

CELTT TECHNOLOGY SERVICES AT THE COLLEGE

CELTT provides the core and the majority of technology services at the College. The following is a description of its structure, services, and training it provides (with other campus departments) for UH System, UHCC System, and College technologies.

I. CELTT Service Units

There are eight major service units under CELTT. Staff is assigned to work in these units as their primary area of responsibility. However, based upon expertise and workload, staff members will support and work within other units as the need arises.

Front Lobby Desk

Front Lobby services are available to staff and faculty on a daily basis. Services include photocopying, computer access and printing. Front Lobby staff support these services. The Front Lobby staff also assists staff and faculty in submitting help requests for the Customer Care Center. The Secretary and part-time student assistants staff the Front Lobby.

Customer Care Center

The Customer Care Center supports staff and faculty with computer repair, troubleshooting, software install, and training. The Customer Care Center also provides equipment set-up, equipment loan, and classroom support. There are two full-time staff and two part-time student assistants in the Customer Care Center.

Information Security

CELTT is responsible for notifying the College on best practices for safeguarding sensitive information. CELTT investigates any reported breach of information security and keeping information secure. Sensitive information scans are run on all servers on a regular basis.

Networking

There is one Networking staff who is responsible for networking infrastructure. A key responsibility is protecting the network and its computers from security risks.

Instructional Support Services

The Instructional Support Services unit provides faculty consultation on instructional design for courses. The Instructional Support Services unit also provides Lualaba support, instructional software support, video production services, 'Ōlelo TV production services, HITS service, and transcription services. There are two full-time staff and one part-time student assistant in the Instructional Support Services unit. A CELTT faculty member oversees this unit.

Digital Systems

There is one Digital Systems Specialist that supports both instructional and College-wide IT support. On the instructional side the Digital Systems Specialist oversees multimedia production for courses. On the IT side the person supports both Networking and the Customer Care Center.

Technology Consultation Services

Technology Consultation Services provide staff, faculty, and departments with advice on the purchase of computer, video, audio, printer, projection, and other technology related devices. There is one full-time staff providing consultation services.

Web Development Team

The Web Development Team is responsible for the College's public and intranet websites. They manage the websites and train College personnel on how to update information. There are two full-time staff and one part-time student assistant on the team.

Graphics Production

Graphics Production provides graphics design services for the College. There is one full-time staff person supporting this service.

II. Campus Support of Information Technology Services Provided by CELTT

The College deploys a variety of technologies that enhance the learning environment and support administrative operations.

Computer Labs

There are forty-four (44) labs and student work areas across the College with a total of 858 computers. Courses, programs, and departments use these labs for instruction. Departments and programs use their own financial resources to buy the computers and related technology. Some departments and programs have an IT support position in their unit. Individuals in these positions work with their respective department chair or program coordinator to purchase computers and maintain the labs. CELTT staff work closely with these individuals to ensure appropriate technology is purchased and maintained. A review of all labs, including maintenance and upgrades, is done on a semester basis. Additional consultation is conducted as the need arises, and service provided by the Customer Care Center.

Technology in the Classroom

There are ninety-two (92) classrooms and meeting areas across the College that have a mix of technology. A typical set-up consists of a desktop computer, DVD/CD player, speakers, and a projector. Departments and programs use their own financial resources to buy the various components. CELTT staff will work with department chairs and instructors to maintain these systems.

Operational Computers

There are many computers used by individual staff, faculty, and administrators purchased using their own financial resources. The Customer Care Center provides software installation, training, and hardware repair as requested by the user.

