 230 MEDICAL BILLING AND CODING SPECIALIST EXTERNSHIP**

Students utilize billing and coding administrative skill sets by working in an actual medical environment. The student is closely monitored by both the Clinical Externship Coordinator and Externship Site Manager. Fulfillment of the requirements for this course includes taking the examination to earn the Certified Medical Administrative Assistant and Certified Biller and Coding Specialist national certifications. **Note:** Students must meet all the requirements in this course in order to satisfactorily complete the Program of study.

**Contact Hours:** Lecture–0, Lab–12, Credits–6

**Prerequisite(s):** All required course work.

**MEDICAL OFFICE TECHNOLOGY (MOT)**

**MOT 115 HEALTHCARE IN A TRANS CULTURAL ENVIRONMENT**

Today’s health care provider will be delivering health care in a transcultural environment. This environment may well present consumer-provider challenges that create barriers to quality care for consumers and to a positive sense of competence and satisfaction for the provider. This course provides students with the opportunity to gain an appreciation for delivering health care.
NTE 101 INTRODUCTION TO NANOTECHNOLOGY
Science and engineering at the nano level will most likely provide the vehicle for future growth in the engineering, electronics, textile, medical, and other related fields. This survey course introduces students to the experimental principles of nanotechnology, allows students to apply knowledge obtained during other courses to the design of experiments and analysis of received nanotech data and results, enhances the communication skills of students in the presentation of data and results analysis both verbally and in writing, and enhances the time management skills of students in planning and carrying out laboratory objectives.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

NTE 102 MANUFACTURING PROCESSES (MEMS)
Micro electromechanical systems manufacturing (MEMS) is the focus of this foundation course for nanofabrication techniques. This survey course introduces students to the principles of manufacturing at the nano and micro levels of technology. Students are introduced to manufacturing processes used today to make the smallest products including a shirt that is a computer, a camera that can be swallowed, and similar devices. Topics include electron beam lithography, nanotubes, nanowires, nanodot manufacturing, chip manufacturing, electroless plating, and the Ligas process which uses synchrotron radiation to create a pattern in an X-ray resist.

Contact Hours: Lecture–2, Lab–2, Credits–3
Co-requisite(s): NTE 101 Introduction to Nanotechnology

NTE 103 ADVANCED MICROSCOPY
Most of the work done in nanotechnology requires microscopy to see how to perform an operation or to see the results of a nanoprocess. Students receive training on the following instruments: scanning electron microscope, tunneling electron microscope, scanning probe microscope, focused ion beam microscope, and the atomic force microscope.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): NTE 101 Introduction to Nanotechnology

NURSING, PRACTICAL (NUR)

NUR 102 NURSING PRACTICE I
This course expands on content presented in NUR101 related to the cognitive, technical, interpersonal, and communication skills needed to provide nursing care using the nursing process for clients with disorders of body systems not previously covered. Included is drug therapy for specific disorders and diseases. Emphasis is placed on the unique health issues and problems of geriatric clients. Clinical experiences to complement theory including the safe administration of medications are scheduled in long-term care, acute care, and other health care settings.
**Prerequisite(s):** Providing basic nursing care. with emphasis on meeting the client's needs by
experien
ted in the nursing laboratory setting. Clinical
and diseases. Theory is coordinated with skill practice
on the Pennsylvania State Board of Nursing
regulations related to intravenous therapy. Emphasis is placed
the interrelationship between individuals and their families
in both health and illness, and the impact of physical
and behavioral problems on both. Intergenerational
care-giving issues are presented. Psychoanalytical,
cognitive, and behavioral therapies of human growth
and development are discussed. Leadership and
elements related to coordination of care, team building,
team leading, delegation, and employee motivation are
discussed. Preparation for the NCLEX–PN® national
licensing examination for Practical Nurses is included.
Clinical experiences are scheduled in facilities that
provide the student with an opportunity to provide
maternal–child and mental health nursing care and to
perform in a leadership/management role appropriate
to the practical nurse.

