

# TAFT COLLEGE TECHNOLOGY MASTER PLAN 2012-2017



A Five-Year Master Plan for Technology

## Table of Contents

<b>INTRODUCTION.....</b>	<b>1</b>
<b>BACKGROUND OF TECHNOLOGY WITHIN THE DISTRICT.....</b>	<b>2</b>
<b>TECHNOLOGY-RELATED COMMITTEES .....</b>	<b>3</b>
Information Technology Committee .....	3
Implementation Oversight Committee .....	4
Facility Committee.....	4
<b>INFORMATION TECHNOLOGY SERVICES DEPARTMENT .....</b>	<b>6</b>
<b>HARDWARE &amp; SOFTWARE .....</b>	<b>7</b>
<b>NETWORK.....</b>	<b>9</b>
<b>EQUIPMENT REPLACEMENT PLAN .....</b>	<b>10</b>
<b>DISTANCE LEARNING.....</b>	<b>11</b>
<b>ONLINE SERVICES.....</b>	<b>12</b>
<b>WEBSITE ACCESS &amp; DEVELOPMENT.....</b>	<b>14</b>
<b>MAINTENANCE AND OPERATIONS .....</b>	<b>15</b>
<b>CONCLUSION .....</b>	<b>16</b>
<b>APPENDICES</b>	
Campus Map.....	17
Classroom Inventory Information.....	18
Equipment Replacement Plan.....	19
Computer & Network Use Procedure.....	20
Communication Matrix.....	22
Information Technology Department Organizational Chart.....	23
List of Recommendations by Department/Committee.....	24

# Taft College Technology Master Plan 2012-2017

## A FIVE-YEAR MASTER PLAN FOR TECHNOLOGY

### Introduction

The West Kern Community College District Technology Master Plan was developed through a collaborative process involving the District's Technology Committee, the Facilities Committee, and various campus departments including:

- o Information Technology Services
- o Financial Aid
- o Counseling Services
- o Distance Learning
- o Student Services
- o Maintenance and Operations
- o Instructional Services

The Plan is designed to provide background, current status, and recommended actions regarding the use of all types of technology on the campus. It is a framework for decision making regarding how to best design, implement, enhance and maintain the District's technology infrastructure over the next five years. This plan will be a living document, reviewed regularly and updated every three years, with a comprehensive review every five years.

Technology is used in every imaginable way across the West Kern Community College District. From the design and delivery of instructional programs and educational content, to the delivery of services to students, faculty and staff, to the effective administration of campus operations, to communications with potential students, the community and other educational partners, technology provides a critical framework for the effective and efficient functioning of the District. As we envision new programs and services to meet the increasingly diverse needs of our students and our community, technology must be a critical aspect of our analysis. This plan represents a continuation of the District's commitment to invest in technology wisely, to manage technology effectively, and to incorporate input across the District as we seek new technology solutions to the education and business needs of the College.

### Planning Participants:

The Technology Committee, made up of a cross section of faculty and staff, meets regularly to discuss and evaluate all forms of technology on campus. The Committee brings forward technology needs and ideas from across the campus, and relays information to staff and faculty of changes taking place on campus. As the West Kern Community College District has evolved, the Technology Committee has provided a wide spectrum of suggestions ranging from the use of technology in the classroom to the email system currently used by Taft College.

Recommendations from the Technology Committee are presented to the Superintendent/President who in turn works with the Governance Council to incorporate technology initiatives in the District's planning processes and planning

documents.

This Technology Master Plan spans a five year period from 2012 to 2017 and is organized to provide background, current environment and recommendations originating from different members of the campus community. Working with the Governance Council, the Strategic Planning Committee and the Budget Committee, opportunities to introduce and enhance technology in the District will be developed, as the campus grows and moves forward.

### **Background of Technology Within the District**

Instructional technology covers systems and services that support teaching, learning, and scholarly research. Students utilize technology to apply to the College, register for classes, pay their student fees, purchase textbooks, and complete their coursework. Technology enables students to communicate with their instructors, access educational content via Distance Education, and check on the status of their grades and coursework.

Administrative systems include applications that support core business services and operations of the College such as student registration, financial aid, payroll, budgeting, and accounting. Taft College uses the power of electronic mail systems to deliver information to its faculty, staff and students.

Interactive communications such as threaded discussions are often used for specific conversations for the TC News segment or Facility News, allowing the employee to capture the entire conversation. All staff members use the email system and web site to disseminate and retrieve information. A wide range of information is created, accessed and retrieved using technology.

Common types of electronic communication on the Taft College campus includes Email, Web Based Submission Forms, Instant Messengers systems, Video Streaming Media, Voice over Internet protocol, Web Pages, and Voice mail.

To better integrate technology across the District, West Kern Community College District has chosen to focus its technology resources on the implementation of commercially available technology applications. This change to a technology "implementation" environment is a major departure from an earlier technology strategy of developing and supporting institutionally created applications such as "Campus America POISE". The most visible departure from the earlier approach was the implementation of SunGard's Banner Enterprise Resource Planning (ERP) system. The Banner System, known at West Kern Community College District as "Cougar Tracks", is an essential component of the college's administrative management information system.

The change in technology strategy was accompanied by a change in technology decision-making. Functional area managers and staff from student, instruction and administrative services now partner with the ITS Department to plan and implement technology projects. Unit managers and staff from across the District are now the "end users" who help define, implement and manage technology to better manage information and support administrative functions.

The Information Technology Committee (ITC) was created to develop procedures and support technology planning for the District. In addition to the ITC, the ITS Department has representation on many governance committees. The Chief Information Services Officer (CISO) attends the Board of Trustee meetings, visits peer colleges, and is a member of several different Community Colleges Technology groups throughout the State.

**Technology-Related Committees**

Information Technology Committee

The Information Technology Committee , originally called "The Technology Committee", was formed in the 1990's to support classroom audio-visual equipment needed for presentations. The committee provided input to the Planning Committee and the Superintendent-President to support the funding of technology in classrooms. It became the "Information Technology Committee" in 2003 and began evaluating email, dorm internet access, computer systems and instructional needs. It is comprised of various members of the college community. The Information Technology Committee's charter is to investigate, discuss, and make recommendations to the Superintendent / President on technology solutions to support student success and college operations.

*Information Technology Committee's Desired Outcome:*

Development of goals and recommendations to improve the use, deployment and support of technology for instructional programs and business operations at the college.

