## Information Technology Concentration Areas

- **Computer Information Systems (CIS) and Computer Science (CS)**  
  *Programming, computer science, web design, games, Excel, Access, SQL, Oracle, or Linux/Unix*  

- **Computer Internetworking Technologies (CIT)**  
  *Building and repairing computers and networks*  

- **GIS**

- **IT Technician – Desktop Support, Computer Support, Network Technician**

### Minimum Requirements

**Track One Certificate**  
Participants who meet the following criteria will be eligible to participate in Track One:
- Students must meet minimum language requirements to enroll in credit-bearing classes.
- Math placement test may be required for some IT courses.
- Pre-requisites may be required for specific courses.

**Track Two Non-Certificate Courses**  
Participants who meet the following criteria will be eligible to participate in Track Two:
- Students must meet minimum language requirements to enroll in credit or workforce classes.
- Math placement test may be required for some IT courses.
- Pre-requisites may be required for specific courses.

**Track Three Courses and English**  
Students who have not yet met minimum requirements in English at their host campus will take a combination of English classes and content courses, as possible based on their level of proficiency and department approval.

### Sample Field Concentration Courses

**CIS**  
- Database Technologies  
- Introduction, Intermediate Access  
- Oracle 11g, SQL 11g, & PL/SQL 11g  
- Web Development and Tools  
- Intro to Game Industry  

**CIT**  
- Introduction to Networks  
- Routing and Switching Essentials  
- Scaling Networks  
- MS Windows Server: Active Directory Configuration, Network Infrastructure Configuration, Server Administrator  
- Geographic Information System Network and Cyber Security  

**Introduction, Intermediate, and Advanced Java Programming**  
- Creating Mobile Apps with HTML5  
- Introduction, Intermediate C# Programming  
- Introduction to C++ Programming  
- Cyber Security  
- Cyberlaw  
- IT Project Management  
- AutoCAD  
- Revit  
- Networking Fundamentals  
- Intro to Web Site/Page Design  
- GIS  
- Computer Hardware Basics  

**English Reading and Vocabulary**  
- English Grammar  
- English Writing  
- English Oral Expression  
- English Listening and Speaking  
- College Success Skills  
- Non-credit courses such as Java, AutoCAD, Revit, Cisco Router & IP Routing, CyberWatch Security, Oracle SQL  
- Field elective
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<tr>
<th>General Studies Helpful for the Field</th>
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<tr>
<td>● Oral Communication</td>
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<td>● College Writing</td>
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<tr>
<td>● Project Management</td>
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<td>● Entrepreneurship</td>
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<th>Hands-on, Practical Professional Experience Outside of the Classroom</th>
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<td><strong>Sample Internship Opportunities—Minimum of 75 hours</strong></td>
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<td>Campus tech help desk, local Start Up Accelerator, MSI Mold Builders, ESP International, ACME Graphics, ComputerCORE, Branch Technical Services, Chicago Computers, the local public library, non-profit organizations</td>
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<th><strong>Sample Volunteer Activities that Build Professional Experience in the Field—Minimum of 100 hours</strong></th>
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<td>Tutoring students with less advanced skills, projects in areas of database, web, and social media for a variety of campus offices or local organizations, and the campus help desk</td>
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<th><strong>Sample CCI Programming in This Field of Study</strong></th>
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<td><strong>Program Site Visits:</strong> Oracle University Training Center, local businesses such as Rockwell Collins International, Hibu, Transamerica, Nordstrom Direct, and Delta Circuits</td>
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<td><strong>Workshops and Conferences:</strong> CyberSci Symposium, Washington DC Tech Security Conference, National Credential Preparation: Cisco Certified Network Associate (CCNA), Certified Information Security Manager (CISM®) Boot Camp, Certified Information Systems Security Professional (CISSP®), Computer Forensic ACE Certification</td>
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