

# **COLLEGE OF INFORMATION SCIENCE & TECHNOLOGY**

## **STRATEGIC PLAN**

**2021-2024**

## **IS&T Mission**

As both college of distinction and a Carnegie Doctoral Research institution, we transform and improve the quality of life locally, nationally, and globally.

## **IS&T Vision**

The College of IS&T is the leading regional provider of workforce development and applied academic research in information technology.

## **IS&T Values**

### ***Create community***

We are committed to bringing our community together for collaboration, learning, and support of each other. Each faculty, staff, and student understands how our work connects to others and how our contributions and actions matter to build a thriving College and a place where everybody feels welcomed and valued.

### ***Inspire diverse voices***

We listen with respect and actively encourage and support everyone's contributions. Richness in the diversity of our backgrounds and experiences leads to innovation and positive institutional change. We recognize that the strongest communities empower all members, not just the majority.

### ***Shape the future***

We focus our energy on solving significant problems affecting our local, regional, and global communities. We strive to amplify the impact of our research through the intelligent and innovative use of technology.

### ***Teach leadership***

Leadership entails having individuals able to motivate and direct others to work together to achieve a common goal. We design learning experiences where students have opportunities to build relationships and gain leadership skills, which can help them grow and succeed as individuals and as citizens who can make positive changes through technology.

## AREA 1: EXPAND ACCESS

*IS&T recognizes the importance of expanding access to higher education for all individuals, regardless of socioeconomic status, race, ethnicity, gender, or geographic location. As such, we are committed to a comprehensive strategy to increase access to our college for qualified students from underrepresented communities and low-income families. By focusing on these strategic goals, we aim to create a more diverse and inclusive student body that reflects the broader community and provides opportunities for all individuals to achieve their academic and career goals. Furthermore, we believe that expanding access to higher education is a social responsibility and an essential step toward building a more equitable and just society.*

To achieve this, we will focus on several strategic goals and initiatives, including:

***Strategic Goal 1 - Increase enrollment through expanded and concerted outreach and recruiting:*** We will increase our efforts to reach out to high schools and community colleges in underserved areas and engage with students, parents, and educators to promote the value of higher education and our college's unique offerings.

***Strategic Goal 4 - Increase student retention and career readiness via improved academic support:*** We will enhance academic support services to help students succeed academically and provide mentoring programs, tutoring, and other resources to support their academic and personal growth.

***Initiative 1 - Learn and Earn:*** We believe that a college education should prepare students academically and equip them with the practical skills and experiences necessary to succeed in their chosen fields. Therefore, we will offer multiple service-learning courses to empower our students to explore their interests and engage in meaningful research and community service. In addition, we will work to provide paid internships to all students that desire them.

***Initiative 2 – Increase Scholarships:*** We will develop and expand financial aid programs to support students from low-income families and ensure that financial barriers do not prevent them from pursuing their education. We will also seek to identify and secure external funding sources to support these programs. For example, the college has developed new scholarships like OASIS, and we envision an IS&T community that supports affordable education. In addition, we are engaging in fundraising to bring resources that make IS&T accessible to all.

***Initiative 3 - The Student Hub:*** Through "The Hub," we want to provide students with comprehensive support. Through our commitment to student success, we aim to offer a wide range of support services that address the diverse needs of our students. From academic advising and tutoring to mental health counseling and career services, we strive to create a holistic approach to student support that recognizes the interconnectedness of academic, personal, and professional development.

## AREA 2: INCREASE RESEARCH IMPACT

*IS&T's research is critical in driving regional innovation and addressing societal challenges. We aim to become the premier regional leader in applied research in technology. As such, we are committed to increasing the impact of our research in the academic and broader communities. Through these strategic goals and initiatives, we will enhance the impact of our research and position IS&T as a leader in addressing Omaha's and the world's most pressing challenges. Therefore, we will focus on the following strategic goals and initiatives:*

**Strategic Goal 2 – Increasing research output and enhancing research excellence:** We will prioritize obtaining extramural funding and supporting high-quality research that aligns with our mission and vision. This will include investing in state-of-the-art facilities and equipment and promoting interdisciplinary collaborations to foster innovation.

