Computer Support Specialist

Need a Good Paying Job?

Register now! Classes start November 28

Expand your skills and stand out from other applicants!

Full Scholarships Available for Everyone!

Computer Support Specialist (Nine Months)

Average wage of $38,344/year.

The Computer Support Specialist program is a sequence of courses designed to provide students with an understanding and technical proficiency related to the concepts, principles, and techniques required in computer design and information processing. Program graduates are competent in the technical areas of computer terminology and concepts, program design and development, computer networking, and computer architecture. Upon completion, students are qualified for employment as a Computer Support Specialist. In addition, graduates are also qualified to pursue advanced certification in other various computer programs, such as A+ and N+ software.

Over 90% obtain employment within 2 to 3 months of graduation!
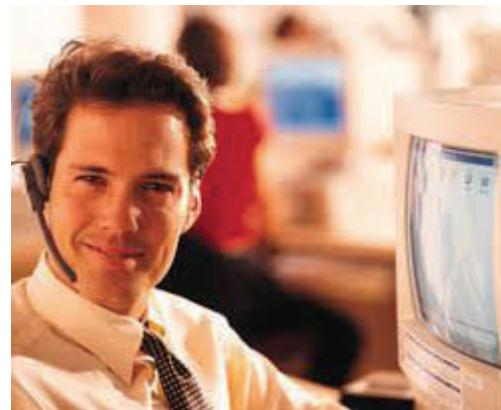
The American Indian Opportunities Industrializations Center (AIOIC) was founded in 1979 and is an accredited post-secondary institution. **Everyone is welcome to apply!**

Free Career Placement Support After Graduation

- Assistance with resume and online job applications
- Improve pre-employment skills
- Referrals, as well as direct contact with employers through mock interviews, externships and more
- Transportation assistance

American Indian OIC
Providing Opportunities. Changing Lives.

**1845 East Franklin Avenue
Minneapolis, MN 55404**

For information or to register for classes, please call ▶ ▶ ▶

(612) 341-3358

www.aioic.org

COMPUTER SUPPORT SPECIALIST COURSE LIST

Block I
College Mathematics (3 credits/75 hours)
This course has been designed to help students develop proficiency in fundamental mathematical skills. Studies will include: arithmetic operations on whole numbers, fractions and decimals, percentages, ratios and proportions. In addition, algebra will be covered as well as an introduction to more advanced topics including solving first degree equations, simplifying polynomials, factoring, solving literal equations, the rectangular coordinate system and graphing lines, solving simultaneous equations, solving and graphing linear inequalities, and solving quadratic equations.

Information Technology in Today's World (3 credits/75 hours)
This course provides an introduction to information and communications technology in the 21st century workplace. Using examples of real-world problems, this course investigates service-oriented aspects in different domains including computer and network functionality, computer security and administration, web technology and multimedia, mobile computing, and a comparison of open source and proprietary IT solutions.

Introduction to Computers (3 credits/75 hours)
This course prepares the student to use computers and peripheral equipment and to conduct the fundamental opening of electronic files, saving of changes, copying of electronic files, and other utilities. The student uses a selection of common software applications to practice these skills, including presentation programs, work processing, Internet browsers, database, and spreadsheet. It requires the student to demonstrate these skills individually.

PC Architecture (3 credits/75 hours)
This course provides an introduction to the installation, configuration, maintenance, and troubleshooting of PC hardware. In addition, this course provides a glimpse into the relationship between computer hardware and software, computer networks and peripherals, virus protection, disaster recovery and maintenance planning. Students who successfully complete this course will be able to proceed to PC Architecture II as they continue along the established pathway to the A+ certification.

Technical Communications (3 credits/75 hours)
This course prepares the student to write at the paragraph and report level for business and technical writing, and to present orally. It requires the students to demonstrate these skills, to practice group skills by critiquing drafts of writing in a cooperative learning setting, and to discuss the topics. Internet and other sources are used and students must locate, analyze, and present information.

