

Information Technology 2-Year Master Plan

GOALS

➤ Network Infrastructure Design and Implementation

- It supports online learning, remote access to resources, and virtual services, making education accessible to students who may face barriers to attending on-campus classes.
- It facilitates seamless communication and collaboration between students and instructors, fostering a supportive learning environment.
- By having a strong network infrastructure, this allows the college to provide more diverse learning modalities, such as hybrid learning, and online courses. This allows students to learn in the way that best suits their needs.
- A resilient network, with redundant systems and fail-safe measures, reduces the risk of outages. This is vital in rural areas where internet access might already be fragile. Network resilience ensures that students, regardless of location, have consistent access to online learning resources.

➤ Enterprise Security Planning

- A strong security plan safeguards student data, including sensitive personal and financial information. This builds trust and encourages students from all backgrounds to engage with online resources without fear of data breaches or identity theft.
- Security measures, such as intrusion detection and prevention systems, help prevent cyberattacks that could disrupt online learning platforms and other critical services. This ensures that all students, regardless of their location or socioeconomic status, have consistent access to educational resources.
- Redesigning our network and systems infrastructure to meet modern security standards, through internal control of the college's cybersecurity, enables the agile development of public-facing and private-facing college computing resources.

➤ Student Information System

- A well-designed SIS can also provide data that can help identify and remove systemic barriers to access.
- A user-friendly SIS provides students with easy access to important information, such as course schedules, financial aid details, and academic records, regardless of their location or technical skills.
- The SIS allows students to track their academic progress, monitor their grades, and identify areas where they may need additional support.
- A well-managed SIS enables the college to generate accurate and timely reports for internal and external stakeholders, demonstrating its commitment to accountability and transparency.

ACTIONS

➤ Network:

- Develop a request for proposal highlighting the following:
 - a respondent will design an enterprise network right sized for the community college with the involvement of the ITS team
 - a respondent will offer recommendations based on emerging technologies to enhance the capabilities of the network to meet modern standards
 - a respondent will fully document and support the implementation of the designed network with minimal downtime to the college overall
- Engage vendors to participate in the RFP process
 - Wasco County CIO will leverage existing vendor relationships to encourage response to the RFP
- Evaluate responses and award the RFP
 - ITS will develop and utilize an objective measurement process based on all requirements
 - ITS will develop a comprehensive requirements analysis for the network RFP to ensure all needs are met for Faculty, Staff, and Students
- Design & Implement the new network
 - ITS will work with the respondent to develop a modern, enterprise network
 - ITS and respondent will test network designs based on current network and new requirements defined in the RFP
 - ITS and respondent will perform the migration of stages of the network to ensure minimal impact to the organization overall.

➤ Student Information System

- Planning
 - Establish a Project Team - complete
 - Perform project kickoff meetings - in progress
- Conduct Needs Assessment and Requirements Gathering
 - Define specific SIS requirements based on the college's needs and priorities.
 - Conduct surveys, focus groups, and interviews with stakeholders.
 - Document current processes and identify pain points.
- Select a SIS vendor that meets the college's requirements and budget.
 - Research and evaluate potential SIS vendors.
 - Request and review vendor proposals.
 - Conduct vendor demonstrations and site visits.
 - Negotiate a contract with the selected vendor.
- Implementation and Configuration
 - Configure the SIS to meet the college's specific needs.
 - Data Migration and Integration
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 - Clean and validate data.
 - Integrate the SIS with other systems (e.g., learning management system, financial aid system).
 - Training and Deployment
 - Provide comprehensive training to students, faculty, and staff.
 - Deploy the SIS and transition from the old system.
 - Evaluate the SIS's performance and make necessary adjustments.

➤ Enterprise Security Planning

- Define Security Requirements and Objectives
 - Clearly articulate the security goals based on protecting student data, ensuring system availability, and supporting agile development.
 - Conduct a risk assessment to identify vulnerabilities and threats.
 - Establish clear performance metrics for the new appliance (e.g., intrusion detection rate, latency).
 - Specifically gather information on the most sensitive data, and where that data is stored.
- Choose a next-generation security appliance that meets the defined requirements and budget.
 - Request vendor demonstrations and proof-of-concept testing.
 - Assess features like intrusion detection/prevention (IDS/IPS), firewall capabilities, threat intelligence, and VPN support.
 - Evaluate the vendors support structure and the ease of management of the appliance.
- Prepare the network infrastructure for the new security appliance.
 - Map the existing network topology and identify critical network segments.
 - Plan for network segmentation and VLAN implementation.
- Appliance Installation and Configuration
 - Install and configure the security appliance according to best practices.
 - Thoroughly test the appliance to ensure it functions as expected.
 - Configure the appliance to protect sensitive student data.
 - Implement the appliance in a phased approach, starting with non-critical systems.

TIMELINE

Priority (1-3)	Department Goal	Action(s)	Timeline	Resources Needs	Lead
1	Network Infrastructure Design and Implementation		1.5 years	<ul style="list-style-type: none"> ▪ Network Administrator ▪ PC Technician ▪ Hardware - \$250,000 ▪ Implementation Services - \$85,000 	Network Administrator
2	Student Information System		3 years	<ul style="list-style-type: none"> ▪ Project Team ▪ Project Manager 	CIO
3	Enterprise Security Planning		2	<ul style="list-style-type: none"> ▪ Network Admin ▪ Cybersecurity Professional ▪ Hardware - \$185,000 ▪ Implementation Services - \$65,000 	CIO