



# COMPILATION OF STRATEGIC PLAN OBJECTIVES & MAJOR ACTIVITIES



## STRATEGIC ROADMAPS

IT STRATEGIC PLAN

## TIMELINE: MAJOR ROADMAP ACTIVITIES – *At a Glance*

<b>SUPPORT RESEARCH &amp; SCHOLARSHIP</b>	<b>NOW</b>	<b>12 MONTHS</b>	<b>24 MONTHS</b>	<b>36 MONTHS</b>	<b>48+ MONTHS</b>
Upgrade network, form governance, recruit a Research IT leader, devise storage strategy	■		■		
Facilitate use of cloud, form multi-institutional HPC partnerships	■	■		■	
Adopt new funding model, expand application support, create research IT liaisons	■	■		■	
Plan future upgrades, further expand application and data expertise	■		■		■

<b>FACILITATE STUDENT LEARNING &amp; SUCCESS</b>	<b>NOW</b>	<b>12 MONTHS</b>	<b>24 MONTHS</b>	<b>36 MONTHS</b>	<b>48+ MONTHS</b>
Assess space condition, Establish Governance	■		■		
Address deficient spaces, create an integrated room planning process	■	■		■	
Develop long-range learning space master plan with coll. spaces, active learning rooms	■		■		■
Create more specialized spaces and an innovation seed fund	■			■	

<b>ENABLE ADMINISTRATIVE EXCELLENCE</b>	<b>NOW</b>	<b>12 MONTHS</b>	<b>24 MONTHS</b>	<b>36 MONTHS</b>	<b>48+ MONTHS</b>
Redesign processes, reduce customization	■				
Close critical application gaps	■		■		
Improve student experience	■		■		
Implement new ERP (2023) and SIS (2025)	■		■		

<b>OPTIMIZE IT SERVICES</b>	<b>NOW</b>	<b>12 MONTHS</b>	<b>24 MONTHS</b>	<b>36 MONTHS</b>	<b>48+ MONTHS</b>
Adopt Services Framework and Governance	■		■		
Phase 1 Core Services – wireless, document management, security, accessibility	■	■		■	
IT Service Management – catalog ticketing system; Phase 2 Core Services	■	■		■	
IT professional development plans, career paths, improved recruiting	■		■		■

# STRATEGIC PLAN OBJECTIVES

<p><b>SUPPORT RESEARCH &amp; SCHOLARSHIP</b></p> <ol style="list-style-type: none"> <li>1. Provide high speed network connectivity from UD research sites to national labs, supercomputing centers and regional and national institutional collaborators.</li> <li>2. Leverage improved campus cyberinfrastructure and cloud resources to provide researchers with a continuum of high performance computing and data storage capabilities.</li> <li>3. Expand research computing support services to maximize the time researchers and graduate students can spend advancing their research and scholarship and to broaden adoption of the research cyberinfrastructure to more faculty and disciplines including the social sciences, humanities and the arts.</li> <li>4. Establish funding and governance practices to make research computing services responsive to the needs of the research community, sustainable, and widely utilized.</li> </ol>	<p><b>FACILITATE STUDENT LEARNING &amp; SUCCESS</b></p> <ol style="list-style-type: none"> <li>1. Build on the strong foundation of the Faculty Commons to create multi-expertise capabilities that enable sustained faculty engagement with comprehensive program and course development, instructional design and technology support services.</li> <li>2. Support the University's online learning strategy with expanded course design and development services.</li> <li>3. Devise a learning space master plan that promotes flexible room designs, supports varied pedagogies, and improves foundational capabilities important to the learning experience, and usability of all spaces.</li> <li>4. Reflect the impact of digital technologies on learning spaces in the campus master plan.</li> </ol>	<p><b>ENABLE ADMINISTRATIVE EXCELLENCE</b></p> <ol style="list-style-type: none"> <li>1. Improve the student experience and lay the groundwork for the next generation student information systems.</li> <li>2. Close critical capability gaps and extend the life of the current Peoplesoft software implementation.</li> <li>3. Deploy business intelligence capabilities to improve transactional reporting and enable advanced analytics.</li> <li>4. Replace the ERP by 2023 and the student information system by 2025.</li> <li>5. Support the redesign of business processes, invest in new technology systems that support improved business processes, and reduce the complexity of the current application portfolio.</li> </ol>	<p><b>OPTIMIZE IT SERVICES</b></p> <ol style="list-style-type: none"> <li>1. Adopt a structured framework for categorizing IT services and determining the optimal structure for managing the service.</li> <li>2. Begin the transition to core services with a focus on major enterprise technologies (e.g. learning management system), critical infrastructure, accessibility, and security technologies.</li> <li>3. Establish structured governance and service management processes to provide oversight for core services and facilitate continual improvement of all services.</li> <li>4. Develop the IT workforce required for the future.</li> </ol>
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## TIMELINE: Now