Campus Servers

CELTT manages twenty-eight (28) College servers and five (5) test servers. The servers are used to run institutional services such as College websites, terminal services, networking services, and file sharing. The test servers are used to test server systems and for experimentation. The servers are located across the College in secure locations. Air conditioning for these locations is designated to run 24/7. Back-up power is provided by uninterruptible power supply (UPS) systems that run for approximately one hour, which allows time for shutting down the servers properly during a power interruption. Some of the servers have remote management capability. Data backup is done on a regular basis and ranges from daily, weekly, or monthly depending on the purpose of the server. The CELTT Networking staff tests, maintains, and upgrades the servers. One of the server rooms has been experiencing a number of air conditioning failures and power outages, affecting service to the College. A review of this room and building is required to improve reliability.

Some faculty and departments run their own servers. Faculty and departments must notify CELTT if they plan on setting up a server. CELTT informs these server owners of all applicable laws, standards, and policies that must be adhered to. The owners are responsible for maintaining and upgrading their servers.

Video Conferencing

Two video conference rooms are available at the College. These rooms have standards-based video conferencing capabilities for meetings. One is in the Naio building and the other is in the Library. The CELTT Customer Care Center staff and the Library staff manage and support the operation of these rooms. The CELTT Networking staff is responsible for the networking infrastructure.

Video conference systems are also owned by departments and programs for their specific use. Department and program staff are responsible for managing and operating these systems. The CELTT Networking staff is responsible for the networking infrastructure.

Network Infrastructure

A fiber backbone connects the College to ITS. There are thirty-six (36) networking closets at the College. Fiber is primarily used as a connection between buildings. Copper is primarily used to run from a networking closet to individual offices and classrooms. 95% of the buildings have 1Gb to the networking closets and 100Mb to the desktop. UPS systems are used as backup power supply during brief power outages up to ½-hour. The future upgrade plan is to have 10Gb to the networking closets and 1Gb to the desktop.

CELTT networking staff is responsible for maintaining and upgrading the networking infrastructure.

Network Photocopy Services

Auxiliary Services has entered into a contract to provide the College with network photocopy machines with multifunction capability. CELTT is working with Auxiliary Services to deploy these machines. Auxiliary Services has the authority over paper duplication services. Networking and information security of the machines is under the responsibility of CELTT.

College Websites

There are two primary College websites: a public website and an intranet website. The public website contains information designed for public consumption. It includes general College information, degree award information, program information and advisories. The intranet contains information valuable to staff, faculty, and administrators, but which is not intended for public dissemination. The CELTT Web Development Team is responsible for maintaining and upgrading the websites. The Web Development Team is currently redesigning the College's public website, and is scheduled to redesign the intranet website.

Portable Electronic Devices

Portable electronic devices are becoming prevalent in the educational setting. The University of Hawai'i Information and Technology Services (ITS) allows a user to register and connect up to ten (10) personal portable devices to access the wireless network system wide. The Library assists student users to register their devices with ITS. The Customer Care Center provides assistance to faculty and staff in registering their devices with ITS.

Faculty and programs have expressed interest in using portable devices in a classroom setting. CELTT is exploring the possibility of supporting College-owned devices for students to use.

iPads, or any other current portable electronic device, by themselves are limited in use. The applications installed are what add value to the iPad. To download an application requires a user account and credit card information. It is a question of whose user account will be used, and whose credit card information is provided.

The consensus of instructors CELTT has consulted state that the College should pay for the iPad. The user account should be the instructors or the students, and the College should provide the credit card information; the College should pay for the applications since it is work or school related. This proposes several dilemmas.

The credit card information remains on the device. There is no oversight as to what application is purchased for download. After a purchase is made, the question remains as to who "owns" the application. The College may have paid for the application, but it resides under the faculty or student account. By Apple's and Microsoft's stated agreement the account holder (the faculty or student) is free to use the application on other devices, either College owned or personal. The management of this "ownership" becomes difficult for the College. Further research is needed before finalizing College policy.

Information Security

CELTT is responsible for ensuring the College is advised of best practices and procedures regarding securing sensitive information, both electronic and on paper. CELTT responds to all

reported breaches of security and files a formal report. Its networking staff ensures the maximum level of security is provided while still allowing members of the College to do their work. Strategies include placing network access behind firewalls, reminding users to keep computer system up to date, and having users install and run anti-virus software on a regular basis.

