Abstract

Information Technology Services (IT Services) provides tools and services that support the mission of the University of Chicago. From email and calendaring, to research computing infrastructure, student course registration, and the Canvas Learning Management System, IT Services team members work directly with partners across the University to consult on the use of technology, understand the needs of the community, and deliver services.

Within this document are descriptions of many of the tools and services provided and supported by IT Services to enable the academic, research, and administrative functions of the University.
Contents

Teaching & Learning Support Services ............................................................................................................ 5
  Learning Technology Tools ............................................................................................................................... 5
    Canvas ............................................................................................................................................................ 5
  GradeScope (Pilot) ......................................................................................................................................... 5
  Panopto ........................................................................................................................................................... 5
  Poll Everywhere ............................................................................................................................................. 6

Audio/Video Services ....................................................................................................................................... 6
  Audio/Video Classroom Support ...................................................................................................................... 6
  Audio/Video Production Services (AVS) ......................................................................................................... 7
  Audio/Video Equipment Lending/Rentals ......................................................................................................... 7
  Audio/Video Engineering and Consultation .................................................................................................... 7
  OneButton Studio ....................................................................................................................................... 8
  Multimedia Production Services .................................................................................................................... 8

Accessibility Services ....................................................................................................................................... 9
  The Center for Digital Accessibility ................................................................................................................ 9

Instructional Design Services .......................................................................................................................... 9
  Overall Instructional Design Support ............................................................................................................. 9

Academic Computing Services ......................................................................................................................... 9
  Classroom Computing ................................................................................................................................. 9
  VLab ............................................................................................................................................................. 10

Digital Signage Services .................................................................................................................................. 10
  CoolSigns .................................................................................................................................................... 10

Learning Content Services ............................................................................................................................... 11
  LinkedIn Learning (formerly Lynda.com) ...................................................................................................... 11

Voice & Infrastructure Services ........................................................................................................................ 11
  Phone Services ............................................................................................................................................. 11
  Voice Circuits Services ............................................................................................................................... 11
  Jabber Messaging Services .......................................................................................................................... 12
  Session Initiation Protocol (SIP) Connection Services ................................................................................... 12
  Voicemail Services .................................................................................................................................. 13
  Web Conferencing Services (Zoom) ............................................................................................................. 13
  Fax Services ................................................................................................................................................ 13
1-800 Services ........................................................................................................... 14
Automatic Call Distribution (ACD) Services .......................................................... 14
Cell Phone Services .................................................................................................. 14
Video Conferencing Room Services ........................................................................ 15
Pager Services ........................................................................................................ 15
Infrastructure & Network Services ........................................................................... 15
Remote Office ........................................................................................................... 15
Internet Access ......................................................................................................... 16
Campus Infrastructure & Local Network Connection (Wired) .................................. 16
Wireless Network ..................................................................................................... 16
Data Centers ............................................................................................................ 16
Science DMZ ........................................................................................................... 17
Data Center Hosting ................................................................................................. 17
System Monitoring ................................................................................................... 18
TechBar ..................................................................................................................... 18
Email & Database Administrative Services .............................................................. 18
UChicago Box .......................................................................................................... 18
Network Storage (Tank) ........................................................................................... 19
Email and Calendaring (Office 365, Gmail) .............................................................. 19
Collaboration Suites (Office 365, Google Apps) ....................................................... 19
Database Administration Services ......................................................................... 19
Managed Virtual Machines ..................................................................................... 20
Desktop Support Services ......................................................................................... 20
Desktop Engineering ............................................................................................... 20
Basic Desktop Support ............................................................................................ 21
Standard Desktop Support ...................................................................................... 21
High Priority Desktop Support ................................................................................ 21
Enterprise Applications & Services ........................................................................ 22
Alumni Services ....................................................................................................... 22
Griffin ....................................................................................................................... 22
Enterprise Data Services ......................................................................................... 22
Data Warehouse (DW) ............................................................................................ 22
Hadoop System ........................................................................................................ 23
<table>
<thead>
<tr>
<th>Information Security</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity Management</td>
<td>30</td>
</tr>
<tr>
<td>Trusted Agent (TAG) program</td>
<td>30</td>
</tr>
</tbody>
</table>
Human Resource Professional (HRP) UCAT access .......................................................... 31
Directory .............................................................................................................................. 31
Directory Reviewers ......................................................................................................... 31
Grouper .............................................................................................................................. 32
Authentication Services .................................................................................................... 32
Shibboleth .......................................................................................................................... 32
Account Administration Management System (AAMS) .................................................... 32
CNetID Claims .................................................................................................................. 33
Two-Factor Authentication (DUO) .................................................................................... 33
UChicago ID Card ............................................................................................................. 33
Campus Card ..................................................................................................................... 34
Short Term Access Card .................................................................................................. 34
CheckIn .............................................................................................................................. 34
Information Security Services ........................................................................................ 34
  IT Security Monitoring & Incident Response ................................................................. 34
  Confidential Data Finder Software and Service ............................................................... 35
  Vulnerability Management Service ................................................................................ 35
  Digital Certificate Service .............................................................................................. 35
  Campus Anti-Virus ......................................................................................................... 36
  ECommerce Hosting Compliance ................................................................................... 36
  IT Security Advisory & Compliance Request ............................................................... 36
  Security Awareness Training .......................................................................................... 36
Operations & Service Management .................................................................................. 37
  Project Management Office .......................................................................................... 37
Availability Goals for Business-Critical Systems ............................................................... 0
Teaching & Learning Support Services

