



DAKOTA DIGITAL ACADEMY

NORTH DAKOTA UNIVERSITY SYSTEM

DDA STATUS REPORT 2021-2023

“The mission of the DDA is to provide access to digital-cyber oriented education, training, certificates, and knowledge produced by the collaborative North Dakota University System of eleven campuses, in partnership with select business and corporate partners.”

— Mark Hagerott, Chancellor, North Dakota University System

In 2021, the NDUS Dakota Digital Academy (DDA) was created to

- Coordinate, expand, and enhance educational opportunities in computing and cyber sciences in North Dakota and the upper Midwest,
- Serve as a collaborative tool through the leveraging of resources of eleven NDUS institutions for the preparation of a future workforce, and
- Support new economic growth sectors for North Dakota.

DDA Key Vision Accomplishments:

INNOVATION

Objectives:

- College courses anytime, anywhere
- Diverse Course Offerings
- Certifications, degrees, programs, and courses tailored to provide needed and valued skills requested by employers

Accomplishments:

- Sixty-nine (69) cyber science programs are currently offered among the institutions with more being added next year. See dda.ndus.edu/offerings/degree.
- Beginning in the summer of 2022, fifteen online cyber science courses for the pursuance of a certificate or degree were offered by six institutions. See <https://dda.ndus.edu/offerings/spring-2023-courses/> for more information. The certificates and stackable credentials help students enhance and further their skillsets and learning outcomes. Examples of certificates include cybersecurity and software development.
- Institutions such as UND are offering degrees in cyber psychology.

COLLABORATION

Objectives:

- Serve as a “go-to” resource for campuses
- Leverage a cross platform of programs and courses across all institutions
- Faculty incentives
- Shared virtual spaces
- Partner with industry and business to determine needed skill sets for emerging technologies, i.e., autonomous, unmanned aerial systems, artificial intelligence, etc.

Accomplishments:

- The Campus Coordinators consisting of members from each institution meet quarterly to discuss workforce needs, degree, certificate, and course development for emerging and bleeding edge technologies.
- Present and future course offerings must be available online and available to students enrolled at other NDUS institutions. Institutions not offering the course accept the course and count it towards the students’ graduate requirements.
- The DDA offers grants to NDUS faculty to create online courses in cyber technology. Fifteen grants of \$5,000 are awarded per each round. In the last three rounds of grant offerings, 46 grants were awarded.
- Blackboard, the NDUS content learning management system, serves as the virtual shared space for course offerings.
- Meet and engage with various industry and business partners such as TechND, the Northern Information Technology Council, the ND Legislative Workforce Committee, and the newly formed ND Legislative AI committee.

- The DDA Workforce Advisory Committee met quarterly to discuss needed skillsets for upcoming graduates entering the workforce, guide faculty on course development that included those needed skillsets. In June of 2023, The DDA Workforce Advisory Committee merged with the TechND Workforce Advisory Committee (WAC). This partnership and collaboration create a strong collaboration and partnership between the institutions and ND industry and business. NDUS members currently serve on two subcommittees, Emerging Technologies, and ND Workforce Needs.
- DDA participates and sits in on legislative committee meetings regarding workforce needs and artificial intelligence.

SOCIAL, ETHICAL & POLICY IMPLICATIONS

Objectives:

- Provide information and resources regarding the implications new and emerging technologies have on personal, family, professional, and social lives
- Offer courses with a focus on these implications to students

Accomplishments:

- Provide input and suggestions to the ND legislative Work Force and AI committees.
- Host monthly Dakota Digital Discussions to cover such topics along with new and emerging technologies. As of December 2023, the DDA hosted 15 online discussions and presentations. A list of the presentations along with the recorded versions can be found here: dda.ndus.edu/ddd-overview/
- The DDA published six issues of the 'Dakota Digital Review.' The magazine is in online and paper format and covers a variety of topics such as cyber security, AI, big tech, Ag, ethical issues, and digitization. See dda.ndus.edu/ddreview/ for the current and past issues.

OUTREACH

Objectives:

- Provide information and resources to North Dakota citizens and communities

Accomplishments:

- In June 2023, the DDA partnered with the NDSU Extension Service, the South Dakota

Extension and AARP to present an online seminar, "The Power of Prevention: How to Safeguard Yourself Against Cybercrime." This was well-attended with close to 140 on-line participants across the state and within South Dakota.

- In partnership with the NDSU Extension, a cybersecurity and digital literacy course was developed for K-12. NDSU In August 2023, the Extension distributed course materials to county extension agents and provided training to tribal schools.

The projects developed and implemented, and the work done by the DDA help to:



- Establish North Dakota as a major destination for students, faculty, and researchers.
- Safeguard where North Dakota has lead roles in precision agriculture, energy, unmanned aerial systems, and rural healthcare.
- Provide potential economic growth opportunities.

Looking ahead, the DDA is working towards:



- A robust program where the students, at anytime and anywhere, can enroll and participate in an online course from any NDUS institution.
- An online course in cybersecurity and digital literacy what will be a requirement for all students.
- Serving as an effective resource when working and partnering with business and industry.



DAKOTA DIGITAL ACADEMY
NORTH DAKOTA UNIVERSITY SYSTEM