**Contact Hours:** Lecture–96, Lab–0, Clinical–384,
Credits–14

**Prerequisite(s):** NUR 105 Introduction to Nursing
Practice, NUR 102 Nursing Practice I, NUR 111 Role
Development of the Practical Nurse I, and NUR 113
Intravenous Therapy

**NUR 105 INTRODUCTION TO NURSING PRACTICE**
This course introduces the student to the cognitive,
technical, interpersonal, and communication skills
needed to provide basic nursing care using the nursing
process with disorders of various body systems. The
concepts of cultural diversity and age-appropriate care
in the provision of individualized nursing care are
discussed. The student learns medical terminology,
fundamental nursing skills, nutrition, and normal
growth and development. Principles related to
medication administration are introduced.
Pharmacological concepts introduced include: drug
classifications, actions, uses, side effects, client
teaching, as well as drug therapy of specific disorders
and diseases. Theory is coordinated with skill practice
performed in the nursing laboratory setting. Clinical
experiences are scheduled in long-term care facilities
with emphasis on meeting the client's needs by
providing basic nursing care.

**Contact Hours:** Lecture–96, Lab–64, Clinical–120,
Credits–8

**Prerequisite(s):** None

**NUR 111 ROLE DEVELOPMENT OF THE
PRACTICAL NURSE I**
This course introduces the role of the practical nurse
as a member of the health care team, examines the
scope of practice of the Licensed Practical Nurse
(LPN) as defined by the Pennsylvania State Board of
Nursing, and discusses standards of practice including
legal and ethical issues. The student learns the history
of nursing. Strategies for success in the Program are
presented.

**Contact Hours:** Lecture–24, Lab–0, Clinical–0,
Credits–1

**Prerequisite(s):** None

**NUR 113 INTRAVENOUS THERAPY**
This course familiarizes the student with the principles
and nursing implications related to peripheral and
central line intravenous therapy. Emphasis is placed
on the Pennsylvania State Board of Nursing
regulations related to intravenous therapy. Theory is
coordinated with skill practice such as venipuncture,
medication administration, and site care performed in
the nursing laboratory setting.

**Contact Hours:** Lecture-16, Lab-16, Clinical-0,
Credits-2

**Prerequisite(s):** NUR 105 Introduction to Nursing
Practice, NUR 111 Role Development of the Practical
Nurse I, and NUR 115 Pharmacology for Practical
Nurses

**NUR 114 ROLE DEVELOPMENT OF THE
PRACTICAL NURSE II**
This course builds on concepts introduced in NUR
111. Health trends and issues are discussed.
Emphasis is placed on conflict management,
advocacy, leadership, management, role transition,
and continuing education. Procedures for applying for
a license and registering for the NCLEX–PN® national
licensing examination for Practical Nurses are
explained.

**Contact Hours:** Lecture–16, Lab–0, Clinical–0,
Credits–1

**Prerequisite(s):** NUR 111 Role Development of the
Practical Nurse I

**NUR 115 PHARMACOLOGY FOR PRACTICAL
NURSES**
This course introduces and expands upon the
standards of practice relating to the principles of the
Licensed Practical Nurse (LPN). The student is
introduced to general as well as specific principles of
pharmacology and medication administration while
integrating pharmacological terminology, mathematics,
and calculations. The various methods of preparing
and administering medications are explored, and
numerous drug groups (including over–the–counter,
vitamins, and minerals) are presented and contrasted.
Emphasis is placed on the legal aspects, personal
responsibility, accountability, and professional ethics
associated with medication administration. The course
stresses the importance of the role of the LPN in safe
and efficient medication administration including the value of communication and documentation.

**Contact Hours:** Lecture–48, Lab–16, Clinical–0, Credits–3

**Prerequisite(s):** None

**NUR 116 ROLE DEVELOPMENT OF THE PRACTICAL NURSE II**

This course builds on concepts introduced in NUR 111. Health trends and issues are discussed. Emphasis is placed on conflict management, advocacy, leadership, management, role transition, and continuing education. Procedures for applying for a license and registering for the NCLEX–PN® national licensing examination for Practical Nurses are explained.

