### Minnesota Dual-Training Pipeline

**Competency Model for Information Technology**

**IT Support Career Cluster Pathway**

**Employer-Specific Requirements**

**Occupation-Specific Competencies**

- Customer Service Procedures
- Troubleshooting Protocol
- Communication Skills
- IT Help Ticket Tracking Software
- Company Specific Software

*: Other on-the-job training associated with a specific occupation.

**Cross-Occupational Technical Competencies**

<table>
<thead>
<tr>
<th>Help Desk</th>
<th>Maintenance</th>
<th>Hardware &amp; Software Installation/Deployment</th>
<th>High Availability Design &amp; Support</th>
<th>Incident Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troubleshooting/Repair</td>
<td>User Training</td>
<td>User and Customer Support</td>
<td>Digital Media and Visualization</td>
<td>Compliance</td>
</tr>
</tbody>
</table>

**Industry-Wide Technical Competencies**

- Principles of Information Technology
- Databases and Applications
- Networks, Telecom, Wireless & Mobility
- Software Development and Management
- User and Customer Support
- Digital Media and Visualization
- Compliance
- Risk Mgmt., Security and Information Assurance

**IT Pillars:**

- Infrastructure
- Development
- Security
- Data

**Workplace Competencies**

- Business Fundamentals
- Teamwork
- Innovative Thinking
- Planning and Organizing
- Problem Solving and Decision Making
- Working With Tools and Technology

**Academic Competencies**

- Reading
- Writing
- Mathematics
- Science
- Communication
- Critical and Analytic Thinking
- Fundamental IT User Skills

**Personal Effectiveness Competencies**

- Interpersonal Skills and Teamwork
- Integrity
- Professionalism
- Initiative
- Dependability and Reliability
- Adaptability and Flexibility
- Lifelong Learning

*Based on: Information Technology Competency Model Employment and Training Administration, U.S Dept. of Labor, September 2012.*

*Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job training opportunities.*
Competency Model for IT Support Career Cluster Pathway Occupations

Possible IT Support Career Cluster Pathway Occupations

- Application Support Lead/Manager/Technician
- Applications: Analyst/Developer/Engineer/Production Support/Specialist
- Business Analyst
- Client Support Technician
- Computer Help Desk Specialist
- Computer Repair Technician
- Computer Service Technician
- Computer Support: Analyst/Specialist/ Technician
- Computer Technician
- Configuration Technician
- Customer Engagement Leader/Representative
- Customer Engineer Representative
- Customer Service Representative
- Customer Success Engineer
- Customer Support Engineer/Technician
- Computer User Support Specialist
- Database Administrators
- Data Warehousing Specialist
- Deployment Technician
- Deskside Support: Representative/Specialist/Technician
- Desktop: Administrator/Analyst/Support Analyst/Support Specialist/Technician
- Document Management Specialist
- End User: Support/Specialist/Technician
- Entry Level Help Desk
- Field Support: Specialist/Technician
- Hardware Technician
- Help Desk: Administrator/Agent/Analyst/Technician/ Associate/Coordinator/Engineer/Representative/Specialist/ Support/Team Lead
- Inbound Technical Support - Call Center
- Information Systems: Analyst/Specialist/Technician
- Information Technology: Administrator/Analyst/Assistant/ Consultant/Manager/Recruiter/Specialist
- Information Technology Support: Analyst/Specialist/ Technician
- Infrastructure Support Engineer
- It Help Desk: Associate/Representative
- IT Support: Assistant/Associate/Coordinator/Engineer
- IT Systems Analyst
- IT Technical Support
- Network: Administrator/Analyst/ Consultant/Engineer/ Manager/Operations Analyst/Specialist/Support/Technician
- Operations: Specialist/Technician
- PC Analyst
- PC Support: Specialist/Technician
- Product Support: Specialist/Analyst
- Production Support Analyst
- Project Manager - Customer Engagement
- Repair Technician
- Sales Specialist
- Security Administrator
- Service Desk: Analyst/Specialist/Technician
- Service Desk Specialist
- Service Technician
- Software Development Engineer
- Software Manager
- Software Support: Analyst/Representative/ Specialist/Technician
- Supervisor, Technical Support
- Support: Analyst/Specialist
• Systems: Administrator/Analyst/Engineer/Software
• Support
• Systems Support:
  Administrator/Representative/Specialist
  • Technical Support Specialist
  • Technical Help Desk
  • Technical Services:
    Coordinator/Engineer/Representative/Specialist/Technician
  • Technical Support: Advisor/Agent/Analyst/Assistant/Associate/Coordinator/Lead/Professional/Supervisor/Technician

This list is intended to be a guide of potential occupations available within the Information Management & Analytics Pathway. Other position titles may be used based on an employer’s organizational structure.

Cross-Occupational Technical Competencies
Help Desk – Learn to assist with problems and provide guidance about products such as computers, electronic equipment and software.
Troubleshooting/Repair – Knowledge how to use trouble ticket tracking systems and how to connect remotely to users computers.
Maintenance – Modification of a system to correct faults, to improve performance, or to adapt the system to a changed environment or changed requirements.
User Training – deliver end user training to support the development of the team.
Hardware & Software Installation/Deployment – Understanding of procedures to install, configure, operate and repair individual workstations and software applications.
High Availability Design & Support – Knowledge of an agreed level of operational performance and support for a higher than normal period.
Incident Management – Learn to identify, analyze and correct hazards to prevent a future IT re-occurrence.

Occupation-Specific Competencies, typically addressed in on-the-job training
Customer Service Procedures – Practice good customer service skills by using professional communication techniques and technical expertise.
Troubleshooting Protocol – Ability to apply logic over technical components, including computers, software or hardware, to identify faults.
Communication Skills – effectively communicate with internal and external customers to gather information regarding system function and maintenance.
IT Help Ticket Tracking Software – Use of software to create, update and resolve reported customer issues.
Company Specific Software – Demonstrate ability to locate, fix or bypass errors in company specific software.

Possible IT Support Career Cluster Pathway Certifications
• CompTIA A+
• ComTIA Network+
• CompTIA Server+
• ITIL Foundations
• CCNA or CCNP
• MCSA or MCSE
• HCI – SCA
• HCI – TSP
• Apple ACSP
• VCP
## IT Support Career Cluster Pathway Training Plan

<table>
<thead>
<tr>
<th>List Course/Training Name and Title</th>
<th>Description of Courses and/or Training Program</th>
<th>List Responsible Provider: Company, College, Trainer, or other</th>
<th>Anticipated Completion Date</th>
</tr>
</thead>
</table>

### Related Instruction Competencies
- Help Desk
- Troubleshooting/Repair
- Maintenance
- User Training
- Hardware & Software Installation/Deployment
- High Availability Design & Support
- Incident Management

### On-The-Job Training Competencies
- Customer Service Procedures
- Troubleshooting Protocol
- Communication Skills
- IT Help Ticket Tracking Software
- Company Specific Software