

Yorktown State University Information Technology Program

<http://cis.ysu.edu/programs/infot.htm>

Yorktown State University offers programs to train computer professionals at all levels. Their programs are coordinated to local Ohio high schools where students can take courses preparing them for work or for continuing their education through postgraduate [certification](#) programs.

This program prepares students for fast growing, high paying computer related occupations that employ approximately 66,000 people in Minnesota. All the occupations are expected to grow by more than 20% during the decade.

Computer professionals are trained in programs that focus on computers, computing problems and solutions, and the design of computer systems and user interfaces. This includes instruction in the principles of computational science, and computing theory; computer hardware design; computer development and programming; and applications to a variety of end-use situations.

Jobs in computers and information technology are some of the highest paying and fastest growing jobs in the Minnesota economy. People in these occupations can work in every region of the state and in every industry. The table shows some of the careers available over the next decade for these jobs.

Occupation	2004 –2014 Job Openings	Median Salary 2006 (\$)
Computer Software Engineers, Applications	9,173	79,173
Computer and Information Systems Managers	3,563	104,181
Network Systems and Data Communications Analysts	3,116	72,155
Computer Software Engineers, Systems Software	2,822	83,743
Network and Computer Systems Administrators	2,813	61,901

The [Mahoning Area Consortium](#) (MAC) Tech Prep programs work with 18 area high schools and Youngstown State University to create seamless college prep career-technical education programs that begin in the junior year or high school and continue through an associate or bachelor's degree program. College Tech Prep programs stress mathematics, science, communications, and technology. They also emphasize teamwork, applied learning, work-site learning, critical thinking, and problem solving.

MAC cooperating partners are the school districts of Austintown, Boardman, Campbell, Canfield, Jackson-Milton, Lowellville, Poland, Sebring, South Range, Springfield, Struthers, West Branch, Western Reserve and Youngstown City Schools. Three Tech Prep programs in information technology are available in these high schools. The programs are interactive multi-media, information services and support, and networking.

As an example, networking classes are offered at [Chaney High School](#), [Choffin Career and Technical Center](#), and [Mahoning County Career and Technical Center](#). The networking program option covers the design, development, implementation, support, or management of computer based information systems, networks and/or software. Students will learn the basics of Windows, Microsoft Office software applications (including Word, Access, Excel, and Power Point), HTML, web page development, networking basics, and Cisco networking training. In addition, you will learn to implement computer systems and software; analyze network systems needs, specifically Cisco Systems; design, develop, and maintain computer systems and software; troubleshoot and repair hardware and software. The students receive significant "hands-on" projects in the College Tech Prep classroom and work-based learning opportunities, i.e. mentoring, job shadowing, and internships at various companies in Mahoning County.

At [Youngstown State University](#) (YSU) high school graduates build on the one of the three programs they took in high school. The YSU Information Technology program includes methodologies and models for conceptualizing the complex dynamics of the office environment. In addition, they can apply them to Office Information Systems design and implementation. Information Technology encompasses office automation, end-user computing, information centers, computer-supported work, performance support, multimedia, and executive information systems. At YSU there are many stopping points for the students.

Students wishing to receive the [Associate in Applied Science degree](#) must complete the following:

- Courses in computer science
- Courses in information technology
- A math course
- An advisor-approved specialization area of at least 9 semester hours
- University General Education requirements in essential skills and one general education course in each of the areas of artistic and literary perspectives, societies and institutions, and speech

YSU graduates of the two-year [Associate of Science degree](#) program can pursue careers as office information specialists in publishing, legal, financial, and medical fields, as well as continuing on to a four-year Bachelor's degree in Information Technology. They may also complete a Bachelor of Science in Education degree in teaching with a major in Integrated Business.