Americans with Disability Act

The College ensures compliance with the Americans with Disabilities Act of 1990, section 504 of the Rehabilitation Act, and the spirit of the law as defined under section 508 of the Rehabilitation Act. It is a priority to provide equitable access for all students enrolled at the College. CELTT works closely with the Disability Support Services Office (DSSO) to define what assistive technologies the College supports.

Phone System

The College employs an IP PBX phone system and an analog trunk tied to the PSTN system. The IP PBX is used as the primary system for day-to-day operations. It is a voice-over-IP (VOIP) system and provides answering machine function, automatic call accounting, caller ID, conference calling, and remote supervision. The analog trunk is available as a back-up emergency response system where power to an individual phone is provided directly through the phone cable from the central system. Unlike the IP PBX system, it does not rely on an IP network switch to provide power. Individual phones connected to this system are strategically located throughout the College.

Auxiliary Services has authority over these systems. CELTT Networking staff has the responsibility for maintaining and upgrading these systems. CELTT Customer Care Center provides user training and support for these systems.

2-Way Radio Communications

The primary use of 2-way radios is to allow personnel to respond to College emergencies. The secondary use is for day-to-day operations. Two departments use 2-way radios at the College: CELTT and Auxiliary Services. There are several areas at the College where the radios can not communicate. CELTT and Auxiliary Services radios are not programmed with the same frequencies. An assessment needs to be done to see if the radio system can be improved in preparation for an emergency response, while retaining day-to-day operation capability.

Cable TV System

The College has access to the Oceanic Time Warner cable TV service. There are 15 signal amplifiers located across the College. Coax cable runs are available to specific building locations. Over time individuals have tapped into the system and have run cables to their offices, classrooms, or work areas without approval. This has resulted in an unbalanced system that has degraded the signal strength across the College. The amplifiers are old and outdated. A College review needs to be done, and approved cable access locations identified. The system needs to be updated.

Fire alarm and AC network system

The fire alarm and AC system in buildings are networked to a central location over IP. CELTT Networking staff is responsible for maintaining and upgrading the network components of these systems. The University of Hawai'i Community College Office has authority over these systems.

III. CELTT and Campus Support of Information Technology Services Provided by the UH System and UH Community College System

The following is a description of on-going operational support services. The activities for supporting these services are to be considered an integral part of the College's technology plan. They identify the daily work that impacts technology planning and budgeting.

The University of Hawai'i System, Information Technology Services (ITS) provides a broad range of computing and communication technologies that support learning and teaching. ITS supports all 10 campuses and related education, training and research centers.

UH Username

ITS manages all UH user accounts. The Library supports ITS by assisting in the management of College related user accounts. The Library provides set-up, management assistance, and re-set support to all College users. Issues that cannot be resolved by the Library are forwarded on to ITS for further consultation and resolution.

Email

ITS entered into an arrangement with Google to provide email services. ITS also continues to support POP and IMAP services. The Library provides student support and training on the use of Gmail. CELTT provides staff and faculty support and training on Gmail, POP, and IMAP protocols. CELTT training is provided on a one-to-one basis, or in a group setting based on the need through the Customer Care Center or the Instructional Support Services group.

Course Management Tool

Laulima is the University of Hawai'i online course management tool. ITS provides system-wide technical support via email, telephone, and walk-in service to students and faculty. CELTT provides direct College support through the Instructional Support Services group. Help tickets are submitted online to the Instructional Support Services group, and the Instructional Support Services group responds to the request. Any issue the Instructional Support Services group cannot solve is forwarded to ITS for consultation and resolution.