Learning Technology Tools

Canvas

Description
Canvas is the University-wide supported learning management system (LMS). We support faculty through workshops, training, support, and consultations.

IT Allocation Components
- Use of Canvas LMS for academic course, non-credit, or group collaboration sites
- Self-service setup of academic course sites and group collaboration sites
- Support from the Academic Technology Solutions (ATS) team (8:30 a.m. - 4 p.m.) and from Instructure (Vendor) 24x7
- Learning Tool Interoperability (LTI) review and vetting process, and integration services
- Integration and support for centrally-supported software such as Panopto, Voices blogs, and Poll Everywhere

Fee for Service Components
- Individual software licenses required for one-off LTI integrations
- Other products offered by Instructure that ATS does not license (Catalog, Bridge, etc.)

GradeScope (Pilot)

Description
GradeScope automates applying rubrics to grading, allows easier team grading, especially for hand-written work, making grading process faster, consistent and fairer.

IT Allocation Components
- Account in the UChicago Pilot of GradeScope
- Integration of GradeScope with a Canvas course
- Extended features not available in free accounts
- Basic training, setup, and support
- Access to vendor support

Fee for Service Components
- Scanning services for student work

Panopto

Description
Panopto is the video management system platform for UChicago.

IT Allocation Components
- Video cloud storage and organization
- Canvas integration to add video content to Canvas courses
- Student video submissions via Canvas
- Sharing controls for video content, and embed links for external sites
- Basic video editing tools within web interface (or within Canvas)
• Automatic machine captioning and indexing
• Bookmarking, personal notes, comments in video player
• Direct recording from laptop via desktop app
• Recording and live streaming from computer or remote recorder
• Schedulable/repeatable recording sessions
• Training and support for use in Canvas
• Vendor support

Fee for Service Components
• Human captioning (ADA compliant)
• Requests for recording and steaming events may include an hourly AV tech rate or equipment rental fees

Poll Everywhere
Description
ATS manages a limited-license (1,500 users) of Poll Everywhere, a vendor classroom polling solution.

IT Allocation Components
• UChicago account of Poll Everywhere
• Integration of Poll Everywhere to a Canvas course
• Consultation around pedagogical uses for a course
• Basic training, setup, and support
• Vendor support for support needs beyond the ITS Service Desk

Fee for Service Components
• Accounts are not granted for event use cases (uses license seats for one-time event)
• Poll creation and administration (self-service)

Audio/Video Services
Audio/Video Classroom Support
Description
Audio/video service for 207 classrooms.