*Information Technology Committee's Areas of Focus:*

- Instructional Technology
- Instructional technology includes systems and services that support teaching, learning, and scholarly research.
- Administrative Information Systems
- Administrative systems include applications that support core business services and operations of the College such as student registration, financial aid, payroll, budgeting, and accounting

*Information Technology Committee Membership:*

Adrian Agundez—co chair	Director of Information Services	Information Technology Services
Linda West—co chair	Distance Learning Coordinator	Office of Instruction
Ruby Payne	Professor of Mathematics	Faculty Member
Shelley Getty	Professor of Mathematics	Faculty Member
Chad Mickelberry	Computer Support Technician	Information Technology Services
Richard Hudson	Computer Support Technician	Information Technology Services
Tiffany Rowden	Human Resources Generalist	Human Resources
Ricardo Garcia	Web Coordinator	Information Technology Services
Mark Gibson	Multimedia Network Administrator	Information Technology Services
Clarissa Espino	Integrated Support Technician	Office of Instruction



## Implementation Oversight Committee

### *Background:*

The Implementation Oversight Committee (IOC) was established in 2005 to help guide the implementation and development of the Banner project. The Taft College IOC is made up of the Superintendent-President, who is considered the sponsor of the Banner project. The Vice Presidents of Instruction, Student Services, and Administration, along with team leads and representatives from Information Technology, make up the Implementation Oversight Committee.



### *Implementation Oversight Committee Charter:*

- **Change Management:** controlling the change requests from the beginning of a project to its conclusion.
- **Defect Tracking:** development of the infrastructure to monitor defects and test the corrected versions.
- **Deployment and Distribution:** to provide a secure and controlled method of distributing products to projects technical environments.
- **Version Control:** to provide a system where all configuration changes result in a revision of the element in question.
- **Management Reporting:** to provide quantitative information on the effectiveness of the functional team and their work process and product quality.

### *Team Leads Responsibilities:*

- Define requirements.
- Ensure everyone in the organization understands the process.
- Make certain that staff members buy into both the process and the supporting tools selected. Keep the end goals in mind.
- Be knowledgeable, pragmatic and practical about what is achievable.
- Recommend training that will be required to maintain each module.

### *Recommendations:*

The Implementation Oversight Committee has made a number of recommendations regarding the implementation, maintenance and enhancement to the Banner system:

- Meet on a regular basis to promote communication, consistency in focus and oversight of Banner implementation activities
- Limit the impact on students by establishing a maintenance calendar which does not infringe on student registration time periods
- Refresh and update hardware as the original equipment, purchased with Measure A funds in 2005, has been in operation since 2006.

## Facility Committee

### *Background:*

With funding from the Measure A bond, several committees were created to oversee the expenditures and the

design of construction. The Taft College Facility Committee was established to provide direction on the use of the college facility. AP architect's introduction to new security techniques were established, including specialty locks, keys created by M&O, Code Blue, electronic badges and surveillance cameras.

*Current Environment:*

The Taft College Facility Committee is comprised of staff, faculty and management. The chair of the committee is the Vice President of Student Services. Both union and management are represented on the committee.. The committee discusses possible technology needs requested by faculty for classrooms and staff ideas on how to improve the appearance of the college. The construction placement and design provided by AP architect is also reviewed by the facility committee for functionality.

*Recommendations:*

- Install additional alarm systems on buildings with large storage areas for medical and chemical supplies, electronics and tools
- Creation of a future security department with staff to monitor cameras and alarm systems
- Develop secure printing by code or biometrics
- Develop biometric security procedures with consent forms and documents

### **Information Technology Services Department**

*Background:*

The Information Technology Services (ITS) department was formed in 2001 by the joining of the office of Multimedia Network Services and the office of Computer Services. These departments were created in the early nineties and provided a combined level of support to staff and faculty.

At that time, the Internet was still very new to this community. Each department provided information and support for either software or hardware. The Computer Services department provided MIS, Student Registration and Financial data while the Multimedia Network Services department provided computer, network and district server support. As some classrooms were converted into computer labs, the Multimedia Network Services department installed and configured the college cabling, switches and fiber segments. Eventually, it became clear that



merging these two departments would result in a higher level of service, reduce duplication of effort, and be a more efficient means of delivering technology services to the campus.

*ITS Mission Statement:*

The mission of the Information Technology Services Department is to recommend, coordinate and guide technology that supports and enhances student success and

student learning outcomes by working with faculty, staff and students. The Information Technology Services Department is involved in every aspect of the teaching, learning and operational functions of the district.

To meet our mission we will:

- Have a strong commitment to support and promote the productive use of technology
- Deliver technology solutions that will be secure, reliable and meet the college's needs
- Provide information and technology that meet integrity, quality and economic standards

- Develop positive relationships and service with all members of the college community
- Promote policies and standards that protect the district

*Current Environment:*

The ITS department provides support and programming for the new ERP system known as Banner, as well as web, Internet, phones, computers, network, servers, peripherals, copiers and electronic security support. The department is comprised of two roles:

Development: Support by programmers, DBA, web master and MIS reporting  
Operations: Support for computers, phones, copiers, teleconference and equipment ordering.

ITS replaced an older electronic work order system with Taft College Service Request (TCSR), powered by Issuetrack, a Microsoft SQL software package that receives emails for the college helpdesk and creates a work order number to track requests. As ITS has installed new equipment the Asset tracking module is being used to help track the age and location of Taft College equipment. ITS also assumed responsibility for managing the college copiers. As leases expire the department has been evaluating copier usage and transitioning departments to centralized printing. This strategy reduces e-waste and is more efficient.

As standard practice, the district requires a 3-year warranty on all computer and monitor purchases, and currently only recommends Lenovo or Apple products. The standard for both color and monochrome printing is HP laser printers. As we move forward, classroom printers will be changed out to Canon toner based printers. These types of printers will reduce the college's cost on replaceable toner cartridges and reduce the amount of E-waste.

Measure A has enabled the District to increase the number of computer labs and technology in classrooms. However, the additional audio-visual equipment and computers exceeds the capacity of the limited support staff. Additional staff is needed in both student workers and classified technicians categories if the department is to maintain the level of services to the college community.

*Recommendations:*

- Adoption of a computer replacement plan and a process for forwarding recommendations to fund computer labs and carts.
- Adoption of a paperless process to be used campus-wide, reducing the need and cost for toner, paper and waste.
- Adoption of a hosted fax solution that will eliminate campus fax machines, paper and toner and increase reliability to 99%.
- Adoption of a power saving solution that will automate the operation of computers in the computer labs to reduce or eliminate excess loss of electrical energy and generation of heat.

