About the National Network

The National Network is a group of business and industry associations that work to bridge the skills gap by better connecting the worlds of learning and work. The National Network’s focus is on promoting competency-based hiring practices and encouraging learning institutions to teach the skills and competencies that workers need to succeed in today’s evolving economy. Learn more at NationalNetwork.org.

Common IT Employability Skills Model
A Solid Foundation
Common Employability Skills at Work

Employers in every sector are increasingly relying on foundational employability skills—like teamwork and problem solving—as indicators of future job success. These skills are gaining even more significance given the nature of today’s labor market; a typical “career” today is really the application of knowledge and skills across a diverse set of jobs in multiple sectors, rather than a linear path within one company or industry.

To help job seekers and educators understand and respond to these new skill demands reflected in workplaces today—no matter the job or industry—the National Network of Business and Industry Associations developed the Common IT Employability Skills. The framework articulates the fundamental skills that job candidates will need in the workplace, using a common vocabulary that employers across sectors are adopting into their recruitment and hiring processes.

The Common Employability Skills (http://bit.ly/1cy7D13) constitute an important first step in helping employers communicate to students, workers and learning providers about the skills they need, creating greater transparency in the transactional job market and stronger relevancy of education and training programs.

Understanding “Hybridization”

The Common IT Skills framework is a first step in helping workers and employers understand and prepare for a new era of “hybrid jobs.” These jobs, with titles such as “Digital Marketer” or “Data Analyst,” require IT skills applied to more traditional business and marketing roles, but do not necessarily require extensive technical training or a computer science degree. Burning Glass Technologies estimates (http://bit.ly/hybridjobs) that the demand for these hybrid technical jobs will only increase, with more than 250,000 job postings for open positions between April 1, 2014 and March 31, 2015.

Preparing Tomorrow’s Workforce Today

The National Network and CompTIA are working to increase access to the training and credentials that students and workers need to qualify for today’s jobs. For IT-related jobs in any industry, credentials like CompTIA’s A+ certification provide individuals with many of the common IT skills highlighted in the framework.

The A+ certification validates understanding of the most common hardware and software technologies in business and certifies the skills necessary to support complex IT infrastructures. It also includes many of the Common Employability Skills, which carry equal weight to technical skills for many employers looking to hire for IT roles.

# Common IT Employability Skills

These are skills listed in order of importance when hiring for IT positions:

## IT SUPPORT
1. Help desk
2. Hardware & Software Installation/Deployment
3. Troubleshooting & Repair
4. Incident Management
5. Maintenance
6. High Availability Design & Support
7. User training

## INFORMATION SECURITY
1. Cybersecurity
2. Firewalls
3. Risk Management
4. Encryption
5. Legal Compliance & Standards/Regulations
6. Penetration Testing/Auditing/Ethical Hacking
7. Policy Development & Implementation
8. Authentication/Biometrics

## PROGRAMMING, DEVELOPMENT, & ENGINEERING
1. Systems Analysis
2. Programming Language
3. Software Development Life Cycle
4. Interoperability of Systems
5. Performance Engineering
6. Web Design, Development & Management
7. Mobile Application, Developing & Management

## SOFTWARE TESTING & QUALITY ASSURANCE
1. Analyzing & Debugging Software
2. Usability Testing/Certification
3. Interface Design
4. Test Automation
5. Non-Functional Testing (Performance, Resilience, Availability, Disaster Recovery)

## INFRASTRUCTURE ADMINISTRATION
1. Network/Systems Architecture, Configuration & Management
2. Storage/Data Backup/Disaster Recovery
3. Hardware Devices/Platforms
4. Monitoring (Alerting, Early Detection)
5. Virtualization
6. Systems Analysis

## STRATEGIC PLANNING/BUSINESS MANAGEMENT
1. Business Analysis
2. Program & Project Management
3. Technology & Business/Industry Trends & Changes/Future of IT
4. Problem Solving
5. Business Process Design/Automation

## INFORMATION MANAGEMENT & ANALYTICS
1. Data Analysis/Business Intelligence
2. Big Data/Data Warehousing
3. Database Admin/Management
4. Server/Data Center Management
5. Data Mining
Mission Critical
The Importance Of IT Skills

As the infusion of technology and the global move toward digitalization impact all aspects of business, more and more companies across all sectors are realizing increased demand for Information Technology (IT) and are recruiting individuals with foundational IT skills. No longer do IT jobs just sit within IT companies: they are found across industries like front-line retail, manufacturing, financial services and healthcare.

According to a CompTIA study (http://bit.ly/ITAWT), 87 percent of surveyed businesses across a mix of industries expect IT to increase in importance over the next two years as a critical factor to their success.

In fact, 91 percent of surveyed hiring managers (http://bit.ly/CCITES) across sectors indicate some degree of gaps in IT skills between what their organization needs from new IT employees and the IT skills they possess.

Defining Common IT Employability Skills

In partnership with the National Network, the Creating IT Futures Foundation, the philanthropic arm of CompTIA, developed the Common IT Employability Skills framework, defines the most prominent and in-demand IT skills needed across technology-driven industries. By focusing on collective IT skills, the framework emphasizes what really matters in the job market. The framework also provides the education community with the intelligence that educators need to equip students and workers with IT skills that are applicable across multiple industries and business environments.

The Common IT Employability Skills framework includes entry, intermediate and advanced level Information Technology skills, with a focus on the advanced level skills that cut across many high-growth industry sectors like Finance, Energy, Insurance, Healthcare and Advanced Manufacturing.