The IT sector is evolving faster than it can be tracked as many companies increasingly integrate tech-savvy practices to boost efficiency and reach. Exceptionally well-paying jobs will continue to emerge in the sector, and with this, it will become increasingly important to understand our talent pipeline to support this economic development. While Dallas-Fort Worth is carving out its place among notable tech towns in the U.S., Amazon’s pass on the DFW for its HQ2 campus proved there is room to grow the number of IT professionals. In efforts to match talent supply to demand, we often focus on the overall numbers but in this report, attention is spotlighted on how we are addressing this alignment. While DCCCD offers an extensive number of IT programs throughout its campuses, the options are hard to navigate and programs are not adapting quickly enough to new skills in demand.

Students report enrolling in IT...

- 57% to earn a credential
- 15% for transfer credits
- 14% for personal enrichment or job related purposes
- 12% did not report a reason

### IT Alumni Outcomes

**Source:** Emsi, Alumni Outcomes 2013-2018

<table>
<thead>
<tr>
<th>Occupation</th>
<th># of IT Grads 2013-2018</th>
<th>Estimated Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer User Support Specialists</td>
<td>348</td>
<td>$54,025</td>
</tr>
<tr>
<td>Network and Computer Systems Administrators</td>
<td>207</td>
<td>$89,847</td>
</tr>
<tr>
<td>Computer Network Support Specialists</td>
<td>60</td>
<td>$79,872</td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>50</td>
<td>$96,076</td>
</tr>
<tr>
<td>Software Developers, Applications</td>
<td>44</td>
<td>$104,590</td>
</tr>
<tr>
<td>Computer and Information Systems Managers</td>
<td>35</td>
<td>$154,782</td>
</tr>
<tr>
<td>Web Developers</td>
<td>35</td>
<td>$73,494</td>
</tr>
<tr>
<td>Information Security Analysts</td>
<td>35</td>
<td>$90,681</td>
</tr>
<tr>
<td>Computer Network Architects</td>
<td>23</td>
<td>$110,504</td>
</tr>
<tr>
<td>Computer Programmers</td>
<td>21</td>
<td>$86,558</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>858</strong></td>
<td><strong>$94,043</strong></td>
</tr>
</tbody>
</table>

*Based on 21,000 DCCCD alumni

### 2016-2017 Academic Year

- **Total Enrollments:** 3,308
- **Job Postings:** 37,200+

**About our data source**

Emsi Alumni Outcomes dissects over 21,000 DCCCD identifiable alumni profiles and provides their occupations, wages, employers, region, and promoted skills. The source scrapes online job boards and professional networking platforms and links the information to the alum’s program of study.

The majority of IT graduates work outside of the field

- **39% IT**
- **56% Outside IT**
- **5% Not Available**

Outside the IT field, other top occupations for DCCCD alumni include:

- Customer Service Representatives
- First-Line Supervisors of Office Administrative Support Workers
- Management Analysts
- Bookkeeping, Accounting, & Auditing Clerks
- Retail Salespersons

**Dallas County Community College District**

workforce.dcccd.edu
Racial diversity is strong, but men dominate enrollments at DCCCD.

2013-2018 IT Enrollments

By Gender
- Men: 65%
- Women: 35%

By Race
- Latinx: 33%
- Black: 28%
- White: 23%
- Other: 14%

Average age of our students enrolled in IT: 33

Several programs have not attracted enrollments including:
- CIP 11.01: Computer and Information Sciences, General
- CIP 52.1201: Management Information Systems, General

All DCCCD IT Programs: What Choice Would You Make?

**NETWORKING/SECURITY**
- Network Administrator and Support Assoc.
  - CCNA
  - Microsoft
  - Virtualization/Cloud
  - UNIX/LINUX
  - Convergence Technology Intern & Technician Cert.
  - Information Security Cert.
- Mobile Applications Development Cert.
- Multi-Platform Applications Developer Cert.
  - Networking Associate Cert.
  - Networking Professional Cert.
  - Networking Support Cert.
  - SQL Server Cert.
- Linux System Administrator Cert.
  - CCNP
  - MCSE Server
  - Database
  - Enterprise

**PC SUPPORT**
- Personal Computer Support Assoc.
- Help Desk/User Support Technician Cert.
- Personal Computer Specialist Cert.
- Personal Computer User Cert.
- Technology Support Cert.
- Personal Computer Technology & A+ Cert.
- Information Technology Support Specialist I Occupational Skills Award
- Information Technology Support Specialist II Occupational Skills Award
- Computer Information Technology - Help Desk

**WEB/INTERNET SERVICES**
- Web Production and Design Assoc.
- Basic Web Production Assoc.
- Open Source Cert.
- Web Developer Specialist Cert.
- Web Development Cert.
- Web Production and Design Cert.

