CSUN Technology 2022-Vision
The CSUN Technology 2022-Vision describes a University-wide plan to leverage technology to support institutional priorities. The CSUN Technology 2022-Vision establishes the aspiration of a more digitally-enabled University, identifies strategic themes to organize initiatives to support institutional priorities, and sets technology principles to guide the decisions. The 2022-Vision was created in consultation with the University Technology Governance and advisory groups and with the input of the broader University community through the annual Information Technology surveys of students, faculty and staff.

Aspiration
The CSUN Technology 2022-Vision creates the path to a more digitally-enabled institution that uses technology to facilitate student learning and success, empower innovation, provide intuitive services, and operate efficiently.

Strategic Themes
The vision has four key areas of focus, strategic themes, to realize CSUN’s aspiration to become a more digitally-enabled University: Digitally Transform the Student Experience; Support for Teaching, Learning and Research; Enable Digital Services and Engagement; and Effective, Robust and Secure Information Technology. All four themes map back to one or many of the University Planning Priorities.
Guiding Principles

By applying the following guiding principles, CSUN will partner with stakeholders to transform existing services and implement new technologies. These principles will inform the selection of technologies and development of IT competencies.

- **Cloud First**
  Favor solutions that are “in the cloud” (including software-as-a-service application solutions and cloud-based compute and storage options) to deploy solutions faster, achieve efficiencies through on-demand scalability and greater economies of scale, and improve technology security and availability.

- **Data Informed**
  Value University data as an institutional asset that is appropriately secured, consistently maintained, and available to effectively inform decisions.

- **Effective Compliance**
  Require that all technology solutions meet or exceed the requirements of University information security and accessibility policies and standards, to protect our community from information security threats and support and enrich experiences.

- **Internet of Things Ready**
  Sustain an infrastructure (networks, storage, identity and access management) to enable the rapidly growing variety of devices, items, and sensors that connect to the internet (Internet of Things) and provide information that is important to support learning, research and campus operations.

- **Intuitive**
  Implement solutions that offer high usability, are designed for accessibility, and support standards for integration of data and processes across applications to improve the overall experience of our users.

- **Mobile First**
  Strongly favor solutions that are designed for mobility and enable a high-quality user experience on any device.
Digitally Transform the Student Experience

Technology 2022-Vision: CSUN students will experience the latest and emerging technologies and develop the digital skills required for their careers and lifelong learning. Intuitive online services and information that is easy to discover and understand will lower barriers to CSUN enrollment and degree completion.

- CSUN will use technology to remove barriers to student success by making it easier for students to access resources, services, events and activities of the University that are personalized to their interests, goals, and location.

- CSUN will provide students with the opportunity to explore new and emerging technologies as part of their college experience to advance student career-readiness.

- CSUN will leverage students’ mobile devices and artificial intelligence as means to access and personalize services (e.g., One Card) to improve the service experience.

- CSUN will develop programs, curate online content, and deploy self-help tools to assist students’ development of the technology competencies they need in their coursework, leadership opportunities, and co-curricular programs.

- Processes used by students will be integrated and organized in CSUN apps and portals around the activities and events they relate to, such as becoming a student, enrolling in courses, or preparing for graduation. Where feasible, processes will be automatically triggered based on what a student will need, without them needing to request it.
Harness Technology to Increase Engagement, Business Productivity and Cost Savings

Technology 2022-Vision: CSUN will become an administratively paperless University generating efficiencies while providing personalized, online services and communications to highly mobile constituents. Constituents include students, faculty, staff, and alumni.

- The CSUN “eProcess+” initiative will streamline and redesign processes and use technology to become paperless, and move more services online with automated workflow and digital signatures.

- CSUN will support use of web analytics and constituent data to measure the effectiveness of communication campaigns and tailor outreach to students, alumni and other external stakeholders.

- CSUN will continue to leverage the Internet of Things and artificial intelligence (e.g., chatbots) to help administrative units gather data about their services, anticipate the needs of students and present multiple ways to access services, and optimize the use of campus space and resources.

- CSUN will employ a user experience-centered approach to the design (and refresh) of processes, web sites and mobile applications.
Enable Teaching, Research and Innovation

Technology 2022-Vision: CSUN will be a leader among its peers in the application of technology to improve the quality of learning. CSUN will assist faculty to pilot leading technologies and pedagogies, access technology support to pursue their innovation ideas, and use data to evaluate student learning and enhance decision making. Instructional design and technology support will impact the greatest possible numbers of our students and faculty.

- CSUN will continue to encourage and support faculty-led explorations of new technologies and pedagogy through an innovation process that includes forums, pilots, collaborative grant development, assessment and communication of outcomes.
- Active learning spaces, support for simulations, and maker spaces will be added to increase experiential learning opportunities.
- Course redesign and support services will be offered throughout the year and become more directly embedded in academic departments to improve student learning outcomes and enhance student engagement and achievement.
- Support for research and scholarship, including by our students, will be enhanced by facilitating faculty and student access to public cloud (e.g., Amazon Web Services, Microsoft Azure), consortium (e.g., NSF’s Extreme Digital program), blended with on-campus computational, storage, and data analysis resources.
- Course level learning analytics will be provided to faculty to help track student learning and enable more self-directed, self-paced learning.
- CSUN will support the teaching and learning scholarship of the faculty and create research opportunities to inform the development of new learning technologies.
Provide Effective, Robust and Secure Technology Infrastructure

Technology 2022-Vision: CSUN will follow a cloud-first strategy wherever possible, consolidating to a single campus data center. Highly available and robust infrastructure will connect users securely to applications, data and computing resources in a hybrid on-campus and cloud infrastructure environment.

- CSUN will continue to employ a risk-based approach to securing the institution’s information assets and deploy the necessary tools to detect and respond to security risks.
- CSUN will strategically manage and secure data as an asset, through data governance, training, tools, and processes that emphasize the quality, availability, security, integrity and privacy of data.
- Through partnerships that CSUN will form with other institutions and cloud vendors, faculty and student researchers will have access to a variety of on-demand, scalable computational capabilities, storage and research software.
- CSUN will maintain an infrastructure that supports the anticipated adoption of greater numbers of internet-connected objects (i.e., Internet of Things) that will become integral to campus operations, teaching and learning, research and student life.
- CSUN will implement “cloud-first” for new and replacement compute and storage infrastructure and continue to transition the computing and storage infrastructure in CSUN’s two on-premise data centers to the cloud, thereby transitioning to a blended model of private and public cloud services supplemented by a single on-premise data center.
- CSUN’s software application strategy will continue to be “cloud-first” and favor selection of vendors’ “software-as-a-service” capabilities.