**Initiative 4 – Collaboratoria Development:** We will align researchers across departments to create interdisciplinary teams within and outside UNO. We will forge strategic partnerships with industry, government, and non-profit organizations to ensure our research has a real-world impact. These partnerships will enable us to co-create knowledge, share resources, and leverage expertise to develop solutions that benefit society. We seek opportunities to be a positive transformative force, forging strong partnerships with industry leaders. Focusing relentlessly on delivering practical, impactful solutions, we aim to transform the world of technology and empower individuals and organizations to achieve their full potential.

**Initiative 5 – PKI Building Expansion:** The expanded facility will continue to house the Colleges of Information Science and Technology and Engineering programs. A learning and event center will house standard and reconfigurable classrooms, an auditorium, and an event space. These will be supported by pre-function, study, eating, and lounge spaces. Classroom and individual study labs will support specialized learning and independent study requiring special or dedicated equipment. New and existing research labs for IS&T will be organized into Collaboratoria, facilitating researcher collaboration and community engagement. A new Student Services Hub will combine IS&T and COE tutoring, counseling, advising, and study areas in one central location. New and existing faculty work areas will be configured to improve approachability for students. They will include support spaces to encourage collaboration, such as eating areas, meeting rooms, and open collaboration lounges. Outdoor spaces will be refined to accommodate work, study, and play environments while improving circulation and safety.

### AREA 3: ADVANCE EXCEPTIONAL EDUCATION

*We are committed to advancing exceptional education for all students. We will foster a culture of excellence in teaching and learning that supports student success, engages students in active learning, and provides opportunities to develop critical thinking, problem-solving, and communication skills. We will have an innovative curriculum and a supportive learning environment that fosters student engagement and success. We will provide opportunities for faculty and students to collaborate on research projects, disseminate research findings, and engage in scholarly activities that promote innovation and excellence in education.*

**Strategic Goal 3 – Develop world-class teaching and a forward-looking curriculum:** We will establish strong partnerships with local communities, educational organizations, and other stakeholders to promote excellence and improve student learning outcomes. We will collaborate with these stakeholders to identify and address community needs, provide opportunities for students to engage in applied learning and other community-based activities, and promote a culture of engagement.

**Initiative 6 – Faculty Mentoring Program:** We will enhance our mentoring program to provide guidance and support to junior faculty members as they navigate the complexities of IS&T. The more robust program will provide clearer expectations so that mentors and mentees will clearly understand what is expected of them in the mentoring relationship. Our emphasis will be on a personalized approach tailored to the needs and goals of the individual mentee. Mentors will take the time to get to know their mentees and understand their unique strengths, challenges, and career aspirations.

**Initiative 7 – Advisory Board Curriculum Reviews:** We regularly engage our external advisory board members to review and evaluate our curriculum to ensure it is relevant and current with market needs. The advisory board members have a strong understanding of the current trends and developments in the Omaha market and the skills and competencies that are in demand. As a result, we are providing the board with relevant information about the program, including course descriptions, syllabi, learning objectives, and assessment methods. In addition, we are creating an assessment method for members to rate the relevance and capture recommendations for improving our programs. These recommendations may include changes to the curriculum, course content, assessment methods, or learning outcomes.

## **AREA 4: FOSTER STUDENT WELL-BEING**

*In IS&T, student well-being is critical to academic success and personal growth. As such, we are committed to fostering a culture of well-being that supports our students' mental, physical, and emotional health. Our approach includes multifaceted efforts that incorporate a range of initiatives, programs, and services to promote academic well-being. We will strive to create an environment where students feel valued, supported, and empowered to take ownership of their careers.*

**Strategic Goal 4 - Increase student retention and career readiness via improved academic support:** We will enhance academic support services to help students succeed academically and provide mentoring programs, tutoring, and other resources to support their academic and personal growth.

**Initiative 8 – Early Intervention, Degree Tipping Points, and Retention Plans:** We will prioritize early intervention by providing accessible, timely, and effective support to struggling students. This includes training peer advisors, performing a 360-degree review of student success policies and procedures, and developing a semester communication plan to ensure coordinated, timely alerts and updates to students. Similarly, we will incorporate Advising as Instruction into the 1st year Career readiness seminars. Finally, we will work to identify progress toward *degree tipping points*. This will allow IS&T advisors and programs to provide critical support to students at crucial junctions. Additionally, we are developing a retention plan for diverse student populations.

