

Empowerment Through Technology





Welcome to Florida State University!

Information Technology Services (ITS) is a strategic asset for Florida State University as we provide essential services, technologies and innovation through which our students, faculty and staff can thrive. More than 300 ITS staff members work to meet the diverse needs of FSU. We invite you to learn how ITS empowers the campus community to reach new goals through our services and explore our vision of the next generation of technology.

While we could tout many successes over the last few years, our organization is energized to continue evolving through our digital transformation efforts. For our students, that means a seamless technical experience and robust resources to support the holistic student experience. For researchers, technology supports new discoveries through our high performance computing resources. For faculty, our systems provide access to innovative instructional technology tools through online, hybrid and in-class modes of learning. And for staff, technology provides customized, cloud-based solutions that foster collaboration and enable our employees to work from anywhere.

We are proud to share our portfolio of services and have identified opportunities where we can work with you and our campus partners to enhance innovation and efficiencies. We look forward to envisioning together how technology can empower our next generation of leaders at Florida State University.



Sincerely,

Rick Burnette, Ph.D.

Rick Burnette

Associate Provost for Strategy and Analytics and Interim Chief Information Officer

Snapshot of Recent Awards & Acknowledgments

- CSO50 Award | Seminole Secure Business Continuity Program, Information Security and Privacy Office
- PeopleSoft Innovator Award | Application Architecture and Administration Team
- Florida TaxWatch Productivity Award | Automated Password Reset Project, Stephen Tyson
- Florida TaxWatch Productivity Award | FSU Smart Onboarding Project, Business Application Services
- FSU Maxwell Carraway Employee of the Year | Christian "Joe" Brigham
- FSU Sustainable Campus Gold Certification | Research Computing Center
- Division of Student Affairs Partner with a Purpose Award | Dave Burgess, Web Services
- · Division of Student Affairs Better Together Award | Charlotte Souffront-Garcia

Goals & Opportunities



Advance FSU Strategic Initiatives

- Expand and improve data and analytics capabilities and services to support FSU's strategic initiatives
- Improve university cybersecurity posture to ensure continuity of services and reduced reputational risk



Be a Strategic Partner

- · Diversify the number of researchers and departments who are leveraging the Research Computing Center
- Provide model and road map to support strategic relationships and mutual successes



Enhance ITS Team Capabilities

- Invest in life-long professional development of our ITS staff to remain engaged and competitive with industry standards
- · Recruit and retain diverse, intelligent and innovative staff members



Develop a Model for Continuous Improvement

- · Co-create the next generation Enterprise Application landscape, infrastructure and supporting architecture
- Improve functions and processes that support IT operations



Reduce Costs and Improve Efficiencies

- Revise the financial model to support costs of ITS services, projects, and strategic initiatives
- Reduce redundant services to improve efficiency across the university

Services

ITS delivers numerous mission-oriented services that provide technology leadership and support to the FSU community.

- Analytics
- Application Development
- Classroom Support
- Collaboration Applications
- Conferencing Solutions
- Customer Relationship Management
- Cybersecurity
- Desktop Support
- Email Accounts
- Enterprise Applications
- File Storage
- High Performance Computing
- Infrastructure and Network
- Telephone Services
- Virtual Server Hosting
- Wireless Access

FSU's Strategic Plan Alignment

Goal VI: Excellence and Reputation – Use Physical and IT Infrastructure to Facilitate Innovation and Excellence

Tactic: Elevate Maturity of Enterprise Technology

Outcome: Exhibited a 78% On-time Completion Rate for ITS Major Projects in 2020



Research

Research Computing Center

High speeds, big data and new discoveries. ITS partners with researchers to provide a platform that supports academic advancements. The Research Computing Center (RCC) is FSU's high performance computing platform. Entrusted by nearly 100 departments across campus, the RCC currently supports more than 1,000 active faculty and staff researchers who are able to process millions of hours of data through high-powered software and equipment.