**Contact Hours:** Lecture–28, Lab–0, Clinical–0, Credits–2

**Prerequisite(s):** NUR 111 Role Development of the Practical Nurse I

**PHARMACY TECHNICIAN (PHT)**

**PHT 102 PHARMACY TERMINOLOGY AND PROCEDURES**

Students learn the derivation of the names of medicines; interpret Latin terms, abbreviations, and symbols; and identify prescription medications and their brand names and generic versions. Major drug classifications are learned as well as the components of a written prescription. Students begin using the Health Professionals Drug Guide.

**Contact Hours:** Lecture–3, Lab–1, Credits–3

**Prerequisite(s):** None

**PHT 115 DOSAGES AND CALCULATIONS**

Upon successfully completing this course, students are able to calculate drug dosages for various forms of medication, perform calculations commonly used in the pharmacy, reduce and enlarge dosages and formulas, solve dosage proportions, and perform other calculations used in the preparation of pharmaceuticals.

**Contact Hours:** Lecture–2, Lab–2, Credits–3

**Prerequisite(s):** None

**PHT 119 THERAPEUTIC RESPONSE IN BODY SYSTEMS I**

Students learn how medical disorders affect the human body; common diseases and disorders of the human body systems; and the etiology (causes), symptoms, diagnosis, treatment, prognosis, and prevention of common diseases. Students concentrate on studying the indications, counter–indications, and impact that medications have on actions; side effects; dosage; and drug administration methodology. Specifically, disorders of the skeletal and muscular, cardiovascular, and endocrine body systems are covered.

**Contact Hours:** Lecture–2, Lab–2, Credits–3

**Prerequisite(s):** None

**PHT 125 PHARMACY TECHNOLOGY I**

Students learn the responsibility of the Pharmacy Technician in processing prescription renewals, controlled substances, and the laws and regulations that apply to prescription orders from authorized health care providers. Aseptic techniques and procedures are discussed and practiced. In addition, students practice functions related to drug purchases, inventory control, production of medications, labeling and packaging of medications, patient counseling, quality assurance, and the dispensing of medication in a simulated pharmacy environment.

**Contact Hours:** Lecture–2, Lab–2, Credits–3

**Prerequisite(s):** None

**PHT 207 THERAPEUTIC RESPONSE IN BODY SYSTEMS II**

Students learn how medical disorders affect the human body; common diseases and disorders of the human body systems; and the etiology (causes), symptoms, diagnosis, treatment, prognosis, and prevention of common diseases. Students concentrate on studying the indications, counter–indications, and impact that medications have on actions; side effects; and dosage and drug administration methodology. Specifically, infectious diseases, and disorders of the gastrointestinal and reproductive body systems are covered.

**Contact Hours:** Lecture–2, Lab–2, Credits–3

**Prerequisite(s):** 119 141 Therapeutic Response in Body Systems I

**PHT 209 ADVANCED DOSAGES AND CALCULATIONS**

This course continues the topics initiated in PHT 126 Dosages and Calculations. Students become familiar with more advanced mathematical requirements for the Pharmacy Technician Program, including a review of the International System of Measurement (metric system). Other topics include apothecary and household dosage systems; conversion methods and applications; and reading and calculating medication dosages.

**Contact Hours:** Lecture–2, Lab–2, Credits–3

**Prerequisite(s):** PHT 115 Dosages and Calculations

**PHT 213 PHARMACY TECHNOLOGY II**

Upon successfully completing this course, students understand compounding, mixing, suspensions and elixirs, intravenous therapy, chemo–therapy, total parenteral nutrition (TPN), and pharmaceutical medical devices. Students also learn to use glucose monitoring devices and other types of durable medical equipment typically found in a pharmaceutical environment. In addition, students continue to learn the proper dispensing of medications, the reconstruction of attenuated medications, the preparation of
prescriptions for pick–up, the proper calibration of scales and measures, and the application of aseptic techniques and quality assurance.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** PHT 125 Pharmacy Technology I

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**PHT 215 PHARMACY RECORDS AND BILLING**  
Students learn how to register patients, access patient prescription records, renew medications on–line, dispense medications automatically through computer systems, and maintain inventory and complete tasks using a pharmaceutical database. Students also learn how to apply pharmaceutical and ICD–9 codes, as amended; pharmacy reimbursement; and computerized billing.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** PHT 125 Pharmacy Technology I

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**PHT 220 PHARMACY TECHNICIAN CLINICAL INTERNSHIP**  
Students develop and refine pharmacy technician skill sets by working in a simulated environment with the most updated pharmacy technician software under the supervision of faculty. Fulfillment of the requirements for this course includes taking the examination to earn the Certified Pharmacy Technician national certification.

