

Cybersecurity Business Industry Leadership Team (BILT)

NSF ATE NSF ATE IT Work Study Flexible Apprenticeship Model (ITFA)

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Contents

Cyber BILT Recruitment Flyer

Cyber BILT Overview & KSA Meeting Presentation



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Columbus State's Cybersecurity BILT

DEVELOP YOUR WORKFORCE

Get ahead of the hiring curve by helping to shape the degree program producing job candidates for your industry. Columbus State Community College is piloting the Business & Industry Leadership Team (BILT) model for the Information Systems Technology Cybersecurity program of study.

The BILT model positions businesses in a co-leadership role for college technical programs so they have direct input into the knowledge, skills, and abilities (KSAs) that program graduates should possess 12-36 months into the future. This BILT will focus on a single program rather than all the programs in the division, and BILT members serve as Subject Matter Experts (SMEs).

The BILT model is nationally recognized for its effectiveness in connecting community colleges with business leaders. It originated at the National Science Foundation (NSF) Convergence Technology Center (CTC) based at Collin College. The NSF CTC finds that engaging businesses and industry to actively co-lead, rather than just advise, a program's focus and curriculum produces positive results for students and employers. The goal is for the program to produce candidates businesses are much more likely to hire.

Please contact Geoff Bauer at gbauer1@cscc.edu.

BILT members must be cybersecurity SMEs. Examples include:

- High-level technical executives (strategists) who are responsible for evaluating future technologies for their companies so that they can help the college anticipate changes
- First-line hiring managers who are aware of the current and future KSAs they need their employees to have as well as the challenges they face
- Technicians currently holding a cybersecurity position

In an engaged BILT, members:

- Participate in a forum to share trends with other business leaders in a neutral, non-proprietary environment
- Influence the creation of a pipeline of skilled future job candidates
- Develop relations with colleges preparing those future employees
- Generate goodwill and positive press as the company demonstrates its commitment to workforce needs

BILT members meet:

- 3-4 times per year (not more than 7-8 total hours)
- One longer meeting is dedicated to the KSA evaluation process; typically lasts 2.5-3 hours
- The remaining meetings focus on business feedback and discussion of industry trends (typically lasts 60-90 minutes)

www.cscc.edu



Columbus State Community College Cybersecurity August 11, 2021

AGENDA

WELCOME

Dr. Gloria Regier Dean of ???

Faculty and Staff

List Gloria, Larry, you and anyone else who should be called out – with their title

Ann Beheler, PhD Inventor of BILT, Mentor, PI for National CTC

INTRODUCTIONS



BILT Process Overview

BILT Process originated with a National Science Foundation Center of Excellence in Convergence Technology (CTC) based at Collin College, Frisco, TX (2012-2022)

The CTC works with a wide range of business leaders from across the nation to determine the Knowledge, Skills, and Abilities they want "workforce ready" graduates to possess for the future

MAJOR GOAL FOR ALL HIGHER EDUCATION PROGRAMS and EMPLOYERS



STUDENTS complete certificates and degrees and are well-qualified for ready employment or transfer

MM

EMPLOYERS are highly engaged and want to hire students



Implementing the Business & Industry Leadership Team (BILT) Process helps to meet both goals, and it's proven effective.

ESSENTIAL ELEMENTS OF THE BILT PROCESS

Businesses must co-lead programs typically via quarterly meetings

- **Prioritize Knowledge, Skills and Abilities (**KSAs) they want graduates to have 12-36 months into the future using a structured, repeatable voting process
- Predict Labor Market Demand
- Predict **trends**

Faculty must

- Cross reference KSAs to existing curriculum
- Update curriculum to address KSAs needed by businesses
- Provide businesses with **feedback** regarding implementation



ESSENTIAL ELEMENT CO-LEADERSHIP

Employers report they are more likely to hire graduates from programs for which they have curricular leadership responsibility

Employers report they will assume this role (and more) if

Their time is respected

There is a method for ensuring that their input is consistently and seriously considered by the faculty members

They consistently receive feedback on their recommendations

Employer Co-Leadership



Begins with a list of **pro forma Knowledge, Skills, and Personal Skills/Abilities (KSAs)** with a futurefocus



Employers prioritize KSAs and discuss the results as a group (via electronic voting)



May **add, change, or delete an item** during discussion



Meant to help faculty align curriculum based on what knowledge, skills, and abilities businesses predict they want in those they want to hire 12-36 months into the future

ROLES

Industry Subject Matter Experts

• Participate in validation ratings and discussion

Faculty Subject Matter Experts

• Attend as *active observers/questioners*

Facilitator

Process expert responsible for efficiency & effectiveness of meeting

Recorder (Zoom in this case)

 Records and transcribes discussion for later analysis

GROUND RULES

Recognize that SMEs come from variety of business environments, but please speak up!

Respect differing opinions

3

Participate fully in:

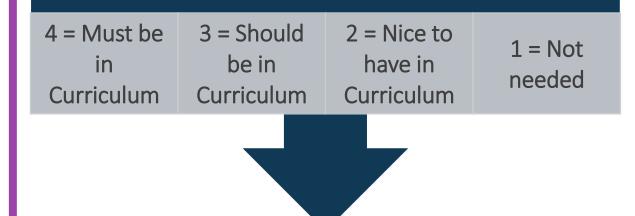
- Validation ratings through online form
- Discussion your input is VERY IMPORTANT

Skills Validation Process

Rating Determination should consider

- Importance
- Level of proficiency
- Time spent doing the skill
- Difficulty how difficult is the skill to learn?

Employers Rank Skills from 4 to 1, with



These are skills you are looking for in an **entry level employee** coming out of the college's program.

Validation Process



Please rate each skill (skip those you do not feel qualified to rate, if any)



The **votes and the average rating** for each skill will automatically be entered into a spreadsheet that becomes the basis for discussion



Discussion of items is useful when faculty later determine how the skill/knowledge will be addressed in a course

KSA Voting

Link for Voting is in "Chat"

Next Steps: Completing The Validation Process

Faculty will determine cut-off level for which items go into curriculum – Typically, those with an average of **3.0 or above**

Faculty will "map" the skills identified at this meeting to existing course

Gaps will be identified, and a curriculum strategy established incorporating your input into the Cybersecurity program

BILT Members will reconvene for a short meeting in September to review results

THANK YOU!

Thank You!