**Hardware / Software**

*Background:*

The legacy system of the Digital Equipment Corporation's VAX System initially provided Word Perfect word processing software to computer users at Taft College. The Computer Services Department supported and maintained this system. The Computer Services Department also supported and maintained the POISE system, which was also hosted on a VAX System. POISE was the legacy administrative system at Taft College. With the implementation of Microsoft Office and later, the Banner System, the College was able to realize opportunities

with more current technology and systems. As the campus standardized on the IBM platform, opportunities for different types of software became available to all instructional areas.

*Current Environment:*

Taft College participates in the California Community Colleges Foundation software purchases of Adobe and Microsoft software. Taft College provides Windows operating systems, Apple operating system and applications to all classrooms and departments. With the participation in the Microsoft Campus Agreement, all licenses and future upgrades are provided to Taft College with renewal of an annual contract. The ITS Department is also participating in the Microsoft IT Academy Program and is able to share training guides with students, staff and faculty. This program provides opportunities for students to take reduced cost exams for certification in Microsoft Programs. Each Taft College organizational unit can purchase its own software provided it meets the hardware standards of Taft College and is compatible with District provided software and antivirus.

*Recommendations:*

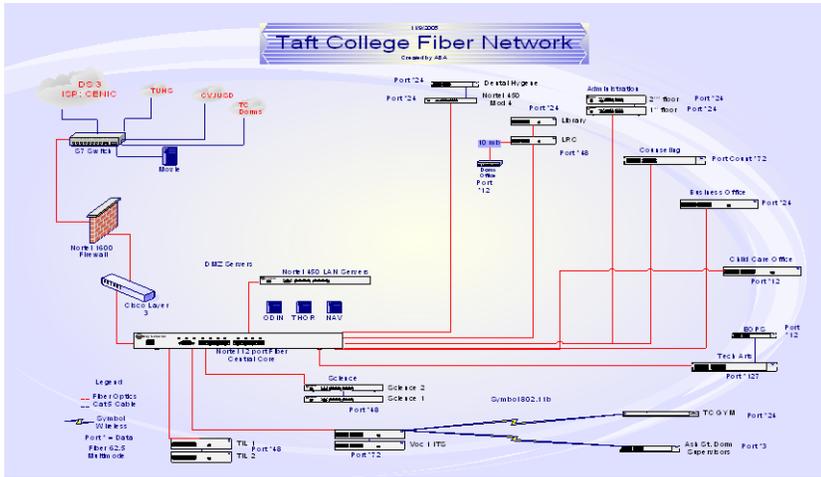
The Information Technology Services department recommends that the District create an overall software expenditure matrix by department to provide the opportunity to adjust budgets as needed without impacting contractual software costs.

### **West Kern Community College District Hardware Inventory**

238 VOIP Phones 53 IP Cameras	72 Wireless Access Points
1528 Data ports	43 Network Switches
56 Analog devices (Faxes, Code Blue, Fire Alarms, Doors.)	205 IP's on the Staff wireless (IPhones – I pads- Laptops)
688 Computers (Classroom, Staff, Faculty, Desktops and Laptops	325 IP's on the Student wireless

**Network**

A telecommunication infrastructure is a combination of physical connections, hardware, and software that provide for the transmission and reception of voice, data, and video information and services. Planning for expansion of the telecommunication network is critical if the District continues to grow in both technology and facilities. A strong telecommunications infrastructure is essential to ensure that students, staff, and faculty have access to the best technology available for teaching, learning, and overall productivity.



*Background:*

In 2006 Taft College purchased and replaced the Verizon PBX system with a Cisco VOIP system. This new system

provided for over 300 direct dial phone numbers and the opportunity for Taft College to allow individual offices to move around campus without the need for Verizon service calls. The installation of the new phone system utilized the newest technology available in the City of Taft with a digital T1 line, consisting of 24 individual channels of data communication. This feature provides for dozens of calls to be placed. Additional features provided by this technology are an increase in individual voice mail accounts for faculty and staff.

Originally, WKCCD had an assortment of Fast Ethernet switches and router.

*Current Environment:*

Network

In 2006, using Measure A funds, Taft College submitted a Request for Proposal (RFP) for a Cisco Gigabyte Core and Voice over Internet Protocol (VOIP) system. The college went from 20 direct dial phone numbers to 300 DID numbers. Over several years, after reconstruction of existing buildings and installation of new buildings, the college network backbone was upgraded from copper-based Cat.5 to newer Fiber Optic systems and Cat.6 standards. The college has benefitted from the expansion from 100 MB to a ten times faster 1 Gigabyte system. WKCCD now utilizes a CISCO network with wireless access points connecting to the network backbone.

Data Service

The district data service is provided by CENIC and was originally a series of T1 data circuits. The T1 data circuit consisted of only 1.4 MB of data and was eventually replaced in 2004 with a DS-3 circuit providing a total of 45 MB of data access to the Internet.

Communications

Communication is utilized at many different levels in the workplace from the traditional memo to newer forms of electronic messaging systems. The latest systems promote the use of skype technology, thus allowing both audio and video communication to both parties using the Internet to deliver the information.

Taft College uses electronic mail systems to deliver information to its faculty, staff and students. Interactive

communications such as threaded discussions are often used for specific conversations for the TC News segment or Facility News, allowing the employee to capture the entire conversation. All staff members at Taft College use the email system and internet web pages for dissemination and retrieval of information.

Types of electronic communication common with our campus consist of the following.

- Email
- Web Based Submission Forms
- Instant Messengers systems
- Video Streaming Media
- Voice over Internet protocol
- Web Pages

*Recommendations:*

- Use the call accounting system which was installed to monitor in-going and out-going traffic to eventually charge-backs telephone expenses to individual offices and departments.
- Assign the E-911 security feature which provides campus locations to emergency personnel to the security department.
- CISCO Informix was also installed; this product provides a college administrator with the ability to broadcast an emergency notification via all desktop phones. This feature will be included in the emergency preparedness document issued by the district.
- Install a calling tree to be used during peak registration times on campus. A calling tree is an automated phone attendant which will allow users to select appropriate departments to be called without the intervention of a receptionist or switchboard operator.
- Increase the capacity of the internet connection from the current 45MB to 1GB. Infrastructure upgrades need to be in place to provide a path for new fiber to the college MDF. The provider CENIC will need to be engaged to monitor the connection and quality of GIGMAN bandwidth.

## **Equipment Replacement Plan**

*Background:*

Purchase and replacement of computer related equipment across the District has been inconsistent over the years. Some departments have funded replacements through one-time dollars, some have used on-going resources and some have relied on department monies or grant dollars to update computer equipment on campus. Funding challenges have resulted in a significant number of PC's, printers and other equipment across the district which have become outdated and in need of replacement. An inventory report done with TCSR noted that the average age of PC's across the District is 4+ years old.