**Note:** Students must meet all the requirements in this course in order to satisfactorily complete the Program of study.

**Contact Hours:** Lecture–0, Lab–12, Credits–6  
**Prerequisite(s):** All required courses in the program; PHT 209 and PHT 213 may be taken concurrently.

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**PHT 224 ADVANCED PHARMACY TECHNICIAN INTERNSHIP**  
In this course, students will engage in the practical application of all skills learned in the classroom to a simulated pharmacy environment using the Virtual Pharmacy Externship for Technicians and Virtual Medication Safety for Technicians software. The second half of the course will focus on reviewing high yield topics and questions most likely encountered in the certification exam. Practice test questions and answers will be reviewed to improve retention and recall. The last day will be reserved for pre-registration for the certification examinations, Certified Pharmacy Technician (PTCB CPhT). Students thereafter will be notified by the PTCB regarding their examination schedule.

**Note:** Students must meet all the requirements in this course in order to satisfactorily complete the program of study.

**Contact Hours:** Lecture–0, Lab–12, Credits–6  
**Prerequisite(s):** Completion of all required course work.

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**PHYSICAL THERAPIST ASSISTANT (PTA)**

**PTA 101 INTRODUCTION TO PHYSICAL THERAPY**  
This course provides an introduction to the physical therapy profession, the American Physical Therapy Association, and the role of the physical therapist assistant in a health care environment. Students are provided with an overview of the current healthcare system, including third party payment systems, documentation and communication skills, health literacy, and the systematic review of professional literature.

**Contact Hours:** Lecture–2, Lab–0, Credits–2  
**Prerequisite(s):** ENG215 Analytical Writing

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**PTA 115 THERAPEUTIC PROCEDURES I**  
This course will introduce basic Physical Therapist Assistant clinical skills for measurement of peripheral joint range of motion (ROM), muscle strength, and edema using volumetric, circumferential and postural assessments. Students will be introduced to manual muscle testing and goniometry, and exposed to dynamometry, and the use of inclinometers in the clinic. Course instruction will include the monitoring of vital signs and completing aseptic techniques. The understanding of common special tests performed by the physical therapist and physician are covered. Competency will be evaluated throughout the term.

**Contact Hours:** Lecture–2, Lab–4, Credits–4  
**Prerequisite(s):** BIO230 Functional Anatomy & Kinesiology  
**Co-requisite(s):** PTA 215 Therapeutic Procedures II, PTA 221 Physical Therapist Assistant Modalities

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**PTA 130 DISEASES OF THE HUMAN BODY**  
The student is introduced to the medical and surgical conditions most frequently encountered in PT departments, with emphasis on the role of the PTA in the treatment of each. The basic inflammatory and healing processes and the principles of treatments to promote healing are covered. Students will become familiarized with the essential nature of diseases, and abnormalities of structure and function that are characteristic of diseases.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** BIO 230 Functional Anatomy and Kinesiology

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**PTA 215 THERAPEUTIC PROCEDURES II**  
This course will introduce basic patient care and handling techniques, including body mechanics, positioning and bed mobility, patient transfer techniques, gait training with assistive devices and wheelchair management using simulated patient care scenarios. Student participation includes receiving and administering care. Skills are assessed throughout the course through skills-competency testing and written and practical examinations.

**Contact Hours:** Lecture–1, Lab–4, Credits–3
Prerequisite(s): BIO 230 Functional Anatomy & Kinesiology
Co-requisite(s): NONE

PTA 221 PHYSICAL THERAPIST ASSISTANT MODALITIES
This course is designed to introduce the student to the use of physical agents and therapeutic modalities in physical therapy practice. Lecture and laboratory activities develop problem solving skills and critical thinking in the use of electrical stimulation, therapeutic heat & cold application, traction, hydrotherapy and aquatics to accomplish therapeutic treatment goals. This course will include instruction in therapeutic massage and continued practice for therapeutic exercises. Skills will be assessed and tested for competence throughout the semester. Students are expected to both receive and administer each of the therapeutic interventions discussed.