**Initiative 9 – Sustainability and Measurement of the Computer Science Learning Center:** We continue to prioritize the development of infrastructure that supports student well-being (see "The Hub"). We are working to provide a sustainable funding model for the CSLC and looking to create metrics and benchmarks to evaluate its use, value, and productivity.

## AREA 5: CREATE A COLLABORATIVE, SUPPORTIVE CULTURE WITH AMAZING FACILITIES

*Establishing a culture of community and collaboration is crucial for any organization that aims to succeed in the long term. We are working to build a strong sense of community and engagement among students, faculty, staff, and alumni. We are working to create opportunities that allow students, faculty, staff, and alumni to connect and build relationships.*

**Strategic Goal 5 - Establish a culture of community and collaboration:** Our first step in establishing a culture of community and collaboration was to define the vision and values of IS&T. We now have a clear statement of what we want to achieve and what we stand for. We are currently working to communicate them effectively to everyone. We are also working to create a supportive environment that promotes open communication.

**Strategic Goal 6 - Increase staff satisfaction:** Staff members are vital to the college's mission and success. Therefore, the goal is to increase the number of professional development opportunities available to staff, such as training programs, conferences, and workshops. Similarly, we will create professional development plans that help them mature in their careers.

**Initiative 10 – Celebratory and IS&T Social Events:** We are providing opportunities for team-building activities and social events. These include celebrations (promotion, end of the year, etc.), getting-to-know-you flash talks at all-college meetings, the IS&T Olympics, winter dinner, etc. In addition, we plan to hold at least four larger, planned social events per year.

**Initiative 11 – Staff Professional Development:** We will offer professional development opportunities for IS&T staff. Professional development opportunities are critical to job satisfaction and can help staff members acquire new skills, advance their careers, and stay engaged and motivated. This might include workshops, conferences, and other training programs. We will also work to foster a culture of continuous learning by encouraging staff to share their knowledge and expertise through informal mentoring, peer-to-peer learning, and knowledge-sharing initiatives. Finally, we are creating professional development plans that align the goals and objectives of the college with the needs and goals of the staff.

**Initiative 12 – Climate Survey:** Our first step will be to assess the current state of the college community. This will include a climate survey for the staff, another for the faculty, and finally, one for students. The assessment will identify strengths, weaknesses, opportunities, and threats to college community-building efforts and provide a benchmark of the college's environment.

# METRICS





## STRATEGIC OBJECTIVE: Increase Enrollment Through Expanded and Concerted Recruiting

Number	Strategic Activity
<b>R-1</b>	<b>Increase Recruiting Personnel</b>
<i>R-1.1</i>	<i>Hire a full-time recruiter</i>
<i>R-1.2</i>	<i>Student Support for Communications and Recruitment</i>
<b>R-2</b>	<b>Expand Community College and Other University Pipelines</b>
<i>R-2.1</i>	<i>Identify and minimize barriers to transfer credits</i>
<i>R-2.2</i>	<i>Strengthen articulation agreements with community colleges (Create IS&amp;T Pipelines)</i>
R-2.2.1	Metropolitan Community College (~15,000 students)
R-2.2.2	Northeast Community College (~5,000 students)
R-2.2.3	Iowa Western Community College (~5,000 students)
R-2.2.4	Southeast Community College (~9,000 students)
R-2.2.5	Central Community College (~6,000 students)
R-2.2.6	Western Nebraska College (~1,800 students)
R-2.2.7	Mid Plains Community College (~2,200 students)
R-2.2.8	Nebraska College of Technical Agriculture (~300 students)
R-2.2.9	Nebraska Indian Community College (~200 students)
<i>R-2.3</i>	<i>Partner with Community College Faculty who advise students</i>
R-2.3.1	Metropolitan Community College (~15,000 students)
R-2.3.2	Northeast Community College (~5,000 students)
R-2.3.3	Iowa Western Community College (~5,000 students)
R-2.3.4	Southeast Community College (~9,000 students)
R-2.3.5	Central Community College (~6,000 students)
R-2.3.6	Western Nebraska College (~1,800 students)
R-2.3.7	Mid Plains Community College (~2,200 students)
R-2.3.8	Nebraska College of Technical Agriculture (~300 students)
R-2.3.9	Nebraska Indian Community College (~200 students)
<i>R-2.4</i>	<i>Build relationships with regional Colleges to attract graduate students</i>
<i>R-2.5</i>	<i>Hire or designate a "Bridge" Advisor for Community Colleges</i>
<b>R-3</b>	<b>Improve High School Presence and Counselor Understanding</b>
<i>R-3.1</i>	<i>Host High School Counselor Conference and Appreciation Day</i>
<i>R-3.2</i>	<i>Visit High Schools and Counselors to Develop Partnerships</i>
R-3.2.1	Develop plan for visits and presentations