Health Data Science Initiative

Through the Health Data Science Initiative (HDSI), ITS, along with key partners such as the Office of Research and University Libraries, designs an environment that promotes faculty efforts to gain National Institute of Health funding through a secure and scalable platform.

"It means that I don't have to be a computer scientist. I can focus on the biology and on training my students."

- Beth Stroupe, Associate Professor, Biological Science

Research in Action

One example of these successful partnerships is with Dr. Beth Stroupe from the Stroupe Lab in the FSU microbiology department. Stroupe's team looks to understand the molecular structure of sulfite reductase, a central enzyme in the sulfur metabolic cycle. Through the FSU cryo-electron microscope, she obtains high-resolution 3D imaging, and the data is automatically transferred to the RCC to be evaluated through a variety of different statistical analyses. The

RCC allows researchers to take advantage of high performance technology without needing to be an expert in different areas.

Next Steps in Research

Revise funding model to expand customer base of departments that use the RCC

Emphasize partnership with FSU's life sciences and digital humanities programs

Pursue collaborations, such as HDSI, to increase grant productivity





Innovation

Online Learning and Remote Working

Technology is the partner of innovation at FSU. When the COVID-19 pandemic gave rise to myriad questions and unknowns, one thing was clear—ITS was ready to join with other technology partners such as Campus Reimagined and Office of Distance Learning to empower others through technology. ITS leveraged existing resources and systems to quickly pivot and move more than 50,000 students, faculty, researchers and staff to online learning and remote working in mere weeks. From fast-tracking enterprise Zoom licenses to supporting thousands of online classes and university meetings to donating more than 500 laptops and web cameras to low-income students at FSU and Leon County Schools, ITS met each unique need with creative problem solving and professionalism.

Innovation In Action

ITS played a pivotal role in the university's COVID-19 response through our collaborative work on the FSU COVID Technical Response team. This team created a daily attestation app for faculty, staff and students to self-report symptoms and developed contact tracing software to allow health officials to track and quarantine exposed students. ITS also developed a method for scheduling both COVID-19 testing and vaccination appointments in collaboration with the Florida Department of Health, doing our part to stop the spread of the 2020 pandemic.

"Our IT group was wonderful in terms of making [the COVID-19 vaccine process] very simple. They couldn't have made it any easier."

 Neil Charness, Psychology Professor and Director of Institute for Successful Longevity, College of Arts & Sciences

Next Steps in Innovation

Implement a customer relationship management strategy that tracks interactions to create a holistic student view

Use data and machine learning to create a personalized student experience

Leverage location-aware technologies to provide pertinent data to students as they need it

Student Success

Data-Driven Decisions

Today's students expect their college experience to be personalized. This expectation can be met when university leadership strategically uses student involvement and enrollment data to curate the FSU experience. To assist with this, ITS partners with Institutional Research and others to connect longstanding, structured data environments and unstructured data from data lakes to create a reliable data platform. By doing so, new discoveries impacting student success are found. Administrators can make important, strategic decisions on what services and programs are needed for the success of today's students.

Personalized Experiences

Within myFSU Portal, students can access personalized portlets to see their class schedule, add or drop classes and even make appointments at University Health Services. Additionally, twice a year, ITS displays a customized registration guide to indicate the ability to register for classes and guide students through any outstanding registration holds or required tasks.

"Our award-winning student success efforts depend on identifying at-risk and higher need populations and responding with timely and personalized support."

- Sara Hamon, Associate Dean, Undergraduate Studies

Student Success in Action

ITS is partnering with the Division of Student Affairs and Undergraduate Studies to provide data to keep students thriving both in and out of the classroom. By being good stewards of data, ITS can help university departments facilitate a well-rounded student experience and make informed decisions to support our students.