Contact Hours: Lecture-1, Lab-4, Credits-3
Prerequisite(s): BIO 230 Functional Anatomy & Kinesiology
Co-requisite(s): PTA 115 Therapeutic Procedures I, PTA 215 Therapeutic Procedures II

PTA 225 ORTHOPEDIC AND NEUROLOGICAL REHABILITATIONS
This course is a study of orthopedic conditions and their underlying pathology, and introduces developmental milestones for normal human motor development across the lifespan. Topics include genetic, hereditary, congenital and acquired disorders, and their impact on human motor development. Emphasis is on physical therapy interventions utilized in the rehabilitation of specified conditions. (This course runs for 11 weeks).

Contact Hours: Lecture-3, Lab-6, Credits-4 (10 weeks)
Prerequisite(s): BIO 230 Functional Anatomy & Kinesiology, PTA130 Diseases of the Human Body
Co-requisite(s): PTA 231 Therapeutic Exercise, PTA229 Rehabilitation Techniques

PTA 227 CLINICAL PRACTICE I
This course is four weeks of structured clinical instruction with a focus on gaining familiarity with PT/PTA interactions and the clinic environment. Students are expected to develop professional deportment and communication, practice measurement and muscle testing skills, refine time management skills, and gain exposure to written or electronic health records and documentation. (This course runs for four weeks).

Contact Hours: Lecture-0, Lab-0, Clinical-160, Credits-4
Prerequisite(s): PTA101 Introduction to Physical Therapy, PTA 115 Therapeutic Procedures I, PTA130 Diseases of the Human Body, PTA 215 Therapeutic Procedures II, PTA 221 Physical Therapist Assistant Modalities

PTA 229 REHABILITATION TECHNIQUES
This course examines the theory and implementation of rehabilitation techniques for patients diagnosed with cerebrovascular accidents, spinal cord injury, progressive neurological disorders, amputation, joint replacement, traumatic head injury, and cardiovascular & pulmonary disease. The focus will be on patient function including assessment instruments used to identify and document architectural barriers and the level of assistance needed for independence with activities of daily living. Use of and need for orthotics and prosthetics will be explored. (This course runs for 11 weeks).

Contact Hours: Lecture-2, Lab-4, Credits-3 (11 weeks)
Prerequisite(s): PTA 130 Diseases of the Human Body
Co-requisite(s): PTA 233 Special Populations

PTA 231 THERAPEUTIC EXERCISE
This course is designed to provide students with entry-level knowledge of therapeutic exercise instruction including stretching and strengthening of the major muscle groups, monitoring patient progress, and effective documentation strategies. (This course runs for 11 weeks).

Contact Hours: Lecture-2, Lab-5, Credits-3 (10 weeks)
Prerequisite(s): None
Co-requisite(s): PTA 225 Orthopedic and Neurological Rehabilitations

PTA 233 SPECIAL POPULATIONS
This course is designed using multiple instructional strategies and methods, for cultivating the student's ability to critically think, in order to apply specialized treatment interventions used in the rehabilitation setting for specialized populations. Students will be introduced to multiple complexities associated with giving care to the medically complex older adult or child. Students will participate in expanded discussions regarding the geriatric and pediatric populations. (This course runs for 11 weeks).

Contact Hours: Lecture-3, Lab-0, Credits-2 (10 weeks)
Prerequisite(s): PTA 130 Diseases of the Human Body
Co-requisite(s): PTA 229 Rehabilitation Techniques

PTA 237 CLINICAL PRACTICE II
This course is a five-week supervised full-time clinical experience structured to allow students to apply and practice skills learned in the most recent classes and learn to become an integral part of a physical therapy department. Students will be assessed on skill acquisition with regards to treatment interventions for orthopedic and neurological patient populations. (This course runs for 6 weeks).

