IMPACT REPORT
2024-2025

About NITIC

The National Information Technology Innovation Center (NITIC) is an NSF ATE National Center, funded by the National Science Foundation's Advanced Technological Education (ATE) program, which aims to strengthen the skills of technicians who work in high-tech, STEM fields that drive the U.S. economy.

As a national center, NITIC serves as a hub for innovation in IT technician education, supporting a collaborative community of educators, industry leaders, government agencies, and other IT stakeholders that are working together to prepare tomorrow's workforce for jobs in emerging technologies. Through initiatives like Working Connections, the IT Innovation Network, and the Innovation Clearinghouse, NITIC equips faculty with employer-aligned training, resources, and peer support.

Award Dates: 9/1/2023-8/31/2028
Total Award: $7,475,000

Working together
to prepare the
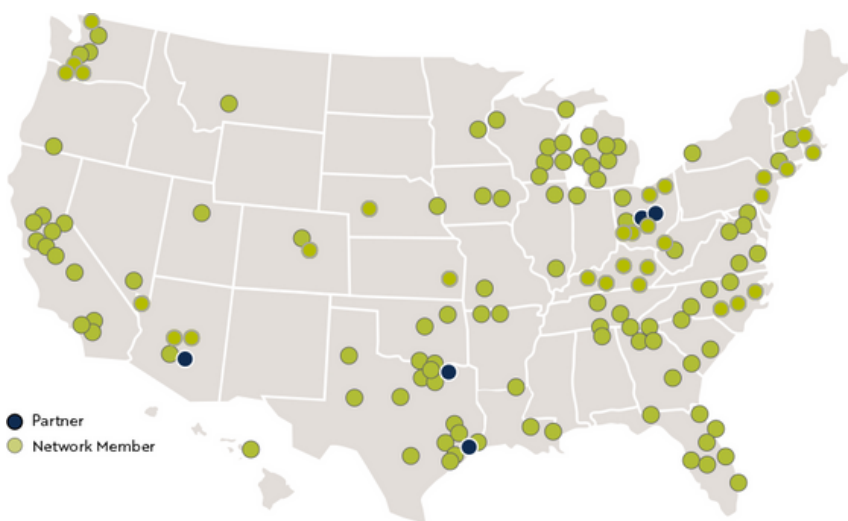IT professionals of tomorrow

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IT Innovation Network

Innovation Clearinghouse

Professional Development

Business Industry Leadership Teams

IT Innovation Network

- **135+ Colleges**
- **35+ States**
- **550+ IT Faculty Members**

Led by:

COLUMBUS STATE
COMMUNITY COLLEGE

Collin College (TX), Lone Star College (TX), Maricopa Community Colleges (AZ), and Sinclair College (OH)

Partner
Network Member

Key Activities:

- **Supports the IT Innovation Network (ITIN):** A national community of practice for IT faculty
- **Maintains the Innovation Clearinghouse:** A hub for IT curriculum and instructional materials
- **Delivers Working Connections:** Targeted professional development in emerging technologies
- **Convenes a National BILT:** Engages employers to align programs with current and anticipated workforce
- **Organizes Technology Teams:** Faculty groups tracking trends and advising on initiatives
- **Awards mini-grants for innovation:** Funds faculty-led projects that enhance developing IT education

IT Job Growth & Rapid Skill Change

6.7M new jobs by 2023; strong growth in AI, Cyber, and Data

32% of job skills changed in last 3 years

1 in 4 jobs saw 75% skill turnover

NITIC keeps educators aligned with industry

Source: U.S. Bureau of Labor Statistics and Lightcast

By the Numbers

9 Events

35 Tracks

711 Seats Filled

20,000+ Students Impacted

Instructor Bill Saicheck supports IT faculty member Mubarak Banisakher during a Promox VE course at Working Connections, hosted by Columbus State.

> ❝ **Every time, I revise my syllabi and labs with current technology content. It's an excellent opportunity for faculty to grow and network.** ❞
>
> - Dr. Homayoun Sharafi, Prince George's Community College

Professional Development

Working Connections
IT Faculty Development Institute

NITIC's Working Connections program expanded significantly in Year 2, offering seasonal, tuition-free professional development for IT faculty across the country. These sessions focused on high-demand technologies and directly impacted classroom instruction.

- 6 events with 424 seats filled across 21 tracks in Year 2
- Topics covered included **AI** (5 tracks), **Cloud** (3), **Data Analytics** (3), **Cybersecurity** (3), **Software Development** (2), **Containers** (2), **Proxmox VE**, **IoT & Automation**, and more
- 20,000+ students impacted by faculty attending and updating curriculum (based on longitudinal survey data)
- 91% average course completion rate; 25–30% of attendees were new
- 94% of attendees said the training was high quality
- 95% said they could apply the training in their classrooms
- Engagez platform launched for virtual PD
- Digital badges issued via Credly to recognize verified credentials
- Saturday workshops and Ohio in-person sessions launched expand access

Industry Alignment

NITIC's Business & Industry Leadership Teams (BILTs) ensure that curriculum and training align with real-world workforce needs. Through Mega BILTs and SME BILTs, employers help define job skills and trends in emerging technologies.