### Milestones

<p><b>SUPPORT RESEARCH &amp; SCHOLARSHIP</b></p> <ol style="list-style-type: none"> <li>(1.1) Network upgrade and science DMZ.</li> <li>(1.2) Define storage requirements</li> <li>(1.2) Raise awareness and increase adoption of new HPC cluster.</li> <li>(1.2) Create a research IT service catalog and website in collaboration with partners.</li> <li>(1.2) Develop communications and use cases to guide adoption of on-premises and cloud storage and compute.</li> <li>(1.3) Hire a Director of Research Cyberinfrastructure.</li> <li>(1.4) Benchmark funding models and analyze options.</li> <li>(1.4) Form a research IT governance sub-committee.</li> </ol>	<p><b>ENABLE ADMINISTRATIVE EXCELLENCE</b></p> <ol style="list-style-type: none"> <li>(1.1) Process redesign – HR, Research Admin, Finance Page Up (HR)</li> <li>(1.2) Mobile framework</li> <li>(1.2) Budget system</li> <li>(1.2) Business Intelligence</li> <li>(1.2) Document management</li> <li>(1.3) Expand mobile services</li> <li>(1.3) PeopleSoft Upgrade</li> <li>(1.3) Constituent Relationship Management Strategy</li> <li>(1.4) Rationalize Plan</li> </ol>
<p><b>FACILITATE STUDENT LEARNING &amp; SUCCESS</b></p> <ol style="list-style-type: none"> <li>(1.1) Establish the mix of services in the Faculty Commons.</li> <li>(1.2) Support the development of the University online strategic plan.</li> <li>(1.3) Adopt a room rating rubric.</li> <li>(1.3) Form a learning space governance sub-committee.</li> <li>(1.4) Rationalize plan</li> </ol>	<p><b>OPTIMIZE IT SERVICES</b></p> <ol style="list-style-type: none"> <li>(1.1) Communicate and adopt the services framework of core, consortium and specialized.</li> <li>(1.1) Apply the framework to confirm services that are or should be core.</li> <li>(1.1) Confirm the initial target list of core services.</li> <li>(1.2) Develop detailed definitions of the scope, service levels and technology solution for each core service.</li> <li>(1.3) Appoint an IT services sub-committee.</li> <li>(1.3) Complete selection of IT Service. management and help desk software.</li> <li>(1.4) Raise awareness of the importance of being an organization and IT community that welcomes diversity, equity and inclusion.</li> <li>(1.4) Convene a staff advisory committee</li> </ol>