<b>R-4</b>	<b>Expand Recruiting Footprint</b>
<b>R-4.1</b>	<b><i>Develop recruitment communication plan</i></b>
R-4.1.1	Survey first-year students to determine effectiveness of K-12 programs
R-4.2.1	Develop clear career outcomes from the different degrees
<b>R-4.2</b>	<b><i>Expand recruiting footprint into large metro areas</i></b>
R-4.2.1	Work to get in-state tuition for neighboring metro areas
R-4.2.2	Kansas City High Schools Counselor Event
R-4.2.3	Des Moines High Schools Counselor Event
R-4.2.4	Minneapolis High Schools Counselor Event
R-4.2.5	Denver High Schools Counselor Event
R-4.2.6	Chicago High Schools Counselor Event
<b>R-4.3</b>	<b><i>Establish partnerships for International Students to come to UNO</i></b>
<b>R-5</b>	<b>Increase Scholarships and Reach</b>
<b>R-5.1</b>	<b><i>Explore Omaha company employees' benefit to pay for children at UNO</i></b>
<b>R-5.2</b>	<b><i>Explore and Expand Relationship with Division of Continuing Studies</i></b>
<b>R-5.3</b>	<b><i>Develop Plan to Capitalize on Career Currency Program</i></b>
<b>R-6</b>	<b>Broaden Computing and Reaching Underrepresented Populations</b>
<b>R-6.1</b>	<b><i>Identify notable Latinos in IT</i></b>
<b>R-6.2</b>	<b><i>Grant resources to support the BPC plan (see C-2.2)</i></b>





## STRATEGIC OBJECTIVE: Increase Research Capacity and Activity

Number	Strategic Activity
<b>RS-1</b>	<b>Improve Lab Space and Infrastructure</b>
<i>RS-1.1</i>	<i>Grow available physical research space (see C-3)</i>
<i>RS-1.2</i>	<i>Evaluate and realign research space in PKI</i>
<b>RS-2</b>	<b>Increase Grant Funding</b>
<i>RS-2.1</i>	<i>Create SharePoint Site of Best Practices, Templates, and Checklists</i>
<i>RS-2.2</i>	<i>Identify Synergies in IS&amp;T and Opportunities for Synergy Areas</i>
RS-2.2.1	Create opportunities virtual board
RS-2.2.2	Create repository of past successful proposals
RS-2.2.3	Encourage / Plan for Large Proposals with Synergy Areas
<i>RS-2.3</i>	<i>Improve IS&amp;T Collaborative Research Culture</i>
RS-2.3.1	Hold twice a month academic symposium
RS-2.3.2	Communicate and celebrate submissions and awards
RS-2.3.3	Encourage the use of UCAT and other mechanisms for speakers
<i>RS-2.4</i>	<i>Develop Research Communication Plan</i>
RS-2.4.1	Rework the IS&T Website
RS-2.4.2	Establish consistent social media content
RS-2.4.3	Create YouTube Channel for Research Highlights and Education
<i>RS-2.5</i>	<i>Improve Process / Use of Academic-Year Course Buyout</i>
<i>RS-2.6</i>	<i>Establish a Sustainable Model for Graduate Student Support</i>
<b>RS-3</b>	<b>Increase Scholarly Publications</b>
<i>RS-3.1</i>	<i>Create fund for publication fees for Open Source journals</i>
<i>RS-3.2</i>	<i>Invite speakers and editors for discussions with IS&amp;T Faculty</i>
<b>RS-4</b>	<b>Improve IS&amp;T Research Brand at Conferences</b>
<i>RS-4.1</i>	<i>Create fund for conference travel</i>
RS-4.1.1	Faculty Fund with Criteria
RS-4.2.1	Student Fund with Criteria
<i>RS-4.2</i>	<i>Identify and Join Strategic Associations and Conferences</i>
RS-4.2.1	Join ISchool Association
RS-4.2.2	Identify and Sponsor Discipline Relevant Conferences
<b>RS-5</b>	<b>Attract and Retain World-Class Researchers</b>
<i>RS-5.1</i>	<i>Establish Competitive Startup Packages</i>