Contact Hours: Lecture-0, Lab-0, Clinical-200, Credits-6
**Prerequisite(s):** PTA225 Orthopedic and Neurological Rehabilitations, PTA 229 Rehabilitation Techniques, PTA 231 Therapeutic Exercise, PTA233 Special Populations  
**Co-requisite(s):** PTA 249 PTA Seminar

### PTA 247 CLINICAL PRACTICE III

This course is a six-week supervised full-time clinical experience intended for students to practice all of the techniques and procedures taught throughout the program curriculum with an emphasis on applying specialized treatment interventions used in the rehabilitation setting for specialized populations. Students will be performing all of the activities normally expected of a physical therapist assistant. Participants are expected to conduct an educational “in-service” presentation to colleagues at the clinical site.

**Contact Hours:** Lecture-0, Lab-0, Clinical-240, Credits-6  
**Prerequisite(s):** PTA 237 Clinical Practice II, PTA 233 Special Populations  
**Co-requisite(s):** PTA 249 PTA Seminar

### PTA 249 PTA SEMINAR

This course incorporates an overview of the organization and administration of a physical therapy service and identifies the role of the assistant in various aspects of physical therapy practice. It also provides a forum for student discussion and exchange of clinical experiences and student presentations of case studies and physical therapy topics which include patients and staff scheduling; professional growth and development; quality assurance concepts; and negotiation skills for employment opportunities. Lectures will address résumé writing and interviewing skills.

**Contact Hours:** Lecture-2, Lab-0, Credits-2 (4 weeks)  
**Prerequisite(s):** PTA 227 Clinical Practice I  
**Co-requisite(s):** PTA 237 Clinical Practice II, PTA 247 Clinical Practice III

### PHYSICS (PHS)

#### PHS 241 CALCULUS PHYSICS I LABORATORY

This is a calculus–based lab, ninety percent (90%) of which is done using Pasco® Interfacing Devices and, whose purpose is to reinforce the concepts of PHS 244 Calculus Physics I.

**Contact Hours:** Lecture–1, Lab–2, Credits–1  
**Prerequisite(s):** PHS 244 Calculus Physics I

#### PHS 244 CALCULUS PHYSICS I

This is a calculus–based course. The topics covered are: measurement, scalar and vector quantities, two and three dimensional motion; and Newton’s Laws of Motion. Other topics are: work and energy, systems of particles, collisions, and impulse and momentum. Fluids, rotational dynamics, and linear and angular momentum are also covered.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Co-requisite(s):** PHS 241 Calculus Physics I Laboratory  
**Prerequisite(s):** MTH 225 Calculus I

### POLITICAL SCIENCE (PLS)

#### PLS 150 AMERICAN FEDERAL GOVERNMENT

This course traces the development and evolution of the federal government in the United States of America with emphasis on how laws are enacted within the framework of the Constitution. The democratic system of government and the electoral process are emphasized. Students analyze the 2000 Presidential election and its impact on the judicial, legislative, and executive branches of the government.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

#### PLS 160 INTRODUCTION TO GLOBAL STUDIES

The relationship between the United States and emerging economic powers such as China, India, and Dubai is explored by tracing the political, cultural, and economic issues in these nations which have influenced their present success. How these relationships impact individuals on a day-to-day basis is addressed.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

### PSYCHOLOGY (PSY)

#### PSY 105 INTRODUCTION TO PSYCHOLOGY

This course provides a general overview of the field of psychology. Students focus on human behavior and human brain functioning. Through the examination of significant psychological research trends and important figures in the field, students trace the evolution of this social science. Topics covered in this course include: memory, learning, creativity, emotions, abnormal behavior, mood and psychological disorders, group dynamics, and motivation. At the conclusion of this course, students are able to apply the concepts they have learned to their own behavior and to that of those around them.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

#### PSY 109 HUMAN GROWTH AND DEVELOPMENT

Psychology and sociology combine in an attempt to understand and predict the behavior of people in their social context. Developmental psychology is the study of the changes in people and their relationships across the lifespan. This course helps students understand those changes in themselves and in the people in their lives.