# TIMELINE: 12 Months

## Milestones

<p><b>SUPPORT RESEARCH &amp; SCHOLARSHIP</b></p> <ul style="list-style-type: none"> <li>(1.1) Improved connectivity to Internet 2 and regional research partners.</li> <li>(1.1) Devise long-term network plan and funding strategy for renewal and replacement.</li> <li>(1.2) Implement tiered research data storage options.</li> <li>(1.2) Facilitate use of AWS and Azure cloud environments.</li> <li>(1.2) Leverage containers in the HPC environment to facilitate movement of projects from UD to national research computing facilities.</li> <li>(1.2) Evaluate options to form collaborative partnership to co-invest in HPC.</li> <li>(1.3) Add developer capabilities to assist faculty to optimize applications for HPC.</li> <li>(1.3) Identify a network of research application experts across UD.</li> <li>(1.3) Devise a scope of services and rate structure to cost recover some UD research IT services.</li> <li>(1.3) Identify research computing liaisons to colleges (also supports 1.2).</li> <li>(1.4) Recommend and adopt a research IT funding model.</li> <li>(1.4) Identify funding to offer baseline research computing capabilities as a core service to all faculty and graduate students.</li> <li>(1.4) Continue to identify core grants or collaboration opportunities with other institutions to defray costs of research IT infrastructure.</li> </ul>	<p><b>ENABLE ADMINISTRATIVE EXCELLENCE</b></p> <ul style="list-style-type: none"> <li>(1.1) Expand business analyst capacity</li> <li>(1.1) Reduce HR Finance customizations</li> <li>(1.2) eResearch Admin</li> <li>(1.2) Identity Management Evaluate eProcurement</li> <li>(1.3) Expand mobile services</li> <li>(1.3) Slate Optimization</li> <li>(1.4) Initiate software options analysis</li> <li>(1.4) Articulate vision, and use cases</li> </ul>
<p><b>FACILITATE STUDENT LEARNING &amp; SUCCESS</b></p> <ul style="list-style-type: none"> <li>(1.1) Expand expertise in the Faculty Commons.</li> <li>(1.1) Design the staffing plan to create access to cross-functional expertise.</li> <li>(1.1) Develop an identity for the expanded Commons and a communications strategy to raise awareness.</li> <li>(1.2) Collaborate with academic leadership to identify priorities for new online courses and programs.</li> <li>(1.2) Begin hiring additional instructional designers.</li> <li>(1.2) Define requirements for 24x7 support and assess options.</li> <li>(1.3) Assess room conditions.</li> <li>(1.3) Plan remediation of substandard spaces.</li> <li>(1.3) Remediate substandard spaces.</li> <li>(1.3) Create a room maintenance and upgrade planning and funding process led in collaboration by FREAS, UD IT, Registrar led.</li> <li>(1.4) Prioritize opportunities to expand collaboration spaces.</li> <li>(1.4) Provide input to campus master plan to address needs for flexible room designs, large enrollment class spaces, and collaboration spaces.</li> </ul>	<p><b>OPTIMIZE IT SERVICES</b></p> <ul style="list-style-type: none"> <li>(1.1) Define and implement a process to propose, vet and approve a new core service.</li> <li>(1.2) Implement service scope definitions and funding plans for each initial core service (defined in 1.1).</li> <li>(1.2) Plan the implementation of new core services for wireless, document management, accessibility support.</li> <li>(1.2) Plan phase 2 core services including email and calendaring.</li> <li>(1.3) Implement a service catalog.</li> <li>(1.3) Appoint service owners.</li> <li>(1.4) Develop professional development plans for all IT staff.</li> <li>(1.4) Conduct a market analysis to benchmark compensation.</li> <li>(1.4) Partner with HR to streamline hiring.</li> <li>(1.4) Review position descriptions and ads to better promote IT jobs at UD.</li> </ul>