IT Allocation Components
• On-call AV Tech support from 8 a.m.–7 p.m., Monday–Thursday, and until 6 p.m. Friday, during the quarter (8 a.m.–6 p.m. during breaks)
• Quarterly maintenance checks on all central classrooms
• On-call AV Engineer support Monday–Friday
• Tutorials on AV equipment in-room or from lending pool
• Digitization for older video and audio formats
• Consultation for equipment needed for small events on campus
• Annual capital projects to add or refresh AV across campus classrooms

Fee for Service Components
• AV Tech support for events outside of scheduled classes
• Equipment delivery and pickup for events outside of scheduled classes
• AV Tech support for non-campus classrooms scheduled by the Registrar (e.g., proprietary classrooms or other departmentally owned spaces like lounges or conference rooms)
• Capital improvements for non-campus classrooms or other spaces not scheduled by the Registrar

Audio/Video Production Services (AVS)

Description
AVS provides audio/video production services including video shoots and post production.

IT Allocation Components
• Assistance with lecture capture for scheduled course sessions
• Assistance with recording course content for individual instructors
• In-class lecture capture
• Tutorials on setup and use of video recording equipment
• Tutorials on in-classroom lecture capture systems
• Transfer of recorded content to video management system

Fee for Service Components
• Studio lecture development
• Recording of departmental events or lectures
• Recording of "Job Talks" for departments
• Recording course content for entire programs or for executive or professional development. course content
• Recording of student events

Audio/Video Equipment Lending/Rentals

Description
AVS rents AV equipment from the Stuart Hall basement location.

IT Allocation Components
• Lending of equipment to be used during scheduled class time on Hyde Park campus
• Setup of equipment to be used during schedule class time on Hyde Park campus
• Tutorials for use of equipment
• On-call assistance regarding equipment during class time on Hyde Park campus

Fee for Service Components
• Rental fee for use of equipment outside of scheduled class time on Hyde Park campus (e.g., departmental events)
• Rental fee for use of equipment for student groups on Hyde Park campus
• No equipment can be lent or rented for off-campus use
• If equipment is lost/damaged, renter is responsible for replacement fees

Audio/Video Engineering and Consultation

Description
Audio/video design, consultation, and implementation projects.

IT Allocation Components
• Consultation with AV Engineer/Designer and Project Manager and infrastructure expert on AV implementations, upgrades, and/or changes
• Quote facilitation with preferred AV Vendor
• Quote facilitation with on-campus electrical shop or vendor
• Quote facilitation with on-campus carpentry shop or vendor
• Quote facilitation with IT Services networking
• Consultation on University AV standards for specific projects, including functionality review, hardware review, vendor RFP review, infrastructure planning review for AV-related needs
• Incorporation of networked AV equipment into Extron Global Viewer software for monitoring (can set up groups of equipment for monitoring)

Fee for Service Components
• AV installation for smaller projects
• Project Manager support for smaller projects
• AV Programming support
• Facilitation of networking work orders to IT Services
• Maintenance of AV systems

OneButton Studio
Description
OneButton Studio is a self-service video studio located on Level A of the Regenstein Library. Users can independently create professional videos.

There are currently three services:
• Basic: user presses one button to start, then same button to stop (no training necessary)
• Advanced studio: aimed at faculty, this gives users more control over camera controls and multiple sources of input (requires short training)
• Video conference call: users can conduct web conferencing calls (requires short training)

IT Allocation Components
• Video studio with easy-to-use recording setup, with hardware already in place (camera, lights, control panel)
• Tutorials on how to use the studio for individuals or classes
• Online booking through the Library website
• Video conferencing through soft-codec software (Zoom, WebEx, Skype, BlueJeans, etc.) with a laptop (leverage the room camera, mic, speaker)
• Advanced studio tutorial for advanced users (faculty & staff only)
• Maintenance of hardware and control panel programming

Fee for Service Components
• AV Tech-facilitated sessions
• Editing services or software
• Laptop for projection or video conference call (user must provide or check-out from TechBar)
• Recording to any cloud service

Multimedia Production Services
Description
ATS provides broad multimedia development services for faculty seeking support.

IT Allocation Components
• Consultation around multimedia needs for instructional, research, or publication content
• 2D image creation, illustration
• 2D image/photo enhancement
• 3D renderings, animations
• Virtual Reality-based image rendering
• Creation of final files for print or digital use
Fee for Service Components
- Printing services (bulk printing requests)
- Graphic design/communications services
- Copywriting services

Accessibility Services
The Center for Digital Accessibility
Description
The Center for Digital Accessibility provides dedicated resources that can directly address digital accessibility related questions, make sure that the University continues to provide students with accessible course materials, and remove barriers for faculty, other academic appointees, and staff during their regular work. This allows the University to “embrace, be hospitable to, and encourage the widest diversity of views within its own community.”