HITS

The Hawai'i Interactive Television System is a video network designed and optimized primarily to deliver interactive video credit classes between campuses and educational centers within the University of Hawai'i system. This system expands across 14 campuses and learning centers state-wide. The priority for using the system is for approved UH Distance Learning Program courses. Requests for activities such as large group meetings, training workshops, seminars and presentations are accommodated after the courses are scheduled. The HITS classroom is located in the Naio building, where CELTT is located. ITS is responsible for equipment upgrade. The CELTT Instructional Support Services staff is responsible for operating and maintaining the system. The CELTT Networking staff is responsible for maintaining the network infrastructure.

Information Security

ITS oversees security for the University of Hawai'i system. ITS adheres to external standards, including Federal standards, Hawaii Revised Statutes, and UH Policy. High security risk threats and software upgrade instructions are announced to the College by University of Hawai'i's Information Technology Services. CELTT responds to information security breaches on campus. Several protocols are enacted to minimize risk. A firewall running the latest generation of protection is applied to all sectors of the network. Anti-virus, anti-malware, encryption, and secure data removal software is installed on every machine. Users are reminded to apply software updates and information security sessions are conducted on a regular basis.

Computer and software support

ITS recommends and supports a number of computer systems and software products. ITS also provides system-wide computer technical and software support via email, telephone, and walk-in service to students, staff, and faculty. CELTT follows the recommendations of ITS and provides direct College support through the Customer Care Center. Any issue the Customer Care Center cannot solve is forwarded to ITS for consultation and resolution.

Supported systems.

- Windows Vista
- Windows 7
- Mac OS X 10.6 and above

Basic supported software.

PC

- Adobe Reader
- McAfee VirusScan
- Chrome
- Firefox
- Internet Explorer 8 & 9
- Microsoft Office 2007, 2010, 2013 (Excel, PowerPoint, Word)

Apple

- Adobe Reader
- McAfee Anti-Virus
- Chrome
- Firefox
- Safari
- Microsoft Office 2008, 2011 (Excel, PowerPoint, Word)

Un-Supported systems and software. CELTT provides a “best effort” support for systems and software not on the recommended list. “Best effort” is ended by CELTT if:

1. The required knowledge is beyond what staff currently have.
2. One hour of work time is exceeded in an attempt to resolve an issue.
3. A resolution is unattainable after exhausting all reasonable avenues of problem solving.

UH Wireless Network

ITS provides wireless access to its network through a system-wide authentication system that supports both UH logins and the registration of MAC addresses.

Security Video Camera and Call Box System

The UH Community College System initiated a campus security system that operates over the College's network. There are eleven (11) security cameras and eight (8) emergency call boxes located around the College. CELTT Networking staff is responsible for maintaining and upgrading the network components of these systems.

IV. Technology Training at the College

CELTT Instructional Support Services

The CELTT Instructional Support Services unit provides one-on-one and group training on a variety of software used in instruction and for administrative operations. The primary audience is staff, faculty, and administrators. Group training is conducted in the Naio building lab. The Instructional Support Services unit also regularly researches new software programs, testing them on an experimental basis and deploying them when cost and support is considered feasible.

Supported Instructional Software:

- Lulima
- Microsoft Office (Word, Powerpoint, Excel)
- Camtasia
- Blackboard
- Gmail
- Google Services
- Brainfuse

CELTT Customer Care Center

The CELTT Customer Care Center staff provide one-on-one training on the use of supported systems, basic software, and hardware to staff, faculty, and administrators. Help tickets are submitted online to the Customer Care Center, and the Customer Care Center responds to the request.

CELTT Information Security

The first line of defense for information security is the well-trained faculty or staff member who updates security software and runs scans on his/her equipment. CELTT provides training and workshops on information security risks and best practices for all faculty, staff, and administrators.

Library

The Library staff assists students with technology on a one-to-one basis and through workshops. Workshop training is provided in the Library computer lab.

Supported Student Software:

- Lulima
- Microsoft Office (Word, Powerpoint, Excel)
- Google Services
- Gmail
- MYUH Portal