## TIMELINE: 24 Months

### Milestones

<p><b>SUPPORT RESEARCH &amp; SCHOLARSHIP</b></p> <p>(1.1) Leverage campus master plan to locate researchers requiring high-speed networking in particular buildings or zones of campus.</p> <p>(1.2) Define a data architect/advisor role in UD IT research team (also supports 1.3).</p> <p>(1.3) Create online training programs for research software and use of clusters.</p> <p>(1.3) Increase participation of UD research IT support team on faculty research teams.</p> <p>(1.3) Define a data architect/advisor role in UD IT research team (also supports 1.2).</p> <p>(1.4) Develop a multi-year forecast of research infrastructure funding requirements.</p>	<p><b>ENABLE ADMINISTRATIVE EXCELLENCE</b></p> <p>(1.1) Continued process improvement in concert with implementation of new Finance, HR and SIS.</p> <p>(1.3) Envision the student experience of the future</p> <p>(1.4) HR &amp; finance implementation SIS strategy</p>
<p><b>FACILITATE STUDENT LEARNING &amp; SUCCESS</b></p> <p>(1.1) Develop an innovation grant program.</p> <p>(1.1) Devise communications, outreach and awareness programs to highlight digital learning capabilities and share successful practices.</p> <p>(1.2) Complete hiring of expanded instructional design team.</p> <p>(1.2) Implement 24x7 support for online learners.</p> <p>(1.3) Complete remediation of spaces.</p> <p>(1.3) Plan a multi-year upgrade of other learning spaces.</p> <p>(1.3) Develop new learning space standards for general and college specific rooms.</p> <p>(1.4) Create additional collaboration spaces around campus.</p> <p>(1.4) Increase the number of learning spaces that support problem-based learning.</p> <p>(1.4) Create digital learning capabilities on a cart—capabilities to bring technologies like AR/VR to rooms as needed.</p> <p>(1.4) Design innovation space grant program.</p>	<p><b>OPTIMIZE IT SERVICES</b></p> <p>(1.2) Implement wave 2 core services.</p> <p>(1.2) Transition funding and restructure budgets as needed to support wave 1 core services.</p> <p>(1.2) Retire overlapping or duplicative solutions.</p> <p>(1.3) Continue to expand the service catalog and improve the service management life-cycle process.</p> <p>(1.4) Re-survey the culture and climate to measure improvement.</p> <p>(1.4) Develop career paths to recognize management and technical expertise.</p> <p>(1.4) Create student employee career paths that lead many towards entry level positions in a UD IT organization.</p>

## TIMELINE: 36 months

### Milestones

<p><b>SUPPORT RESEARCH &amp; SCHOLARSHIP</b></p> <p>(1.1) Continue to increase network connection speeds for research programs with leading edge network requirements.</p> <p>(1.2) Continue to upgrade storage options and capacity.</p> <p>(1.2) Evaluate needs for cluster upgrades or expansion.</p> <p>(1.3) Add additional application development expertise in UD IT research IT team as demand warrants.</p> <p>(1.4) Continue co-investments opportunities in shared HPC environment with interested faculty</p> <p>(1.4) Continue to seek grants to fund shared infrastructure for research computing.</p>	<p><b>ENABLE ADMINISTRATIVE EXCELLENCE</b> (<i>Milestones Continued</i>)</p> <p>(1.1) Continued process improvement in concert with implementation of new Finance, HR and SIS.</p> <p>(1.3) Envision the student experience of the future</p> <p>(1.4) HR &amp; finance implementation SIS strategy</p>
<p><b>FACILITATE STUDENT LEARNING &amp; SUCCESS</b></p> <p>(1.1) Issue innovation grants.</p> <p>(1.1) Design and raise funds for an innovation lab/prototype teaching space.</p> <p>(1.2) Evaluate need for additional instructional designers or technology support based on growth of online enrollments and programs.</p> <p>(1.3) Execute long-term room upgrade master plan.</p> <p>(1.4) Expand support for bring your own device.</p> <p>(1.4) Convert additional general labs into specialized teaching and assessment spaces.</p> <p>(1.4) Raise funds for and implement innovation grant program to coinvent in new space designs and emerging technologies.</p>	

## TIMELINE: 48 months+

### Milestones:

#### ENABLE ADMINISTRATIVE EXCELLENCE

(1.4) SIS Implementation