*Current Environment:*

The latest Gartner Research on PC replacement cycles indicates that 5 years should be the normal replacement cycle for desktop PC's and 3 - 4 years for laptops. At Taft College, we have an average of 4+ year old computers, meaning that at that at least half are at or past their useful life as established by Gartner.

Taft College is not keeping up with the pace of technology changes in the PC and printer arena. Some of the District computers are no longer expandable in memory or processing speed and are therefore unable to run the latest software versions of the operating system and other applications required to complete work. In classrooms, students should be training in the latest hardware and software systems, so that they can be competitive in the job market upon completion of their studies. Finally, accreditation standards require demonstration of the appropriate

resources to carry out our mission.

*Recommendations:*

- To extend equipment life, use Memory upgrades and chipset upgrades. This type of upgrade extends the life of the equipment by 1-2 more years' useful life. Not all PC's or printers are upgradeable.
- Create "next generation plans" by evaluating shelved computers and use them to replace older and failing computers.
- Establish a district plan with a minimum standard for computer-related equipment replacement, and give the campus the choice to replace more frequently or with better quality equipment. Departments that want to use grant funds to purchase equipment must remember that once the grant has expired, the equipment becomes the property of the district and may not be replaced at the end of its life with district funding.

**Distance Learning (Educational Technology, Learning Management Systems)**

*Background:*

The Taft College Planning Committee established the college's priorities for distance learning in 1998. These priorities included areas of instruction, student services, and marketing. The committee approved the creation of the Distance Learning Institute (DLI) with three lead coordinators. The coordinators generated a report with findings and recommendations in the areas of pedagogy, security/authentication, student/faculty support and resources, quality of courses, and student/faculty evaluation. Student demand for distance learning courses also increased as students were introduced to the convenience of the delivery mode known as Etudes.

The Etudes learning management system was adopted as the primary mode of delivery for online courses. Also, offline distance learning courses were designed to meet the needs of the inmate population at the nearby Taft Correctional Institution, where Taft College has provided a computer lab for inmates to achieve their educational goals.

*Current Environment:*

Annual analyses of Taft College students indicate that distance learning students have been steadily increasing in number at the present time; approximately 40% of Taft College's student enrollments are through distance learning. The College offers seventeen (17) degrees and eleven (11) certificates through distance learning, many use the latest in technology such as wiki's and IPAD applets.

Although the majority of our distance learning courses utilize Etudes, some courses in the math and science area utilize the Moodle Learning Management System. At this time, the Integrated Technology Support Technician in the Distance Learning Faculty Support area has assumed the responsibility of creating Moodle course shells for those instructors who utilize them in their online courses.

The Distance Learning Instructional Support Unit focuses on two areas: support for instructors teaching through the Etudes learning management system, and coordination of Taft College instruction at the Taft Correctional Institution. As previously stated, roughly 40% of Taft College's enrollments are through distance learning and it is essential that we continue to provide a high level of support.

Resources to promote student success are available online and by telephone. The Distance Learning Help Desk is staffed by a Distance Learning Academic Advisor who is accessible by telephone during normal business hours. After hours, students may contact the Help Desk by email. Students who are unable to drive to campus may schedule telephone advising appointments.

The Taft College Tutoring program support students enrolled in distance learning courses. Tutoring for distance-learning students is conducted by phone and through Skype (via webcam). Students may also arrange a tutoring session on-campus.

Course success rates for on-campus and distance learning courses were fairly consistent across the past five years. The course success rates for distance learning were about 10% lower on average than on-campus courses. One-year retention rate is defined as the percentage of students enrolled in one academic year who returned to enroll in the following academic year. The one-year retention rates are very similar for face-to-face and distance learning students over the same five year period.

*Recommendations:*

The Distance Learning Program at Taft College has a long and successful history and many of the components contributing to that success are already in place. Recommendations for continued improvement and expansion include:

- The Distance Learning Coordinator should oversee a redesign of the Distance Learning Web pages to ensure the information is current and relevant to student needs.
- The Distance Learning Coordinator should continue to provide ongoing training opportunities for distance learning faculty. In addition, the Coordinator should consider reinstating “brown bag” lunch sessions for the purpose of exploring successful online teaching strategies and pedagogy.
- The Coordinator of Counseling and Matriculation, with the support of the Vice President of Student Services, should explore extending the hours of Help Desk staffing during peak times.
- The district should consider hiring an instructional technologist to support faculty who want to implement technology in both the online and face-to-face classroom.

The screenshot shows the Etudes website interface. At the top left is the Etudes logo. At the top right are input fields for 'user id:' and 'password:' with a 'Login' button. Below the header is a navigation menu with links: Welcome, System Requirements, Login & Other Help, Reset Password, Sites, and About. The main content area features a 'MESSAGE OF THE DAY' section with the title 'Stay in touch with your Etudes courses with inTouch!'. The message text reads: 'Etudes is pleased to announce the release of a mobile app of Etudes for the iPhone, iPod touch, and iPad. Get the inTouch app from the Apple Store today, at no additional charge to yourself and start using it! Once you install it, just enter your existing Etudes userid and password. Learn more: <http://etudes.org/release/intouch/inTouch-app.htm>'. Below this is a 'New User?' section with instructions: 'Please refer to your institution's login formula for your userid and password. See Login & Other Help (left) for tips and how to reach your campus help desk. Review System Requirements before getting started.'

## Online Services

*Background and Current Environment:*

Online Services offer important resources for students taking both distance learning and on-campus classes. It has been the goal of the Student Services department to automate as many of the services as possible. This allows our students to complete the majority of what is necessary to attend Taft College anywhere they have access to the Internet. If students do not have technology available to them, they are provided with access to computers found in various locations on campus like the library and the student services building. In addition, we still offer telephone and in person services for the students not yet comfortable with the Internet.

The majority of our first time students use the online services located on our website to apply for admission to the college, make an appointment with a counselor, and determine the classes they wish to complete, register for those classes, view their financial aid award, pay their fees, and print a receipt. Students continue to use additional services throughout their time at the college as the need arises. Some of these services include dropping classes they no longer wish to attend, viewing their student schedule, checking registration status, buying books for classes, and printing an unofficial transcript. In addition to online services for students, faculties teaching both distance learning and/or on-campus classes have access to submit their grades online, access their class roster online, which includes student contact information, and submit actual hours of attendance online. Faculty also has important deadline dates available on their rosters which notify them of census. All faculty members are using online technology for these services.



Most communication with students and faculty is now completed using email. We have also begun using our automated call system (SARS call) for registration messages and updates. Our email system Outlook has a limit of 500 emails per day; SARS email system does not have that restriction.