**Contact Hours:** Lecture–3, Lab–0, Credits–3  
**Prerequisite(s):** None

Revised: August 30, 2016
SOCILOGY (SOC)

SOC 103 INTRODUCTION TO SOCIOLOGY
Sociology is a social science that attempts to explain group dynamics and behavior, social structures, and society as a whole. This course serves as an introduction to the study of human society and social behavior. All areas of social life are examined including community, work, religion, school, family, gender, race, class, and crime/deviance. This course also assesses how society shapes and changes its norms by examining the complex relationship between the similarities and differences. The course is designed to introduce students to the basic principles of this discipline and to develop a more sophisticated understanding of socialization and society.

Contact Hours: Lecture–3, Lab–0, Credits–3
Prerequisite(s): None

SOFTWARE AND INFORMATION TECHNOLOGY (SIT)

SIT 203 BASIC OFFICE SOFTWARE APPLICATIONS
This interactive course is designed to develop core skills in each of the most popular and useful office software applications with a view to their interaction and integration techniques. Students gain useful competence in using spreadsheets, databases, presentation software, and word processing.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

SIT 204 INTERMEDIATE OFFICE SOFTWARE APPLICATIONS
This course goes beyond the fundamentals in providing instruction in features and capabilities of office software. In addition to more interaction and integration techniques, methods are covered for customizing the applications for specialized uses.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): SIT 203 Basic Office Software Applications or equivalent

SIT 205 UNIX
This is an introduction to the UNIX operating system. A Linux version is used to explore logins, permissions, commands, and editors, and the various shells such as Bourne, korn, and bash. Administrative tools, such as awk and grep, as well as graphical user interfaces, are explored.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

SIT 210 VISUAL BASIC I
Visual Basic .NET is used to develop skills in modern program development for both stand-alone and web-based applications. Key target skills are: building the user interface, mastering procedural and object-oriented syntax, and accessing and manipulating database information in a .NET environment.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): SIT 222 Programming Fundamentals

SIT 211 VISUAL BASIC II
This course builds on existing knowledge of Visual Basic .NET to create sophisticated programs using object-oriented techniques, ASP.NET, ADO.NET, and SQL, especially for web-based applications.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): SIT 210 Visual Basic I

SIT 213 XML WEB SERVICES
The student learns to create and manipulate datasets, access and manipulate XML data, create remote-able classes for .NET Remoting, create and use SOAP extensions for basic and advanced web services, and use Windows and Component Services of the .NET framework.

Contact Hours: Lecture–3, Lab–4, Credits–5
Co-requisite(s): SIT 211 Visual Basic II

SIT 218 CLIENT OPERATING SYSTEMS
Students learn to install and configure desktop operating systems as a client in a client–server network environment. The course provides in–depth, hands–on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of operating systems on a PC as part of a network.

Contact Hours: Lecture–3, Lab–2, Credits–4
Prerequisite(s): CTT 099 Computer Fundamentals

SIT 220 DATABASE SYSTEMS I
Students will create and query relational database tables using SQL and will configure and manipulate data on a modern database server. Other target skills include creating and managing login accounts, assigning and enforcing security roles and access permissions, optimizing server performance, locking access, and troubleshooting transaction errors.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

SIT 221 PROJECT MANAGEMENT
Students will learn the fundamental principles used by project managers to oversee personnel, spending schedules, and other resources to initiate, run, and terminate projects within budget and on time. The roles of the sponsor, stakeholders, project teams, work breakdown structure, and other concepts will be used along with project software on test cases or on actual projects during the term.

Contact Hours: Lecture–2, Lab–2, Credits–3
Prerequisite(s): None

SIT 222 PROGRAMMING FOUNDAMENTALS

Revised: August 30, 2016 158
This course introduces the student to the proper, fundamental standards for writing well-structured computer programs. Starting with the procedural programming techniques of using structure elements, flowcharting, and Pseudocode, the student is then introduced to object-oriented syntax and techniques.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** None

**SIT 225 COMMAND LINE AND SCRIPTING**  
The student gains familiarity and competence in use of the text-based command line interface that accompanies operating systems. Students will achieve expertise with individual commands, batch files, and scripts to create customized utilities that facilitate large, complex, or repetitive administrative computer skills.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** None

