

Working Connections

IT Faculty Development Institute

July 15-19, 2024



Cybersecurity Institute
and
Technology Incubator

**FORT HAYS STATE
UNIVERSITY**

Department of Informatics



Department of Informatics

At a Glance:

- 7 undergraduate majors, including: Computer Networking, Web and Mobile App Development, Information Systems, Health Informatics, and Cybersecurity
- 3 minors
- 7 certificate programs, including Applied Data Analytics
- 8 graduate programs
- 14 fulltime faculty
- 437 undergraduate students
- 60 graduate students
- International partnerships



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Academic Program Partners

EC-COUNCIL | ACADEMIA
PARTNER



Where Practice Leads to Success

paloalto
NETWORKS

**Cybersecurity
Academy**

vmware

**IT Academy
Program**

aws academy

cisco

**Networking
Academy**

Beyond the Classroom

OUTREACH

STUDENT ENGAGEMENT

EXPERIENCE

COMMUNITY IMPACT



Center for Academic Excellence in Cyber Defense



- First KBOR institution to earn National Security Agency CAE designation in 2009
- Information Enterprise Institute
- Redesignated in 2015 and in 2022



“Kansas’ *strong talent pipeline and growing computer services industries* will help support and sustain digitally-enabled business processes, automation and business tourism in the state.”

At FHSU We Are Building Kansas’
Computing Talent Pipelines!



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Small Business Security: Economic Risk

- Studies cite 45-60% of all data breaches involve small and medium-sized businesses
- 61% of all small to medium businesses have reported at least one cyber attack during the previous year
- 83% of small and medium businesses are not financially prepared to recover from a cyber attack
- 91 % of small businesses haven't purchased cyber liability insurance.



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Small Business Security: Economic Risk

- 14 % of small businesses consider their cyber attack and risk mitigation ability as highly effective
- 43% of small to medium businesses do not have any cybersecurity plan in place
- 54% of small to medium businesses do not have any IT security experts in-house

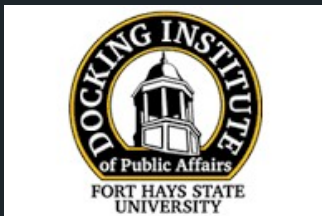
Source: <https://cybersecurity-magazine.com/10-small-business-cyber-security-statistics-that-you-should-know-and-how-to-improve-them/>



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Understanding the Issues and Identifying Additional Opportunity for the Incubator Project

- Partnership with Docking Institute to study state of cybersecurity among small and medium business across Kansas.
- Work with external partnerships, including but not limited to the SBDC to distribute survey
- Evaluate results and consider opportunities, align incubator mission



Growing Success- FHSU Tech Incubator Project

Two Tier Concept:

Tier 1 - assessing and addressing underserved small business security vulnerabilities through microinternships and students

Tier 2 – development of security and tech ventures that can be developed into viable businesses with support and expertise

Direct and Indirect Economic Impact



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Growing Success- FHSU Tech Incubator Project

Tier 1

- Leverage the Kansas Small Business Development Center and support expansion of cybersecurity evaluation processes deployed by the SBDC statewide
- Receive referrals and deploy students based on cybersecurity project scope/business need
 - Microinternships
 - Long term internships
 - Faculty/student collaboration on larger scale consulting projects
 - Expanding existing outreach and improving security posture of Kansas small business



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Growing Success- FHSU Tech Incubator Project

Tier 2

- Cybersecurity Business Incubator
 - Faculty mentorship, consulting specialization
 - Tailored to business need and target market
 - Support for operational structure development, marketing plans, business analysis
 - Guidance for intellectual property considerations
 - Business launch
 - Job creation



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Original Implementation Plan

2022

2023

June-July

August – December

January

February -April

May-August

August

Refine and Finalize

- Develop plans for space
- Develop position description for Director
- Develop Microinternship Services

Tier 1 Development

- Form committee and launch search for and hire director
- Develop marketing materials
- Collaborate with internal and external partners
- Begin recruiting businesses for pilot microinternship cohort

Tier 1 Launch

- Deploy students for small business security-focused microinternships
- Finalize position descriptions in conjunction with Director hire
- Search for remaining professional positions

Tier 2 Development

- Develop processes, policy, and eligibility guidelines for incubator services
- Develop "Entrepreneur in Residence" program
- Develop capital investment processes and policy

Tier 2 Implementation

- Market for, screen, select incubator ventures
- Review first semester cycle of Tier 1 operations
- Onboard Incubator Consultant support

Tier 2 Launch

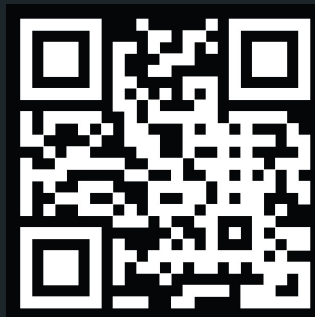
- Assess venture development needs
- Create incubator plans for 1-2 ventures in residence
- Establish incubator support team and consultation



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MICRO-INTERNSHIP OPPORTUNITIES

Leveraging student and faculty expertise to improve the cybersecurity posture for small and medium-sized businesses through student micro-internships, capstone projects, and faculty consulting. The innovation center will be positioned to help collaborate students and faculty with communities in a supportive, strategically developmental environment.



SERVICES PROVIDED

Website Development

Basic Network Set-Up

Advanced Network Set-Up

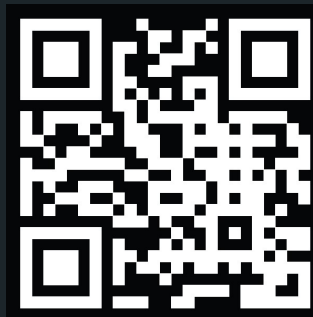
Website Security Evaluation

Security Vulnerability Report

Basic Cybersecurity Set-Up

Extended Vulnerability
Remediation

Security Assessment





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Thank
You!

HOW TO REACH US

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