Next Steps in Student Success

Use big data to drive personalized and customized experiences

Develop instructional technologies in a postpandemic learning environment Expand data governance as an essential element in ensuring data-informed strategies





Cybersecurity

Seminole Secure

Remaining vigilant and keeping FSU secure from cyberattacks must remain a top priority for FSU. Arguably this is the most important challenge FSU faces as cybersecurity affects ITS resources and non-ITS resources. Recent efforts focus on mitigating any weak link applications and reducing vulnerabilities of department-managed resources. To this end, the Information Security and Privacy team combined efforts with Emergency Management to create the Seminole Secure program. Over the next three years, ITS will guide more than 50 university units through the creation of business impact analyses, disaster recovery plans, risk assessments, continuity of operations plans and vulnerability scanning.

Two-Factor Authentication

One very visible cybersecurity effort is 2-factor authentication (2FA). Moving campus to 2FA reduced the average number of FSU email accounts compromised each month from roughly 570 to just 3— that is a 99.4 percent decrease in malicious activity. As hackers attempt new tactics, FSU will need increased leadership support and continual training and awareness programs.

"We've got data all over the place that requires different types of security and that's great because that means we're doing a lot of really interesting work." - Robyn Blank Jackson, Chief Compliance and Ethics Officer

Cybersecurity in Action

Cybersecurity must remain "top-of-mind" for our campus leaders. ITS has made significant improvements in the last few years to secure our environments and improve our barriers to intrusion each of the past several years. Currently, FSU has the third best cybersecurity score of the top 20 public universities.

Next Steps in Cybersecurity

Expand disaster recovery abilities to units and applications beyond currently supported mission-critical systems

Merge student and employee email systems into a single, more secure system Expand knowledge, communication, and training of cybersecurity professionals



1.9M

Authenticated Sign-Ins To FSU Systems In 2020

172,003

Virtual Computer Lab Applications
Launched In 2020

93%

Faculty and Staff
Completed Cybersecurity
Training

250

FSU Classrooms Supported By ITS

488M+

Zoom Meeting Minutes In 2020

1,600

Monthly Average Of Hours
Of Online Individualized
Learning

3.68M

Malicious Attacks Blocked Through Email Filtering During 2020

14M+

Documents Stored Electronically
Through OnBase

555K

Active Directory
User Accounts

85,955

COVID-19 Daily Wellness Checks
Through Stay Healthy FSU App

\$31M

Grant Dollars Awarded From NAVSEA
To Implement CAPS Project

10K+

FSU COVID-19 Vaccine Registrations Through ITS-Supported Systems 1.6M

FSU Websites Sessions Supported Each Month

32%

Average Growth In Student Central's Electronic Forms In Last 3 Months

76,584

COVID-19 Tests Through University Health Services

75

Custom Applications Created And Maintained In Last 5 Years

29M

CPU Hours Processed At RCC Last Year

What's Next?

Located in Florida's capital city with ties to the Northwest Regional Data Center and Florida Virtual Campus, ITS has the opportunity to capitalize on the synergy of government, other higher education institutions and innovation from within our own community. We will continue to advance these initiatives, but there is still more to do. Here is a road map of where we are headed.

Envision Next Generation Instructional Technology

Evaluate and evolve our ability to modernize instructional technologies for online, hybrid and classroom learning

Improve Researchers' Access to Secure and Stable Computing

Maximize research grant dollars by prioritizing diverse options for resources and supporting their discoveries with our expertise in research computing







Harden the Network Security and Data Ecosystem

Monitor and remediate risks across the university's environment where intruders could take advantage of vulnerabilities and expose private data

Share Your Thoughts

Gestalt - The totality of our efforts should exceed the sum of our inputs. ITS seeks input and innovative ideas from all partners in the FSU community to create a better future for the next generation. As you have ideas of ways to further the university's mission and reach new technology milestones, please share those thoughts with us as we strive to be a strategic asset for Florida State University.



Enhancing Student Experience with Path Finding

Leverage an individual's data and trends to keep them on track towards their academic goals and personalize the student experience to encourage holistic development







Improve Data Model for Flexibility

Remove silos and barriers by creating a governed data environment to support all systems, research and analytics

Centralize Services When Beneficial

Remain fiscally responsible by reducing expenses and finding new ways to improve efficiencies across campus