### Admissions & Records

Admissions & Records has continued to expand its automated offerings to assist students completing their varied transactions online. All students apply for admission online using the CCCApply application with the exception of students applying under the age of 13 or students that have never used a computer before. Students use CougarTracks for the following online services: registration, payment, search for open classes, grades, update email addresses, printing unofficial transcripts.

Students will also have the ability to request enrollment verifications, official transcripts including electronic transcripts, and degree verifications using vendor, National Student Clearing House. This service is still in the implementation phase. Students can make requests 24 hours per day, 7 days per week to verify enrollment or degree status requested by 3rd party entities like insurance companies or employers, and will eliminate the researching and distribution of this type of information by the Records staff. This service will also cut down on postage, envelopes and transcript paper as we will be processing electronic transcripts. Students will still be able to come to the window and get the same services as before.

The degree audit system, DegreeWorks was built by Records and Counseling over the last two years. There have been many challenges with the system with errors and upgrades and we are still working out some bugs with nightly extracts before bringing it live to the students. All majors and certificates have to be scribed by class so the system will pull the correct degree or certificate information when the audit runs. Student coursework is integrated into DegreeWorks from Banner to issue an audit report of a student's progress towards degree completion. The degree audit report provides students with information that indicates what classes they have completed towards their chosen academic program, courses currently in progress here at Taft College, and transfer course work taken from other colleges.

The report also shows students what courses they still need to complete in order to obtain their Associate degree or certificate. The system also has the ability for a student to check other degree or certificate programs they are interested in and view what courses are still needed towards that academic option. Counselors create an educational plan in the system that helps the student stay on track when registering for classes and provides a completed degree audit when a student petitions for graduation.

Email has become the main communication mechanism between Admissions & Records and students. Students are now contacted by both email, and automated phone blasts for important information regarding registration updates, payment deadlines, and an email is sent when waitlisted seats become available.

The Admissions & Records website provides information to potential and current students to assist them in all facets of the college, from application for admission and registration to classes, to obtaining grades, relevant academic policies and basic information to assist them to be successful as a student.

### Financial Aid

It is the goal of Taft College's Financial Aid Office that no student be denied access to our quality educational programs due to a lack of funds. In order to ensure students are able to acquire necessary funding we offer the following:

From the Taft College Financial Aid Webpage students can access links pertaining to general financial aid information, Taft College financial aid abbreviations and definitions, financial aid facts, FA TV, Taft College and outside scholarship opportunities, financial responsibility information and also link to the FAFSA online application. Additionally, through our Student Information Systems, Cougar Tracks, students can view the status of their financial

aid application, view outstanding requirements, download needed documents, view their financial aid academic standing, view their account summary by term, view their awards by aid year, view payment schedules and award overview and history.

Recommendations:

The following recommendations should be considered as potential new modes of technology to the online services areas:

- Provide DegreeWorks audit to students through access on CougarTracks.
- Research the process for faculty to drop students from their classes online for census through CougarTracks. This process was implemented and had to be aborted midway through census since faculty could not view the information with the system running so slow.
- Research the process for students to apply for graduation online through CougarTracks.
- Research the process for students to update their address, phone number, email, and emergency contact information online through CougarTracks without having to fill out a form and send it into the campus.
- Create an online version of the Board of Governor's Fee Waiver (BOGW) form using CCC Apply so that information supplied by students on their admissions application can be auto filled into the BOGW form. After meeting certain criteria, many students apply for this financial aid waiver program, which pays for enrollment fees.
- Consider offering financial aid forms that students can complete and submit online.
- Send award notifications via email instead of through the mail to reduce the time it takes to notify students and reduces costs.



## Website Access and Development

*Background:*

In the summer of 2007, the main Taft College website had a yellow background with a green mountain logo as the template for most web pages. Since then the main college template has undergone several redesigns.

Current Environment:

Taft College provides hosted web pages of district information and services to students and community members via a Windows 2003 OS running on a single server. Publishing access to create web pages on the web server is provided to select academic departments, administrative offices and special purpose groups via various content management systems (CMS) including Word press and other proprietary web applications. Faculty members will be able to create and maintain their own websites using CMS applications. Connections to enable the web publishing process are made on standard web browsers through secured user logins, File Transfer Protocol (FTP).

The colleges WWW Uniform Resource Locator (URL) or web address is currently <http://www.taftcollege.edu>.

In addition to the main web server, there are several other servers, which provide more specialized services to the college and local community. A standard naming convention system has been established for web addresses pertaining to the various administrative and academic departments in addition to individual faculty member websites.

The web address naming convention for academic departments is in the form:

[http://www.taftcollege.edu/department\\_name](http://www.taftcollege.edu/department_name).

For example, the web address for the Office of Instruction would be <http://www.taftcollege.edu/instruction/>. The faculty websites will follow a slightly different convention, [dl-prod.taftcollege.edu/faculty\\_member\\_name/](http://dl-prod.taftcollege.edu/faculty_member_name/). For example, a faculty member with name John Doe, would have a URL of [dl-prod.taftcollege.edu/jdoe/](http://dl-prod.taftcollege.edu/jdoe/) (first initial of first name, lastname).

[http://cougar102.taftcollege.edu:9020/prod8/twbkwbis.P\\_WWWLogin](http://cougar102.taftcollege.edu:9020/prod8/twbkwbis.P_WWWLogin)

Self Service Banner (SSB) is used by Students, Faculty and Staff to manage their personal information.

<https://sars.taftcollege.edu/SARSAAlert/Login.aspx>

SARS Early Alert: Faculty can identify students who are having academic, behavioral, personal, or enrollment difficulties, connect them with support services for appropriate interventions, and receive feedback on actions taken.

<http://www.taftcollege.edu/tcwp/instruction/>

The Office of Instruction content management system where users can publish, edit and maintain web pages pertaining to the Office of Instruction through any standard web browser.

<http://www.taftcollege.edu/tcwp/its/>

The Information Technology Services website allows college faculty, staff and students to be aware of the status of all ITS services for the college. <http://tcsr.taftcollege.edu/TrakHome.asp>. Issuetrak is an application that tracks and organizes service requests from employees.

#### *Recommendations:*

- Some of the servers, which house high traffic websites, are approaching end of life cycles. They should be replaced with new and improved servers with more powerful hardware and software specifications. Certain applications have specific software and hardware requirements.
- The college should invest in a virtual server system, which would enable a considerably improved computing environment. These virtual servers would run on more powerful hardware designations allowing faster and more robust web experiences. This would also facilitate the development of more cutting edge web applications and their testing environments for emerging technologies such as web applications run on mobile devices.
- Some of the most visited webpages should be put into the “cloud” where they would be housed on servers that are maintained by a third party company in a physically separate location. Taft College home page, class schedule page, Office of Instruction shell webpages are examples of highly visited webpages. This setup would also have an added benefit of supplying a backup solution for disaster recovery. With power outages or Internet disruptions locally in Taft the Internet based webpages will be available the college’s presence would not disappear from the Internet.

