COMPUTER AND INTERNETWORKING TECHNOLOGIES
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These days it’s almost impossible to find any area of life not impacted by technology. As existing and emerging technologies become more ubiquitous, and industry becomes more and more dependent on technology, there will be a growing need for qualified professionals to develop, implement, maintain, organize and repair the devices and systems used by nearly everyone and found in nearly every industry. Job growth in computer-related careers is expected to continue into the next decade. Career opportunities are varied and include computer service technicians, database administrators, network administrators, systems analysts and software developers. Health care facilities, computer consulting services, accounting systems design, manufacturing and government agencies are a few examples of fields that provide jobs for technical and business computer professionals.

The Computer and Internetworking Technologies (CIT) program at College of DuPage offers a variety of degrees and certificates that allow graduates to pursue a career in a wide range of information technology (IT) fields. The CIT degree programs are unique in that they have been built specifically around industry standard certifications that are in demand by today’s employers. In addition, CIT offers a variety of certification training programs through its Cisco Networking Academy, VMwave Academy, Microsoft Academy, and CompTIA Academy. These targeted training programs are for professionals interested in advancing their careers or for students who are interested in a career in IT.

For a complete list of courses in this program visit: cod.edu/catalog
WHY COLLEGE OF DuPAGE IS RIGHT FOR YOU

Whether you are preparing for a career in the IT industry, planning to transfer to a four-year baccalaureate-granting institution, or updating your skills, College of DuPage has the right program for you. We offer:

• Dedicated instructors with years of practical industry experience, certification, and licensing.
• Instruction in top-notch facilities and on cutting-edge equipment.
• Flexible schedules with morning, afternoon, evening, and weekend classes.
• Practical, hands-on experience as well as classroom-based studies.
• Affordable programs that get you on the fast track to success without breaking the bank.
• Training that is accredited and certified by industry associations and organizations ensure the most up-to-date and relevant training.
• Programs designed around industry-standard professional certifications that give job seekers a competitive edge over the competition.
• Articulated partnerships with respected baccalaureate-granting institutions validate the rigor of the program and enable seamless transfer of earned credits.
“Coming to COD has been great. COD helped me get my first job.” — Tony Baranowski, Graduate
ASSOCIATE IN APPLIED SCIENCE (A.A.S.) IN COMPUTER AND INTERNETWORKING TECHNOLOGIES

The Computer and Internetworking Technologies program offers two A.A.S. degree programs. The program provides students with the skills necessary for entry-level positions in the data communications and computer networking fields. Students will become adept at designing, implementing and maintaining networks.

This degree is designed around vendor certifications including, but not limited to, CompTIA A+, CompTIA Network+, CompTIA Security+, CompTIA Convergence+, CompTIA Server+, AccessData Certified Examiner (ACE), Cisco Certified Entry Networking Technician (CCENT), Cisco Certified Network Associate (CCNA), CCNA Security, CCNA Wireless, CCNA Voice, Cisco Certified Network Professional (CCNP). Once students have successfully completed required classes, they will be prepared to sit for industry certification exams.

The Computer and Internetworking degrees transfer to some of our university 2+2 and 3+1 university partners. Contact us for specific information and to obtain the recommended sequencing of courses.

Computer and Internetworking Technician
The Computer and Internetworking Technician A.A.S. degree program is designed to provide a broad exposure to computer systems and networks. Network design and system design are emphasized along with convergence, network security, system maintenance and troubleshooting. Students are required to complete a minimum of 64 credits of coursework, which includes 41 credits in core requirements. After completing this program, students have potential to earn up to eight professional certifications in addition to A.A.S. degree.

Information Systems Security (INFOSEC) 4011 Professionals
The Information Systems Security training degree satisfies the national training and education standards set for INFOSEC professionals. College of DuPage is certified to train INFOSEC professionals under the authority of Committee of National Security Systems (CNSS) and the National Security Agency (NSA). Coursework includes fundamental and advanced topics in networks and networking, security administration, systems maintenance, and systems security, as well as selected topics in criminal justice. Students are required to complete a minimum of 64 credits of coursework, which includes 32 credits in core requirements.
CERTIFICATES IN COMPUTER AND INTERNETWORKING TECHNOLOGIES

The Computer and Internetworking Technologies program offers certificates in a variety of disciplines. These targeted programs range in length from 12 to 44 credit hours. Most students enroll in these programs to improve their on-the-job credentials, retrain for a new career in technology, or upgrade skills for a competitive edge in the job market.

Computer and Internetworking Technologies
The Computer and Internetworking Technologies certificate program provides students with broad exposure to computer systems and networks. Students are required to complete 35 credits in coursework that includes computer forensics, Internet telephony, maintenance, networking fundamentals, routing protocols and security.

CompTIA A+ and Network+ PC Technician
The System Support Specialist certificate program prepares students to work as computer and network support specialists. Upon completion of the program, students are prepared for the CompTIA A+, and CompTIA Network+ certifications. Students are required to complete 14 credits in classes including computer and hardware maintenance, PC maintenance, system maintenance, and networking.

