# Dakota Digital Academy Overview

- **Coordinate**, **expand** and **enhance** educational opportunities in computing and cyber sciences in North Dakota and the upper Midwest

- **Collaborate** by **leveraging resources** of all 11 NDUS institutions to prepare future workforce and create new economic growth sectors for North Dakota

# Trending Workforce Requirements

- IT/Digitization/data/Cyber <u>touches every area of society</u>

- Forbes estimates **one million new jobs** for cybersecurity professionals in the United States

- Higher education needs to address this massive workforce shortage

# Trending Workforce Requirements

## Job Postings*
### Last 12 Months

Average Demand

**12,735**

## Projected Growth*
### 10 Years

**+37.4%**

*Courtesy Burning Glass Technologies

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# Trending Workforce Requirements

## Top Requested Occupations*

| |
|---|
| Software Developer / Engineer |
| Senior Software Developer / Engineer |
| Network Engineer / Architect |
| Sales Representative |
| Production Worker |
| Systems Engineer |
| Software QA Engineer / Tester |
| Java Developer / Engineer |
| Attorney |
| Business / Systems Analyst |

## Top Requested Specialized Skills*

| |
|---|
| Project Management |
| Customer Service |
| Sales |
| SQL |
| Software Development |
| Java |
| Scheduling |
| Budgeting |
| Customer Contact |
| Product Development |

*Courtesy Burning Glass Technologies

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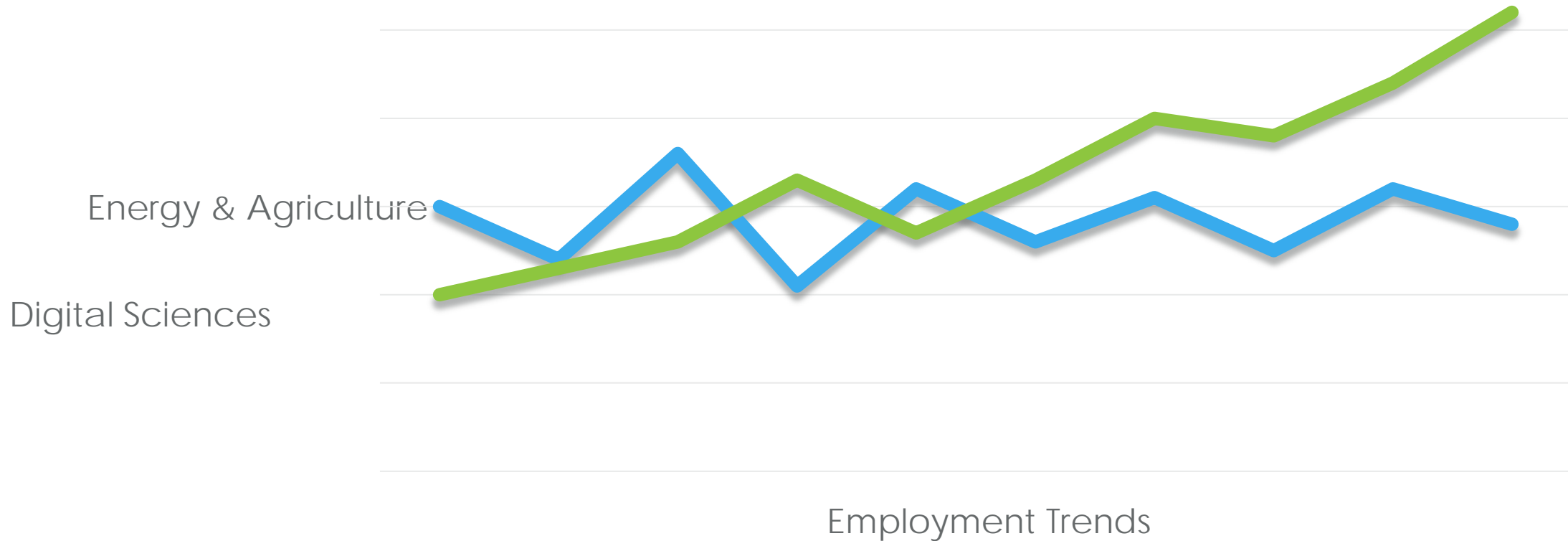# Comprehensive Online & Geographic Coverage

# DDA Current State

- ☐ Director hired
- ☐ Web portal in development
- ☐ Additional courses and certificates fast-tracked
- ☐ Humanities and social sciences engaged

# DDA Future State

## Diversified economy has advantages



Energy & Agriculture

Digital Sciences

Employment Trends

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# Vision: Innovation

- College courses anytime, anywhere: synchronous and asynchronous
- Combine courses from all North Dakota Colleges and Universities to meet educational goals
- All content delivered through the existing NDUS-wide Blackboard platform for a seamless experience
- Programs tailored to provide skills identified as valued by employers
- Programs can be completed at a single campus or by taking courses from multiple participating campuses

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# Vision: Collaboration

- The Dakota Digital Academy connects and acts as a resource for campuses

- Continued institutional autonomy in the courses and programs offered creates diverse offerings

- Courses developed at one institution can be leveraged across the system using existing protocols

- Incentives for faculty collaboration

- Shared collaboration virtual spaces

# Vision: Social, Ethical, and Policy

- Cyber technologies penetrating into personal, family, professional and social lives
- Students can choose courses in the social, ethical and policy implications
- Public talks and forums will focus on these implications
- Dakota Digital Review will cover the cyber sciences as well as related legal, political, regulatory, social and ethical issues, and digitization's impact on the arts
  - Written and edited to serve the public beyond the campus
  - Designed to elevate discussions and debates about digitization, facilitating far better preparation of government and business and of voters to make crucial decisions about our future

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# Vision: Supporting Higher Ed

- The Dakota Digital Academy will support NDUS institutions with funding, technology, coordination and other resources
- The Dakota Digital Academy will help coordinate between institutions that want to make their courses available via other NDUS institutions
- Employer contact and workforce needs assessment
- Outreach and other support
- Multiple and flexible entry points to support students at varied levels of readiness
- Stackable credentials to provide opportunities for students to reach higher and higher education levels

# Potential DDA Outcomes

- Establish ND as a major destination for research and education
- Safeguard lead roles in Precision Ag, Energy, UAS, and Rural Healthcare
- Economic growth potential

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# For More Information

Visit **dda.ndus.edu/**