## **Maintenance and Operations**

### *Background:*

Taft College Maintenance and Operations maintains the college’s individual buildings and provided limited improvements due to low funding opportunities. The college’s lighting systems were controlled by either a time clock system at each building or photoelectric sensor mounted on the buildings. During the nineties installation of individual energy controllers were installed on all building’s air conditioning systems and the central controller was installed in the college phone room and connected to dial up modems.

*Current Environment:*

During the summer of 2007 the campus installed a central plant for the cooling of campus buildings. Along with the central plant we installed an energy management system to control room temperatures and electronically control operating schedules to run. The campus also added a controller to manage lights on campus and in offices. These systems are controlled by a software package allowing the planning of special events. This new system is networked and available for updates from the Internet using the college's VPN access.

The Maintenance Dept. was using three copy carbon paper work orders and in mid-2011 we converted over to a paperless system using a hyperlink on the college website. This link sends the user to [myschoolbuilding.com](http://myschoolbuilding.com) and allows them to fill out a work order. Now all work orders and requests are processed with a completion notification sent back to the originator via email.

The Maintenance Dept. has moved into a new facility to house equipment and personnel. Originally M&O was stationed in assorted mobile buildings that we over 30 years old and no longer safe.

*Recommendations:*

- Maintenance & Operations is currently working on implementing a paperless preventative maintenance program that will track maintenance schedules of equipment and also life expectancy of equipment. We are planning on implementing this new PM component once all of the information and data is available. This project may become an operational goal for the 2012 – 2013 school year.

**Conclusion:**

This Master Plan will provide a path for the college for the next five years. This plan should be considered a living document that will be reviewed by the Information Technology Committee annually. New recommendations will be incorporated into the document with the approval of the planning committee. See appendix #7 on page 24. The Board of Trustees has always supported the ongoing development of technology for education. Their support of the reconstruction and adoption of new technology and course material has made Taft College a modern and state of the art institution.

As the District completes its construction projects through the remainder of Measure A funding, the district must review all areas of the college and provide continued financial support to many of the products and technologies that were originally funded. The ITS department will provide information to the ITC Committee and work with faculty to identify the need for additional technologies on the campus. This Technology Master Plan is a guide to the identification, development and implementation of technology at the West Kern Community College District and is designed to support the overarching Strategic Plan for the District.



**2. Classroom Inventory Information:**

Classroom	Computers	Monitors	Laptops
G8			20 Lenovo Laptops
G9	24 Allinone pc		
G10	24 Lenovo Desktops	24 Viewsonic 19"	
Science 4			30 Lenovo Tablets
Science 6			30 Lenovo Tablets
Science 7			30 Lenovo Tablets
T5	35 Lenovo Desktop	35 Viewsonic 17"	
T10	20 Imacs		15 Lenovo Laptops
T14	33 Lenovo Desktops	33 Viewsonic 17"	
T15	35 Lenovo Desktops	35 Viewsonic 17"	
Library Commons	23 Lenovo Desktops 4 Imacs	23 Viewsonic 19"	20 Lenovo Laptops
Library Math Lab	10 Lenovo Desktops 4 Imacs	10 Viewsonic 17"	
Library Writing Lab	8 Lenovo Desktops	8 Viewsonic 17"	
SSS Hi Tech Lab	10 Lenovo Desktops	10 Viewsonic 17"	

### 3. Equipment Replacement Plan

The Information Technology Committee recommends the following minimum replacement schedule:

<b>Equipment</b>	<b>Minimum Replacement Cycle</b>
Classroom Desktop Computers	3 Years
Classroom Carts (laptops, iPads, tablets)	3 years
Faculty/Staff Desktop Computers	5 Years with an interim evaluation
Servers/Blades/Upgrades	4 Years
Mouse/Keyboard	As Needed
Monitors	4 Years
Network Capable Printers	7 Years
Non-network Capable Printers	Replace with Network Capable Printers
Audio Visual Classroom Systems	7 years

## **4. Computer and Network Use Procedure**

- I. Introduction
- II. Rights and Responsibilities
- III. Right to Privacy
- IV. Enforcement

### **I. Introduction**

In order to comply with federal and state regulations, laws, and harassment mitigation policies, educational organizations are compelled to establish Internet safety guidelines and procedures for the appropriate use of computer systems.

### **II. Rights and Responsibilities**

Use of computers, services and networks owned by West Kern Community College District (WKCCD) is a privilege governed by certain regulations and restrictions as defined by the college as well as all applicable federal, state and local laws.

The user agrees to abide by the regulations set forth in this document. This means that the user agrees to behave responsibly according to the standards established by WKCCD and this document while using college systems and network resources. Examples of conduct that violate this document are listed in Appendix A.

### **III. Right to Privacy**

WKCCD supports each individual's right for personal communication; however, messages on computing resources are accessible to others through normal system administration activities and to the public through public records laws. Therefore WKCCD cannot guarantee privacy of electronic communication.

The system administrator reserves the right to monitor the usage of all network resources to ensure compliance with college policies, and federal, state and local laws. User files may be subject to search by law enforcement agencies under court order if such files contain information which may be used as evidence in a court of law.

WKCCD users are expected to comply with copyright and intellectual property laws.

Users who become aware of any violation should notify the proper authorities. These authorities include the appropriate administrative areas, the Office of the President/Superintendent and/or the local police.

### **IV. Enforcement**

Violations of this procedure will be reported to the appropriate administrator and, if warranted, the appropriate civil authorities. Non-compliance may also result in the loss of access to computer resources.

### **V. Disclaimer**

Do not leave your equipment unprotected. WKCCD is not responsible for damage or theft.

WKCCD is not responsible for damage to your equipment due to any power problems.

The district does not service personal computers nor provide technical support for personal devices.