**COMPUTER SCIENCE**
- CIS - Business Software Programmer/Developer
- CIS - Business Computer Information Systems
- CIS - Personal Computer Support

**PROGRAMMING**
- Software Programmer/Developer Assoc.
- DBA Cert.
- Programmer Level 1 Cert.
- Software Programmer/Developer Assist. Assoc.
- Visual Studio Developer Cert.
- Visual Studio Enterprise Developer Cert.
- Visual Studio Professional Developer Cert.
- Object-Oriented Programming Skills Achievement Award
- Oracle Assoc. Skills Achievement Award
- Oracle Professional Skills Achievement Award
- .NET Programming Skills Achievement Award
- Data Processing Programmer

**INTERNET DEVELOPMENT TECHNOLOGIES**
- Interactive Simulation & Game Technology
- IDT - Web Application Development
- IDT - Interactive Media Development
- IDT - Internet Marketing
- IDT - Web Site System Administration
- IDT - Adv Web Application Development
- IDT - OS Administration

Programs with low enrollments:
- CIP 11.01: Computer and Information Sciences, General
- CIP 52.1201: Management Information Systems, General

2015-2018 IT Enrollments

By Gender
- Men: 65%
- Women: 35%

By Race
- Latinx: 33%
- Black: 28%
- White: 23%
- Other: 14%

Average age of our students enrolled in IT: 33
According to a 2018 CompTIA IT Industry report, “new collar” jobs call for candidates who have a skill-centered education that can address technology’s presence in other industries. However, a strong pipeline from education to middle-skill jobs is required.

**Job Roles to Watch**
- Cloud Computing
- Cyber Security
- Virtualization
- Networking & Wireless LAN
- Internet of Things (IoT)
- AI, Cognitive Computing & Machine Learning
- Mobility & Endpoint Mgmt.
- Mobile App Development & Deployment
- Software Development
- Business Process Mgmt.

**Program groupings making up over 60 offerings**
- Computer Information Technology (CIT)
- Internet Development Technology (IDT)
- Interactive Simulation and Game Technology
- Computer Science

**54 CIT Programs**
- 27 Networking Security
- 12 Programming
- 9 PC Support
- 6 Web/Internet Services

**Emerging Trends**

**Increase Your Wage Potential with These Certifications**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Average Annual Salary in the United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrix Certified Associate – Networking (CCAN)</td>
<td>$99,217</td>
</tr>
<tr>
<td>Cisco Certified Networking Professional (CCNP) Routing and Switching</td>
<td>$99,402</td>
</tr>
<tr>
<td>Certified Information Systems Auditor (CISA)</td>
<td>$99,684</td>
</tr>
<tr>
<td>Microsoft Certified Solutions Expert (MCSE) – Server Infrastructure</td>
<td>$100,656</td>
</tr>
<tr>
<td>Citrix Certified Professional – Virtualization (CCPV)</td>
<td>$103,424</td>
</tr>
<tr>
<td>Six Sigma Green Belt</td>
<td>$104,099</td>
</tr>
<tr>
<td>Certified Ethical Hacker (CEH)</td>
<td>$106,375</td>
</tr>
<tr>
<td>Certified ScrumMaster</td>
<td>$106,938</td>
</tr>
<tr>
<td>Certified Information Security Manager (CISM)</td>
<td>$108,043</td>
</tr>
<tr>
<td>Certified in Risk and Information Systems Control (CRISC)</td>
<td>$111,049</td>
</tr>
<tr>
<td>Certified Information Systems Security Professional (DISSP)</td>
<td>$111,475</td>
</tr>
<tr>
<td>AWS Certified Developer – Associate</td>
<td>$114,148</td>
</tr>
<tr>
<td>Project Management Professional (PMP)</td>
<td>$114,473</td>
</tr>
<tr>
<td>AWS Certified Solutions Architect – Associate</td>
<td>$121,292</td>
</tr>
<tr>
<td>Certified in the Governance of Enterprise IT (CGEIT)</td>
<td>$121,363</td>
</tr>
</tbody>
</table>

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