Information Systems Security (INFOSEC)
The Information Systems Security training certificate satisfies the national training and education standards set for INFOSEC professionals. Students are required to complete 32 credits of coursework that includes fundamental and advanced topics in networks and networking, security administration, systems maintenance and systems security, as well as selected topics in criminal justice.

System Support Specialist
The System Support Specialist certificate program prepares students to work as computer and network support specialists. Upon completion, students are prepared for the CompTIA A+, CompTIA Network+ and CompTIA Security+ certifications. Students are required to complete 17 credits in coursework that includes computer and network maintenance, networking and security.

Voice Over IP Telephony Specialist
The Voice Over IP Telephony Specialist certificate program provides students with a foundation in the design, installation, troubleshooting and use of Voice Over IP related software and hardware. Students are required to complete 18 credits in coursework that includes Cisco Voice Over IP, LANs, routing and WANs.
UPDATE YOUR SKILLS AT COLLEGE OF DuPAGE

The CIT program at College of DuPage offers several certifications and industry-standardized credentials that may be earned by students and professionals to update skills and knowledge in both broad and specialized disciplines. Professional certifications are non-degree credentials awarded to students who have achieved qualifications specified by a certifying agency. College of DuPage houses two areas of professional certification training: Cisco Networking Academy and CompTIA Academy.

Please note: Some certification programs have prerequisite requirements. Students should consult with a faculty advisor for more information on prerequisite requirements for specific programs.

Cisco Networking Academy
The Cisco Networking Academy provides students with valuable Internet technology skills for the global economy. The Cisco Academy teaches students to design, build and maintain computer networks. The program also prepares students to pursue a number of industry-standard certifications, including Cisco Certified Network Associate (CCENT), Cisco Certified Network Associate (CCNA), CCNA Security, CCNA Wireless, CCNA Voice, and Cisco Certified Network Professional (CCNP).

Cisco Certified Network Associate (CCNA)
The CCNA program consists of four classes that provide students with a foundation in networking fundamentals such as installation, configuration, administration and troubleshooting of route and switched networks and remote connections. Students are required to complete 12 credits in networking, and routing protocols and concepts.

Cisco Certified Network Professional (CCNP)
The CCNP program provides training that enables students to plan, implement, verify and troubleshoot local and wide-area networks and work collaboratively with specialists on advanced security, voice, wireless and video solutions. Students are required to complete 9 credits in advanced networking topics including routing, switching, and troubleshooting.
“COD provided tangible value for my hard work and a path to achieve my dreams.” —Arvind Natarajan, Graduate
CCNA Security
The CCNA Security program provides specialized training for students who want to enhance their CCNA-level skill set or prepare for entry-level positions as security specialists. It is also a prerequisite for obtaining the Cisco Certified Security Professional (CCSP) credential for IT professionals who are pursuing a career in network security. Students are required to complete 15 credits in coursework that includes networking fundamentals, routing, LANs, WANs and network security.

CCNA Wireless
The CCNA Wireless program provides an introduction to the design, implementation and maintenance of wireless networks. Topics include: 802.11 standards, wireless radio technology, wireless topologies, access points, bridges, wireless security, site surveys, troubleshooting and antenna systems.

CCNA Voice
The CCNA Voice program provides specialized training for students who want to enhance their CCNA-level skill set or prepare for entry-level positions in basic voice operations.

CompTIA Academy
The CompTIA Academy offers a wide variety of certification training programs designed to meet the needs of IT educators and learning professionals. CompTIA certifications are recognized throughout the industry as the standard for proving foundation-level skill sets and are the only industry-supported, vendor-neutral programs on the market today. Many top organizations, including Canon, Cisco, IBM and Novell, require CompTIA certification for their IT employees.

CompTIA certifications are also prerequisites for several advanced, vendor-specific credentials such as the Microsoft MCSA and MCSE tracks, Novell CNE and HP Certified Systems Administrator. College of DuPage provides training that prepares students to earn A+, Convergence+, Network+, Project+ and Security+ certifications.

CompTIA A+
CompTIA A+ certification is a credential that validates the knowledge of Computer Service Technicians. A+ certification means that the candidate can adequately diagnose, repair, configure and install hardware and operating systems as well as troubleshoot and upgrade personal computers. Students are required to complete 8 credits in coursework that includes advanced system maintenance, computer and hardware maintenance, and PC maintenance and upgrading.
CompTIA Convergence+
The CompTIA Convergence+ certification is a credential that recognizes the core competencies needed to sell and service convergent technologies. Students are required to complete 9 credits in coursework including Internet telephony, networking and security.

CompTIA Network+
The CompTIA Network+ certification is a credential that recognizes a technician’s ability to design, implement and manage both data and voice networking. Students are required to complete 9 credits in coursework including Internet telephony, networking and security.