## Appendix A

Conduct which violates this procedure includes, but is not limited to the activities in the following list:

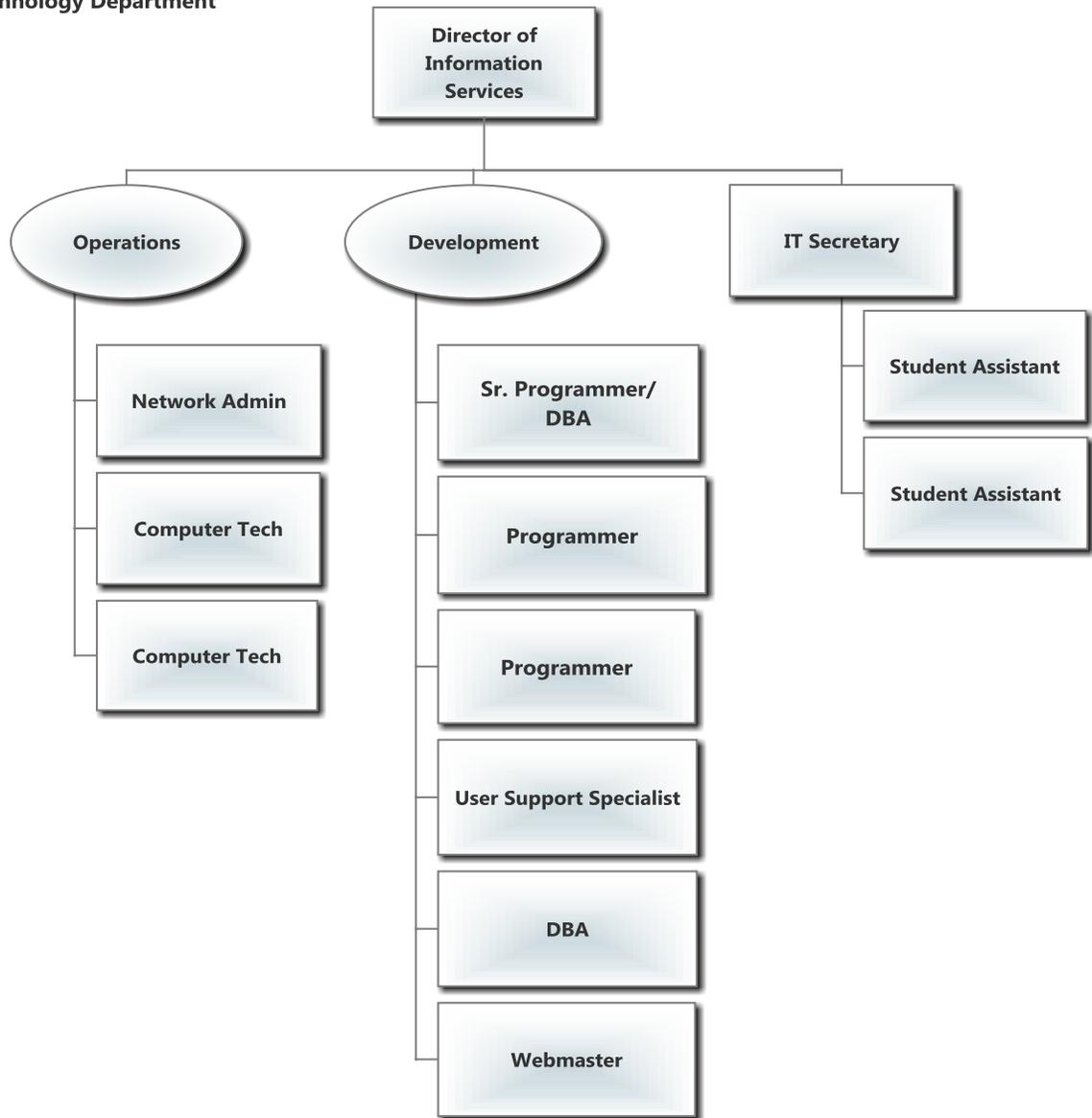
- Unauthorized use of a computer account.
- Using the Campus Network to gain unauthorized access to any computer systems.
- Connecting unauthorized equipment to the campus network.
- Personally owned wireless access point or wireless device acting as an access point for use on campus.
- Unauthorized attempts to circumvent data protection schemes or uncover security loopholes. This includes creating and/or running programs that are designed to identify security loopholes and/or decrypt intentionally secure data.
- Knowingly or carelessly performing an act that will interfere with the normal operation of computers, terminals, peripherals, or networks, e.g., deleting programs or changing icon names.
- Knowingly or carelessly running or installing on any computer system or network, or giving to another user a program intended to damage or to place excessive load on a computer system or network. This includes, but is not limited to, programs known as computer viruses, Trojan Horses, and worms.
- Deliberately wasting/overloading computing resources, such as printing too many copies of a document.
- Violating terms of applicable software licensing agreements or copyright laws.
- Violating copyright laws and their fair use provisions through inappropriate reproduction or dissemination of copyrighted text, images, etc.
- Using college resources for commercial activity, such as creating products or services for sale.
- Using electronic mail to harass or threaten others. This includes sending repeated, unwanted e-mail to another user.
- Initiating or propagating electronic chain letters.
- Inappropriate mass mailing. This includes multiple mailings to newsgroups, mailing lists, or individuals, e.g. "spamming," "flooding," or "bombing."
- Forging the identity of a user or machine in an electronic communication.
- Transmitting or reproducing materials that are slanderous or defamatory in nature or that otherwise violate existing laws or college regulations.
- Attempting to monitor or tamper with another user's electronic communications, or reading, copying, changing, or deleting another user's files or software without the explicit agreement of the owner.
- Transmitting pornographic material.
- Pirating of computer software.

**5. Communication Matrix:**

Communication-Matrix	Purpose	Frequency	Format	Medium	Membership
Implementation Oversight Committee	Charge / Overview / Risks; 1. High level decisions (people, responsibilities, cross-departmental prioritizations), 2. Money / Budget, 3. District Policy, 4. External Restraints, 5. Add-ons (additional system purchases), 6. Approve existing Disputes	Monthly (3rd Thursdays, 2:00 p.m. Boardroom)	Meeting	Meeting Agenda, Proposals for review, new business, functional issues resolutions, new change management procedures, etc. Meeting Minutes for approval	President VP's Team Leads Appointed members
Information Technology Committee	Review pending activities, identify issues, and identify planned activities for the campus.  Recommend procedures and solicit ideas	Monthly (3 <sup>rd</sup> Friday, 10 am, TBA)	Meeting	Meeting Agenda, Proposals for review, new technology  Analysis.  Review of procedures, etc. Meeting Minutes for approval	ITS Members Staff Members Faculty Members Admin or Management Members
Emails	Issue identification, event notification, task communications between team members and/or outside resources,	Continual	Electronic	Email distribution groups defined by project team, leads, stakeholders	ITS Members All Campus users
Phone Calls	Questions, clarifications, issue discussion, conference call meetings, Note: does not provide written account of decisions	Continual	Verbal	Phone, Voicemail	ITS Members All Campus users
Direct, Face to Face Conversations	Questions, clarifications, issue discussion, conference call meetings, Note: does not provide written account of decisions	Continual	Verbal	In-person, Video conf. call	ITS Members All Campus users
TCSR Submission	Submit request for needed resource; event notification, task communications.  Provides scheduling and tracking reports	Continual	Electronic	Email to <a href="mailto:helpdesk@taftcollege.edu">helpdesk@taftcollege.edu</a>  Log on to website TCSR.taftcollege.edu.	ITS Members All Campus users