## STRATEGIC OBJECTIVE: Develop World-class Teaching and Forward-Looking Curriculum

Number	Strategic Activity
<b>TS-1</b>	<b>Ensure Modern, Relevant Curriculum</b>
<i>TS-1.1</i>	<i>Perform an Audit of Current Curriculum</i>
<i>TS-1.2</i>	<i>Perform an Audit of Current Certificates</i>
<i>TS-1.3</i>	<i>Develop an Integrated / Collaborative College Curriculum</i>
TS-1.3.1	Train Faculty on Science of Curriculum Development
TS-1.3.2	Ensure Planned and Data-Driven Curriculum Decisions
TS-1.3.3	Eliminate Course Redundancies Between Departments
TS-1.3.4	Develop Collaborative Curriculum Across Departments
TS-1.3.5	Creating Sustainable Doctoral Program Instruction
<b>TS-2</b>	<b>Provide Support for and Develop Exceptional Teaching</b>
<i>TS-2.1</i>	<i>Review Metrics on Teaching Effectiveness</i>
<i>TS-2.2</i>	<i>Develop Teaching Evaluation and Mentoring Plans</i>
TS-2.2.1	Partner with Center for Faculty Excellence to Provide Consistent Support
TS-2.2.2	Create an Orientation for Adjunct Faculty
TS-2.2.3	Explore Expansion of TABS for Adjunct Faculty
<i>TS-2.3</i>	<i>Create a Fund for Instructional Faculty to Attend Conferences</i>
<i>TS-2.4</i>	<i>Increase Faculty Instruction Support</i>
TS-2.4.1	Increase number of graders
TS-2.4.2	Increase Graduate Teaching Assistants
TS-2.4.3	Fund Tutoring Center
TS-2.4.4	Acquire new online instruction technology
<b>TS-3</b>	<b>Create Clear, Cohesive, and Exceptional Online Offerings</b>
<i>TS-3.1</i>	<i>Perform an Audit and Inventory of Online Offerings and Modes</i>
<i>TS-3.2</i>	<i>Develop a Clear and Robust Online Course Presence and Plan</i>
<b>TS-4</b>	<b>Expand Offering Types and Modes</b>
<i>TS-4.1</i>	<i>Perform Market Analysis for Micro credentials in IT Fields</i>
<i>TS-4.2</i>	<i>Develop NC3 Certificates and Programming</i>



## STRATEGIC OBJECTIVE: Increase Faculty and Staff Satisfaction and Retention

Number	Strategic Activity
<b>FS-1</b>	<b>Create a Warm Welcome and Clear Integration to IS&amp;T</b>
<i>FS-1.1</i>	<i>Hold a Fall Celebration of Promotions and New Hires (with Families)</i>
<i>FS-1.2</i>	<i>Hold a New Student Welcome Event in the Fall</i>
FS-1.2.1	Graduate Student Event
FS-1.2.2	Undergraduate Student Event
<b>FS-1.3</b>	<b>Develop Onboarding Processes and Checklists</b>
FS-1.3.1	Establish Onboarding for Faculty
FS-1.3.2	Establish Onboarding for Staff
FS-1.3.3	Establish Onboarding for New Graduate Students
<b>FS-1.4</b>	<b>Develop Mentoring Programs</b>
FS-1.4.1	Establish Mentoring Program for Faculty
FS-1.4.2	Establish Mentoring Program for Staff
<b>FS-1.5</b>	<b>Develop In-Group Creating and Collaboration Establishing Processes</b>
<b>FS-2</b>	<b>Provide Easy Access to Answer Questions</b>
<i>FS-2.1</i>	<i>Develop a FAQ for New Faculty</i>
<i>FS-2.2</i>	<i>Develop a FAQ for New Student Workers</i>
<b>FS-3</b>	<b>Improve RPT Process and Faculty Progress</b>
<i>FS-3.1</i>	<i>Establish Ad Hoc Committee to Create New Guidelines</i>
FS-3.1.1	Benchmark other University and Colleges Guidelines
FS-3.2.1	Review and Revise RPT Procedures and Policies
<b>FS-3.2</b>	<b>Integrate RPT Process with Other Activities</b>
FS-3.2.1	Training RPT Committee Chairs on RPT Process
FS-3.2.2	Integrate RPT Metrics with Mentoring Plans (FS-2.4)
FS-3.2.3	Ensure RPT Reflects Varied Workloads
<b>FS-4</b>	<b>Improve Faculty Service Allocations and Commitments</b>
<i>FS-4.1</i>	<i>Review and revise service allocation processes</i>
<i>FS-4.2</i>	<i>Find opportunities for service simplification</i>

