

#### Degree/Certificate Details

# AAS Degree

# Information Technology - Systems Administration

## Year One (Sample schedule)

#### Quarter One (Fall)

$\Box$ IT 111 Fundamentals of Information Technology5
$\Box$ C SC 100 Intro to Computer Science5
ENGL& 101 English Composition I5

# Quarter Two (Winter)

□ IT 107 Intro to Networking5
$\Box$ IT 162 Upgrade and Maintain PC5
AMATH 121 Applied Math for Professional & Technical Programs5

# Quarter Three (Spring)

□ IT 114 Database Design and Implementation5
□ IT 156 Introduction to Operating Systems
□ AOS 170 Business Communications

## Year Two (Sample schedule)

## **Quarter Four (Fall)**

CAT 212 Help Desk and Support Specialist5	
□ IT 225 Windows Domains5	
□ MEDIA 111 Introduction to Multimedia-Web5	

## **Quarter Five (Winter)**

CSIA 185 Risks Control and Encryption or CSIA 290 Cybe	er-
security Capstone Course	5
ECON 101 Introduction to Economics	5
□ IT 260 Unix/Linux System Administration	5

## Quarter Six (Spring)

MEDIA 206 Database Driven Websites	5
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BUS 270 Management Info Systems	5

Total Credits Required 90

# **Specifics**

# Length of Program

Courses with prerequisites, and the placement level of the student, may extend the Length of Program listed on this page.

# Which Quarter Can I begin?

The typical student schedule is based on entering the program during the fall quarter, however some programs allow students to enter in t he winter or spring as well. Since not all do, please confirm with an advisor whether this program must be started during a specific quarter or not.

## Details

Completion Award:	AAS Degree
Length of Program:	6 Quarters
Program Code:	CPVSAAPT

#### Program Coordinator (contact with questions)

Eric Waterkotte Office: M207 (360) 417-6270 ewaterkotte@pencol.edu

Apply online: <u>http://pencol.edu/GetStarted</u>

#### **Notes**

#### Degree/Certificate Details

# AAS Degree

# Information Technology - Systems Administration

#### **Program Description**

The Associate of Applied Science (AAS) degree in Information Technology – Systems Administration, trains students, using industry-based skill standards. Students will design, implement, secure and support Microsoft, Unix/Linux and other industry standard network, client and server systems. Students will learn about the fundamental business context were IT systems function including business communication skills. Classroom instruction and practical experiences are combined into a course of study that provides students with broad exposure to the principles of network management and basic a basic understanding of the current information technology business environment.

#### **Program Goals**

For the education program to be effective, the curriculum is designed to promote the following outcomes:

- Prepare students for a variety of Information Technology, network support, computer support and business related job opportunities.
- Prepare students for professional certification exams, where applicable.
- Prepare students to communicate effectively with management, including Chief Information Officers (CIO), and Chief Financial Officers (CFO).

#### **Special Features**

- This program helps prepare the student for a life-long learning process that accommodates rapidly changing technologies.
- This program can be completed online, or face to face depending on the mode that best fits each student's needs
- The practice examination used in this program is based on content that follows guidelines established by industry leaders..

#### **Student Learning Outcomes**

When this program is completed, the student will be able to:

- Determine the type of software or hardware necessary to complete an objective; understand the functions of different operating systems
- Access information from various storage mediums to locate and provide access to information in subdirectories
- · Consider ideas that conflict with individual value systems
- · Design, configure, troubleshoot and deploy computer networks
- · Use an operating system to access a variety of software
- Solve problems using the appropriate operating system utilities; apply systematic approaches and logic to solving problems
- Synthesize and apply information to meet an identified need

- Ask questions and give answers using discipline-specific vocabulary
- Respond to a heterogeneous technology climate
- Plan, install, configure and manage resources. Connect and run applications. Monitor, optimize and troubleshoot network software and hardware
- Provide organizations a safe, secure, and redundant information
  system

#### **Program Prerequisites**

Students entering this program should have good familiarity with computer software and hardware in the Windows or MAC environment. College level skills in English and math (eligibility for courses numbered 100 or higher) are required before registering for the English, math, or applied math courses in this program. Students may need to complete prerequisite coursework. The placement test will help determine placement level if not known. Previous coursework may also indicate placement level.

#### **Career Opportunities**

The Information Technology field continues to evolve. Information Technology plays an integral part in achieving management goals and objectives. Network and computer support personnel with experience and education earn living wages that vary depending on many factors, including but not limited to: specific skill set, supply and demand, location, and current business and economic conditions. Job openings vary across the country.

#### **Potential Positions and Earning**

Potential positions include Systems Administrator, Systems Support Specialist, and Network Engineer. For current employment and wage estimates, please visit and search for the relevant occupational term: www.bls.gov/oes

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#### Assessment

Students are required to place into the English and math/applied math courses required for the program. Learn more about placement options by visiting the Assessment and Placement website: http://www.pencol.edu/placement-testing

#### **Approximate Additional Costs**

Books, supplies and miscellaneous fees	
(per quarter)	\$200.00-\$300.00
Optional/Recommended Personal	¢4 500 00 ¢0 500 00
Computer/software	\$1,500.00-\$2,500.00