- 7 BILT meetings held: 3 Mega BILTs and 4 SME BILTs (AI, Software Dev, Infrastructure, Data Analytics)
- 88 BILT members representing 73 companies across 19 states
- 38% local, 28% regional, and 46% national company representation
- SIG session planned at HI-TEC to support local BILT implementation
- BILT toolkit and employer engagement materials updated

> " The consistent, continuous need for well-matched workers persists, underscoring the importance of technical schools and community colleges working hand-in-hand with industry. "
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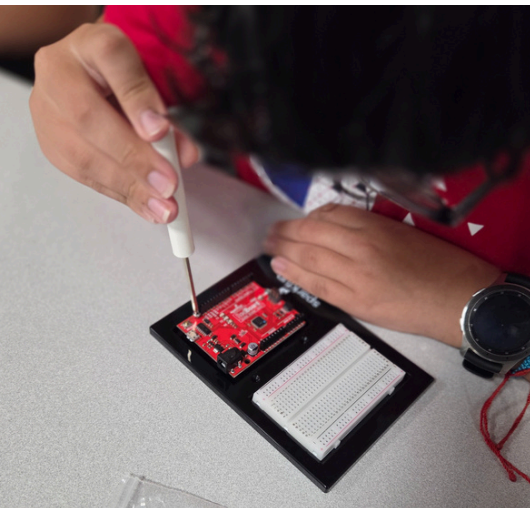> **- Kim Yohannan, MongoDB**

Community of Practice

The IT Innovation Network (ITIN) fosters collaboration and knowledge-sharing among IT faculty nationwide. Through webinars, surveys, and discussion threads, the network supports professional growth and innovation.

- 139 member institutions with 561 IT faculty and staff members
- 236 LinkedIn followers
- 7700+ website users with 55% counted as engaged
- 11 webinars with an average of 34 participants from 26 institutions
- Topics covered included AI, Cybersecurity, Containers, Quantum Computing, Operation Techology, Faculty Externships, Student Micro-Internships, and more
- Community Q&A series generated 70 responses across 7 threads
- Annual ITIN survey conducted to guide future planning

> " The AI-Powered Teaching Workshop changed my thinking by explaining how AI can be used as a 'Teaching Assistant' to improve efficiency. I found the idea to create a tutor bot for students invaluable and I've already begun outlining how I will implement an AI tutor into my classes. "
>
> - Andrea Schauer, Glendale Community College

Mini-Grant Funding

NITIC's mini-grant program supports faculty-led innovation in IT education. Projects span curriculum development, employer engagement, and integration of emerging technologies.

- 6 awards funded in Round 1, totaling $60K
- 18 applications received in Round 2, with plans to award $80-$100K
- Projects funded include AI for instructors and students, gamified learning, flipped classrooms, and more
- Follow-up meetings and reporting required for all awardees

Forsyth Community College student builds his future-ready tech skills with a Sparkfun Inventor's Kit.

Innovation Clearinghouse

The Clearinghouse serves as a central hub for IT curriculum resources, instructional materials, and trends analysis. Tech Teams are now contributing content aligned with emerging technologies and instructional needs.

- 39 curated resources published on AI, cybersecurity, data analytics, and more
- Expansion plan includes AI tools, podcasts, vendor trainings, and white papers
- Tech Teams launched to support content creation and review
- Clearinghouse promoted through all webinars and newsletters

National Conferences

NITIC actively shares its work at national conferences to broaden its impact and engage with the wider IT education community. Presentations highlight curriculum innovation, employer engagement, and instructional tools.

- 15+ national conferences attended by NITIC team members
- Innovation Demo and Spotlight Session at the ATE PI Conference 2024
- HI-TEC 2025 participation includes a pre-conference workshop, session presentation, a NITIC-hosted reception, and an exhibit booth
- Additional conferences include AACC, NCPN, League of Innovation, and the National Conference on AI
- Presentation topics included AI-infused curriculum, BILT model, and IT educator tools

Looking Ahead: 2025-2026 Initiatives

NITIC's Year 3 initiatives will deepen its impact through expanded programming, new resources, and enhanced employer engagement. The focus will remain on emerging technologies, inclusive excellence, and sustainable innovation.

- Launch of Tech Talks series led by Tech Teams
- Pilot faculty externships with emphasis on AI
- Expand BILT participation and integrate labor market data
- Add new Clearinghouse categories: cross-sector curriculum and IT/OT integration
- Plan Fall & Winter Working Connections
- Establish Working Connections Ambassadors to share course improvements
- Introduce new guidance program for schools planning to submit IT proposals

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