IT Allocation Components
- All Services

Fee for Service Components
- None

Instructional Design Services
Overall Instructional Design Support
Description
ATS provides instructional consultation that revolve around pedagogical uses for technology such as blogs, video, direct polling, general Canvas use, etc.

IT Allocation Components
- Instructional Designers provide short/limited-term engagements with faculty/instructors in consultative role in designing and implementing learning technology into teaching and learning practices
- Service for all UChicago academic units

Fee for Service Components
- Long-term engagements in which Instructional Designers are dedicated full-time to a project or roles for the delivery of a course

Academic Computing Services
Classroom Computing
Description
ATS manages three computer classrooms (two Windows, one Mac) and maintains their operating systems and the software. These classrooms are used mainly used by faculty that teach with site licensed software along with several hospital departments that book the classrooms for qualification exams that require a secured browser. There are also occasional workshops hosted in these rooms.

IT Allocation Components
- Mac or PC computers loaded with fully licensed software, accessible via CNetID login
- Teaching station with computer and ability to project to the class (either via projector or monitor)
- Specific software installation by request two weeks in advance (licensed or free)
• Fully supported AV and access to AV technicians
• OS build and patching management for all machines

Fee for Service Components
• Software install of non-licensed software that has a cost associated with it for license
• Instruction for use of licensed software

VLab
Description
VLab is a remote desktop computing environment for students to use in their coursework. The environment includes MATLAB, ArcGIS, SPSS, R, Stata, and Mathematica. This service supports all Faculty, Students and Staff who have a valid CNetID.

IT Allocation Components
• Licensed, current versions of software used for instruction
• By request, installation of free add-on tool packages for licensed software
• Key Server management of licensed software
• Remote desktop service (RDP) or application server interface to allow use of software on Mac or PC computer without separate installation
• Support for login and use

Fee for Service Components
• Non-centrally licensed software
• Paid add-on packages to licensed software
• Instruction for use of licensed software

Digital Signage Services
CoolSigns
Description
CoolSigns is a hardware-based digital signage service that enables control, distribute, and display digital audio, video, static images, and live video content in equipped locations that are connected to the UChicago data network. CoolSigns allows for the control and management of content via a central management console.

IT Allocation Components
• Consultation on signage needs, monitor recommendations, and placement
• Assistance with quote through AV vendor for hardware purchase and install
• Coordination with University Facilities (electrical shop, carpentry shop) for basic installation of monitor
• Coordination with IT Services for network requirements
• Coordination with Desktop Support or direct assistance to install desktop software
• Basic training on use of Cool Signs content management software
• Troubleshooting assistance (hardware and software) and hardware return for repair (RMA) and re-install
• Annual maintenance fees for player hardware and content server
• Coordination with AV vendor for troubleshooting and maintenance of player device OS (updates, patches)
Fee for Service Components

- Hardware purchases (e.g., Cool Signs player, monitor)
- Content management for Cool Sign player

Learning Content Services

LinkedIn Learning (formerly Lynda.com)

Description
University-wide licenses for access to over 16,000 online training video tutorials for software applications and workplace skills.

IT Allocation Components

- System administration at University level provided in the vendor product.
- Communications at University level

Fee for Service Components

- Custom reporting
- End-user training
- Custom content or system integration with other platforms
- Unit-specific communications

Voice & Infrastructure Services

Phone Services

Description
For phone service, the University provides single-line and multi-line phones for desktops. These are Voice over Internet Protocol (VoIP) phones that offer speaker phone and conferencing as basic features. VoIP phones offer enhanced features due to their ability to combine voice and data over the same network.

IT Allocation Components

- All services to include 7941, 7942, 7945, 7961, 7962, 7965, 7970, 7975, 8811 Cisco phones

Fee for Service Components

- Cisco 8821 Wi-Fi phone
- Cisco 8831 conference phone
- Cisco 6911 phones used in patient rooms

Voice Circuits Services

Description
Voice circuits are used for campus wide to support credit card machines, ATM, postage machines, paging, time-clocks, emergency phone, alarms, elevator phones, and fax machines. The circuit lines used are MB lines, Century
link, radio channel, 3010 CHANNELS, 3020 CHANNELS, ISDN, and Centrex lines that service the Medical Center and campus.