Block II
Client-Server Relationship (3 credits/75 hours)
This course covers topics related to the setup and configuration of installing operating systems on workstations in a networked client-server environment. Topics include user account management, network file systems, and network access. Compatibility with other operating systems will also be addressed. Course format will include a mixture of lecture and lab.

Desktop Operating Systems (3 credits/75 hours)
This course covers the various operating systems including Windows, Mac, and Linux. The main emphasis of the course is to familiarize the student with installing, configuring, administering, and managing workstations in a Windows platform. *Prerequisite: Writing Fundamentals.*

Network Essentials I (3 credits/75 hours)
This course is designed to cover the foundations of networking including Local Area Networks (LAN) and Wide Area Networks (WAN) technology, and how communications are accomplished in those environments. Students learn the different protocols used in networking. The course covers designing both cabled and wireless networks. Students who successfully complete this course will be able to proceed to Network Essentials II as they continue along the established pathway to the N+ certification.

PC Architecture II (3 credits/75 hours)
This course is a continuation of the PC Architecture course. This second course within the series will examine such issues as design concepts used in hardware organizations and how computer architectures can improve the performance of computations. Performance improvement techniques employed at instruction set, addressing, gate, register transfer, processor data path, pipelining, memory, I/O, and multiprocessor design levels will be explored to achieve the objectives of the class.

To reinforce the materials in this course, students are assigned hands-on projects to be performed in a lab environment. Students who successfully complete this course will be able to continue along the established pathway to the A+ certification. *Prerequisite: PC Architecture I.*

Spreadsheets (3 credits/75 hours)
This course prepares the student to use a commonly utilized spreadsheet at a production level. The student learns to create, use, and monitor worksheets and files, and to use their features appropriately to the task at hand. It requires the student to demonstrate these skills, to practice group skills, and to discuss the topics. A second spreadsheet program is also practiced, as well as a database program.

Block III
Application Support (3 credits/75 hours)
This course familiarizes the student with non-Microsoft applications including computer protection, desktop and web publishing, disk utilities, and related software applications. Course format will be a mixture of lecture and lab.

Database (3 credits/75 hours)
This course introduces basic relational concepts and processes involved in the creation of a database. The student performs tasks includes designing and implementing database using tables, entering and manipulating data, creating and analyzing table relationships, creating and editing forms, building and modifying queries, and designing and generating reports. This class creates a path for the student to pursue the Access section of the Microsoft Office Specialist exam. Course format will be a mixture of lecture and lab.

Network Data and Security (3 credits/75 hours)
This course covers the fundamental issues associated with information assets protection. Included within the class are issues related to defining response levels to security incidents, determining appropriate intrusion detection, and various reporting features. Other topics will include techniques for proper network monitoring and analysis—including techniques for studying the Internet; estimating the number and severity of attacks; network-based attacks such as probes and denial of service attacks; host-based attacks such as buffer overflows and race conditions; malicious code such as viruses and worms. An inclusion of statistical pattern recognition methods will be briefly examined for the purposes of enhancing overall detection and classification of potential attacks. Various techniques for the visualization of network data will also be discussed.

Network Essentials II (3 credits/75 hours)
This course is a continuation of the Network Essentials course and includes data communications, error prevention, detection, and correction. To reinforce the materials in this course, students are assigned direct hands-on projects to be performed in a lab environment. Further, students who successfully complete this course will be able to continue along the established pathway to the N+ certification. *Prerequisite: Network Essentials I.*

Service Learning Experience (3 credits/120 hours)
This course provides occupational experience relevant to the student's program of Computer Support Specialist. A training plan is developed for each student in cooperation with a supervisor at the training site and with our Employment Service Counselors. The students will apply skills and knowledge acquired during the completion of their coursework to an actual work setting. The Service Learning Experience requires 120 hours minimum for this particular program. Additional hours may be completed by mutual agreement between the student, AIOIC Employment Counselor, and Employer.

Financial Aid
Student financial aid is available in eligible programs for students who qualify. The school participates in the Pell Grant Program, Minnesota State Grant (MHESO), Minnesota Indian Scholarship Assistance Program and various other grant programs. Supplemental Educational Opportunity Grants (SEOG) and Work-Study may also be available to qualifying students.

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