CompTIA Project+
The CompTIA Project+ certification is a credential that recognizes fundamental project management skills. Students are required to complete 6 credits in coursework that includes data communications and networks, as well as the entire project life cycle from initiation and planning through execution, acceptance, support and closure.

CompTIA Security+
CompTIA Security+ validates knowledge of communication security, infrastructure security, cryptography, operational security and general security concepts. Students are required to complete 9 credits in coursework that includes data communications, networking fundamentals, as well as computer security topics ranging from access rights to cryptography.
STATE-OF-THE-ART FACILITIES
Facilities for the CIT program at College of DuPage are housed in the recently renovated Seaton Computing Center (SCC).

AVAILABLE SCHOLARSHIPS
Students who are planning to enroll in the CIT program at College of DuPage may be qualified to receive a financial award through a variety of supported scholarships.

- Barth Engineering/Computer Science Scholarship
- CDW Women in Technology Scholarship
- Foundation’s Returning Adult Scholarship

Visit cod.edu/scholarships for requirements and a full list of available scholarships.

TRANSFER OPPORTUNITIES
2+2 Transfer Agreement
The College of DuPage CIT program has established several 2+2 transfer agreements with area colleges such as DePaul University, Illinois Institute of Technology and Northern Illinois University. These agreements enable students to complete their associate’s degree at College of DuPage and then seamlessly transfer to a partner university where they can complete their bachelor’s degree in two years. These agreements offer a convenient and affordable option for students who plan to pursue a four-year degree.

3+1 Transfer Agreement
The College of DuPage CIT program has established a 3+1 agreement with Lewis University aimed at students who are pursuing a bachelor’s degree in Computer Science. This agreement enables students to complete an associate’s degree plus additional coursework beyond the associate’s degree at College of DuPage and then seamlessly transfer to a partner university where they can complete their bachelor’s degree in one year. The last year of coursework is offered by the partner university on site at COD.

The Illinois Articulation Initiative (IAI) facilitates the transfer of students from one Illinois institution to another. Both a general education core curriculum and a lower-division major recommendation course listing have been developed.

For more information on transfer opportunities at College of DuPage, visit cod.edu/academics/transfer_programs.
EMPLOYMENT OUTLOOK

There is a broad range of possible careers for graduates of the CIT program at College of DuPage, with an equally broad range of wages and projected growth. The U.S. Bureau of Labor Statistics reports that the median annual wage for common careers for graduates of the CIT program ranged from $37,280 to $75,660 in 2010, with top earners bringing in more than $119,940. Projected growth in several of these careers ranges from 18 to 31 percent between 2010 and 2020. By industry, employment in professional, scientific, and technical services is projected to grow by 29 percent, adding about 2.1 million new jobs by 2020. Driven by growing demand for sophisticated computer network and mobile technologies, computer systems design and related services employment is expected to increase by 47 percent by 2020.

For more information and employment statistics in the IT industry, visit www.bls.gov.
COMMON CAREERS FOR GRADUATES OF THE COMPUTER AND INTERNETWORKING TECHNOLOGIES PROGRAM

- **Computer Network Architects**: Design and implement computer and network information networks.
- **Computer Network Support Specialists**: Analyze, test, troubleshoot, evaluate and maintain existing network systems.
- **Computer Technicians**: Install, fix and maintain computer and peripheral equipment.
- **Database Administrators**: Use software to store and organize data. May plan, coordinate and implement security measures to protect computer databases.
- **Information Security Analysts**: Plan, implement, upgrade or monitor security measures for the protection of computer networks and information.
- **Network and Computer Systems Administrators**: Install, configure and support computer network systems, network segments, intranets and other data communication systems.
- **Network Engineer**: Troubleshoot network problems; maximize, monitor and optimize network performance.
- **Telecommunications Line Installers and Repairers**: Install and repair telecommunications cable, including fiber optics.
- **Technical Support Specialist**: Problem solve, present technical information, design networks, implement networks and perform network optimization.
GETTING STARTED
If you are considering this program as an area of study:

• Visit our website at cod.edu/programs/cit

• Consult with a program coordinator or specialist:

  Dr. Felix Davis, Program Coordinator, davisfe@cod.edu
  Berg Instructional Center (BIC), Room 1605, (630) 942-2134

  Kathy Harper, CIT Advisor, kotowsk@cod.edu
  Berg Instructional Center (BIC), Room 1474B, (630) 942-3961

  Kim Groesbeck, Program Support Specialist, groesbec@cod.edu
  Berg Instructional Center (BIC), Room 1433, (630) 942-2599

• Contact the Business and Technology Division Office:
  Technical Education Center (TEC), Room 1034
  (630) 942-2592

The College will not discriminate in its programs and activities on the basis of race, color, religion, creed, ancestry, marital status, sexual orientation, arrest record, military status or unfavorable military discharge, citizenship status, or physical or mental handicap or disability.

For Americans with Disabilities Act accommodations, call (630) 942-2141 (voice) or (630) 858-9692 (TDD).

For individuals who need language assistance, please contact Campus Central at (630) 942-2380.