**SIT 230 JAVA I**  
This course provides a conceptual understanding of Object-Oriented Programming (OOP). Topics include the fundamentals of the Java language’s Application Programming Interface (API). Students learn to create classes, objects, and applications. Most fundamental and universally useful elements of Java syntax are covered including arrays and collections, while providing an overview of more advanced elements. Students write useful Java classes, applying Object-Oriented concepts such as inheritance, polymorphism, interfaces, exception handling, and inner classes to create Java programs that work with these classes.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** SIT 222 Programming Fundamentals

**SIT 232 JAVA II**  
This advanced Java course focuses on the Java Foundation Classes (JFC), also known as Swing, event-based programming, and Java’s event model within the context of the Abstract Window Toolkit (AWT). Students learn to design multi-threaded network applications that use databases to store and manipulate information.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** SIT 230 Java I

**SIT 246 PROGRAMMING INTELLIGENT DEVICES**  
This course uses an intuitive approach to teaching fundamental software design by programming modern devices. The students will develop games and useful applications for intelligent devices such as Smartphones, tablet computers, PDAs and robots. This practical yet rigorous course will teach students all fundamental programming principles and techniques which serve as the foundation for higher level programming courses. The content and methods will be updated each term to remain state-of-the-art.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** None

**SIT 291 SERVER MANAGEMENT**  
Students gain the knowledge and skills to manage user and group accounts, computer accounts, network shares, group policies, and other directory resources on a server in a client–server network. Students learn to control user access by assigning and managing user rights and resource permissions. This course prepares candidates to qualify for the Microsoft Server Administrator certification exam.

**Contact Hours:** Lecture–3, Lab–2, Credits–4  
**Prerequisite(s):** None

**SIT 292 SERVER MAINTENANCE**  
The student learns to establish baseline performance parameters for newly deployed servers; to set alert levels; and to monitor subsequent performance by viewing and interpreting system logs and event logs to pinpoint problems with the network, memory, or storage, and to troubleshoot accordingly. This course prepares candidates to qualify for the Microsoft Active Directory and Configuring certification exam.

**Contact Hours:** Lecture–2, Lab–1, Credits–2  
**Prerequisite(s):** SIT 291 Server Management

**SIT 294 NETWORK INFRASTRUCTURE**  
The student learns the advanced skills of: establishing a Dynamic Host Configuration Protocol (DHCP) server, creating and activating scopes, implementing and managing name resolution through Domain Name System (DNS), creating lookup zones, administering security policies, installing security updates, securing network traffic with IPsec, configuring routing and remote access, among other topics. This course prepares candidates to qualify for the Microsoft Network Infrastructure and Configuring certification exam.

**Contact Hours:** Lecture–3, Lab–2, Credits–4  
**Prerequisite(s):** SIT 292 Server Management

**SIT 299 SERVER SECURITY**  
The advanced topics of this course include securing remote access, deploying, configuring, and managing SSL Certificates, deploying and troubleshooting security templates, deploying and troubleshooting IPsec, and planning and implementing security for wireless networks, among other topics. This course prepares candidates to qualify for the Security Fundamentals (98-367) certification exam.

**Contact Hours:** Lecture–2, Lab–1, Credits–2  
**Prerequisite(s):** SIT 292 Server Maintenance

**STRUCTURAL ENGINEERING (STR)**

**STR 134 ENGINEERING MECHANICS**  
Engineering mechanics covers the fundamental concepts and methods of analyzing statically determined structures. Topics include: moments and couples, free body diagrams, component polygons, 2–
D and 3–D vector representation of forces, static equilibrium of rigid bodies, engineering structures and points in space, analysis of internal and external forces in structures, and properties of cross-sectional areas. Calculus–based problems are the focus of this course.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Co-requisite(s):** MTH 225 Calculus I

**STR 247 MECHANICS OF MATERIALS**  
Stress and strain at a point in space; elastic and plastic analysis of deformable bodies; stability, stiffness and rigidity of structures; and engineering applications are covered in this course. Calculus–based problems are the focus of this course.

**Contact Hours:** Lecture–2, Lab–2, Credits–3  
**Prerequisite(s):** MTH 225 Calculus I and STR 134 Engineering Mechanics
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