## STRATEGIC OBJECTIVE: Attract and Retain Exceptional Staff and Students

Number	Strategic Activity
<b>SS-1</b>	<b>Provide Professional Development for Staff</b>
<b>SS-1.1</b>	<b><i>Establish Training Programs for Staff Positions</i></b>
<b>SS-1.2</b>	<b><i>Create a Fund for Sending Staff to Professional Development</i></b>
SS-1.2.1	Establish Position Development Plans
SS-1.2.2	Encourage Faculty to Participate in Professional Development Activities
<b>SS-1.3</b>	<b><i>Create Clear Staff Position Descriptions</i></b>
SS-1.3.1	Audit Position Descriptions
SS-1.3.2	Clarify and Codify Roles and Responsibilities
SS-1.3.3	Establish Clear Position Expectations
<b>SS-2</b>	<b>Reward and Recognize Staff Performance</b>
<b>SS-2.1</b>	<b><i>Create Quarterly IS&amp;T Staff Recognition Awards</i></b>
<b>SS-2.2</b>	<b><i>Implement Staff Rewards Program (Parking, Gift Cards, etc.)</i></b>
<b>SS-3</b>	<b>Increase Student Career Readiness</b>
<b>SS-3.1</b>	<b><i>Establish More Scholarships and Internships</i></b>
SS-3.1.1	Develop the Earn and Learn Program
SS-3.2.1	Increase Pay Rate for Student Workers
<b>SS-3.2</b>	<b><i>Improve Student Career Service Support</i></b>
SS-3.2.1	Advertise ACDC Services Via Syllabi and Professors
SS-3.2.2	Invite ACDC to Come to PKI Once a Month
SS-3.2.3	Develop a Strategic Plan for Career Support
<b>SS-4</b>	<b>Enhance Student Services</b>
<b>SS-4.1</b>	<b><i>Perform Comprehensive Review of CSLC</i></b>
<b>SS-4.2</b>	<b><i>Develop a Strategic Plan for Retention</i></b>

## STRATEGIC OBJECTIVE: Create a Collaborative, Supportive Culture with Amazing Facilities

Number	Strategic Activity
<b>C-1</b>	<b>Establish Important, Actionable, and Memorable Values</b>
<i>C-1.1</i>	<i>Brainstorm Values with IS&amp;T Faculty</i>
<i>C-1.2</i>	<i>Finalize and Publicize Values</i>
C-1.2.1	Review with Executive Team and Faculty Vote
C-1.2.2	Post the values around IS&T
<b>C-2</b>	<b>Integrate Diversity, Equity, Inclusion, and Accessibility into Culture</b>
<i>C-2.1</i>	<i>Include DEIA Topics in All College Meetings</i>
<i>C-2.2</i>	<i>Develop and Implement BPC Plan (R-6.2)</i>
<b>C-3</b>	<b>Expand and Improve IS&amp;T Spaces</b>
<i>C-3.1</i>	<i>Develop a Strategic Space Plan</i>
C-3.1.1	Benchmark Research Space Against Aspirational Peers
C-3.1.2	Collect Past Plans for Fisserv
C-3.1.3	Integrate with Chancellor's Plan
C-3.1.4	Create Research Space Plan
C-3.1.5	Create Instructional Space Plan
C-3.1.6	Create Collaboration Space Plan
C-3.1.7	Research Technology Needs for Instruction