## 6. Information Technology Department Organizational Chart

### Information Technology Department



## 7. RECOMMENDATIONS

Department/Committee	Recommendations
<u>Implementation Oversight Committee</u>	<p>Recommendations regarding the implementation, maintenance and enhancement to the Banner system:</p> <ul style="list-style-type: none"> <li>• Meet on a regular basis to promote communication, consistency in focus and oversight of Banner implementation activities</li> <li>• Limit the impact on students by establishing a maintenance calendar which does not infringe on student registration time periods</li> <li>• Refresh and update hardware as the original equipment, purchased with Measure A funds in 2005, has been in operation since 2006.</li> </ul>
<u>Facility Committee</u>	<ul style="list-style-type: none"> <li>• Install additional alarm systems on buildings with large storage areas for medical and chemical supplies, electronics and tools</li> <li>• Creation of a future security department with staff to monitor cameras and alarm systems</li> <li>• Develop secure printing by code or biometrics</li> <li>• Develop biometric security procedures with consent forms and documents</li> </ul>
<u>Information Technology Services Department</u>	<ul style="list-style-type: none"> <li>• Adoption of a computer replacement plan and a process for forwarding recommendations to fund computer labs and carts.</li> <li>• Adoption of a paperless process to be used campus-wide, reducing the need and cost for toner, paper and waste.</li> <li>• Adoption of a hosted fax solution that will eliminate campus fax machines, paper and toner and increase reliability to 99%.</li> <li>• Adoption of a power saving solution that will automate the operation of computers in the computer labs to reduce or eliminate excess loss of electrical energy and generation of heat.</li> </ul>

<p>a. <u>Hardware / Software</u></p>	<ul style="list-style-type: none"> <li>• The Information Technology Services department recommends that the District create an overall software expenditure matrix by department to provide the opportunity to adjust budgets as needed without impacting contractual software costs.</li> </ul>
<p>b. <u>Network</u></p>	<ul style="list-style-type: none"> <li>• Use the call accounting system which was installed to monitor in-going and out-going traffic to eventually charge back telephone expenses to individual offices and departments.</li> <li>• Assign the E-911 security feature which provides campus locations to emergency personnel to the security department.</li> <li>• CISCO Informix was also installed; this product provides a college administrator with the ability to broadcast an emergency notification via all desktop phones. This feature will be included in the emergency preparedness document issued by the district.</li> <li>• Install a calling tree to be used during peak registration times on campus. A calling tree is an automated phone attendant which allows users to select appropriate departments to be called without the intervention of a receptionist or switchboard operator.</li> <li>• Increase the capacity of the internet connection from the current 45MB to 1GB. Infrastructure upgrades need to be in place to provide a path for new fiber to the college MDF. The provider CENIC will need to be engaged to monitor the connection and quality of GIGMAN bandwidth.</li> </ul>
<p><u>Distance Learning</u> (Educational Technology, Learning Management Systems)</p>	<ul style="list-style-type: none"> <li>• The Distance Learning Coordinator should oversee a redesign of the Distance Learning Web pages to ensure the information is current and relevant to student needs.</li> <li>• The Distance Learning Coordinator should continue to provide ongoing training opportunities for distance learning faculty. In addition, the Coordinator should consider reinstating “brown bag” lunch sessions for the purpose of exploring successful online teaching strategies and pedagogy.</li> </ul>

	<ul style="list-style-type: none"> <li>• The Coordinator of Counseling and Matriculation, with the support of the Vice President of Student Services, should explore extending the hours of Help Desk staffing during peak times.</li> <li>• The district should consider hiring an instructional technologist to support faculty who want to implement technology in both the online and face-to-face classroom.</li> </ul>
<p><u>Financial Aid</u></p>	<p>The following recommendations should be considered as potential new modes of technology to the online services areas:</p> <ul style="list-style-type: none"> <li>• Provide DegreeWorks audit to students through access on CougarTracks.</li> <li>• Research the process for faculty to drop students from their classes online for census through CougarTracks. This process was implemented and had to be aborted midway through census since faculty could not view the information with the system running so slow.</li> <li>• Research the process for students to apply for graduation online through CougarTracks.</li> <li>• Research the process for students to update their address, phone number, email, and emergency contact information online through CougarTracks without having to fill out a form and send it to the campus.</li> <li>• Create an online version of the Board of Governor's Fee Waiver (BOGW) form using CCC Apply so that information supplied by students on their admissions application can be auto filled into the BOGW form. After meeting certain criteria, many students apply for this financial aid waiver program, which pays for enrollment fees.</li> <li>• Consider offering financial aid forms that students can complete and submit online.</li> <li>• Send award notifications via email instead of through the mail to reduce the time it takes to notify students and to reduce costs.</li> </ul>
<p><u>Website Access and Development</u></p>	<ul style="list-style-type: none"> <li>• Some of the servers which house high traffic websites, are approaching end of life cycles. They should be replaced with new and improved servers with more powerful</li> </ul>

	<p>hardware and software specifications. Certain applications have specific software and hardware requirements.</p> <ul style="list-style-type: none"> <li>• The college should invest in a virtual server system, which would enable a considerably improved computing environment. These virtual servers would run on more powerful hardware designations allowing faster and more robust web experiences. This would also facilitate the development of more cutting edge web applications and their testing environments for emerging technologies such as web applications run on mobile devices.</li> <li>• Some of the most visited webpages should be put into the “cloud” where they would be housed on servers that are maintained by a third party company in a physically separate location. Taft College home page, class schedule page, Office of Instruction shell webpages are examples of highly visited webpages. This setup would also have an added benefit of supplying a backup solution for disaster recovery. If local power outages or Internet disruptions occur, the Internet based webpages would be available and the college’s presence would not disappear from the Internet.</li> </ul>
<p><u>Maintenance and Operations</u></p>	<ul style="list-style-type: none"> <li>• Maintenance &amp; Operations is currently working on implementing a paperless preventative maintenance program that will track maintenance schedules of equipment and also life expectancy of equipment. We are planning on implementing this new PM component once all of the information and data is available. This project may become an operational goal for the 2012 – 2013 school year.</li> </ul>



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