IT Allocation Components
• All Services

Fee for Service Components
• None

Jabber Messaging Services
Description
Jabber is the service that lets individuals make and receive calls from their work number using their computer or mobile device. This application works through the existing campus infrastructure to simulate VoIP phone functionality.

IT Allocation Components
• All Services

Fee for Service Components
• None

Session Initiation Protocol (SIP) Connection Services
Description
The University provides a voice service that allows for a connection over the data network between two or more telecommunication services/systems. The SIP connection supports a high volume of telephone calls between systems. When SIP connections are requested from IT Services, engineers typically perform some or all the following to complete requests:

• Attend project meetings with vendors and customers
• Review and determine design criteria
• Configure the Cisco VoIP system based on the requirements
• Submit firewall changes
• Test the call flows with customers and vendors
• Perform final testing
• Provide ongoing support

IT Allocation Components
• All Services

Fee for Service Components
• None
Voicemail Services

Description
Voicemail allows for the support of thousands of individual mail boxes in one platform. Voicemail systems store the messages and alerts the caller with a light on their phone. Voice messages can also be transcribed (speech-to-text) and delivered via email. Voicemail systems also provide call trees for better routing and call handling for a department. IT Services analysts typically perform some or all the following services:

- Based on individual phone or mail box request, configure, and the test the mailbox.
- For larger requests, work directly with a customer representative and or attend project meetings with vendors and customers
- Review and determine design criteria
- Configure the Cisco Unity voicemail system and phone system based on requirements
- Test the call flows with customers and vendors
- Perform final testing
- Provide ongoing support

IT Allocation Components

- One voicemailbox per user
- Transcription of voicemail to e-mail

Fee for Service Components

- None

Web Conferencing Services (Zoom)

Description
Zoom conferencing provides conferencing solutions for audio, web, and video. It allows users to conduct meetings and webinars over the internet.

IT Allocation Components

- All Services

Fee for Service Components

- None

Fax Services

Description
RightFax is a scalable fax server solution that allows users to fax directly from business applications on their computers.

IT Allocation Components

- All Services

Fee for Service Components

- None
1-800 Services

Description
1-800 numbers are issued and used throughout the Medical Center and the Hyde Park campus.

IT Allocation Components
- All Services

Fee for Service Components
- None

Automatic Call Distribution (ACD) Services

Description
ACD allows for the management of a high volume of telephone calls. These calls are answered by the application servers, provide the caller with greetings and options on how their call request will be handled. Calls are held in a queue in the order received waiting for an agent (the call taker) becomes available. Once the agent is available the caller in queue is routed to agent's desk phone. The IT Services analysts typically perform some or all the following services:
- Attend project meetings with vendors and customers.
- Review and determine design criteria
- Configure the Cisco VoIP system based on the requirements
- Test the call flows with customers and vendors
- Perform final testing
- Provide ongoing support

IT Allocation Components
- All Services

Fee for Service Components
- None

Cell Phone Services

Description
Qualified users have access to exclusive pricing negotiated by the University with AT&T and Verizon.

IT Allocation Components
- None

Fee for Service Components
- All Services
Video Conferencing Room Services

Description
The University’s room-based, video conferencing system allows users to communicate, view, and interact with others while in select conference rooms and departmental spaces on campus. IT Services configures all the necessary equipment so that users can visually communicate using a dedicated video conferencing unit.

IT Allocation Components
• None

Fee for Service Components
• All Services

Pager Services

Description
Pagers can be numeric or alphanumeric. For numeric, callers simply input the callback and hang up. With alphanumeric pagers, users can send text messages, emails, and alerts sent right to their word messaging device.

IT Allocation Components
• None

Fee for Service Components
• All Services

Infrastructure & Network Services

Remote Office

Description
IT Services supports offices outside of Hyde Park. This service includes the Chicago area, domestic and international locations.

IT Allocation Components
• Engineering support
• Net Tech installation and support (Local Chicago Offices)
• Local area switching and wireless (Unless wireless requires independent controller)
• Monitoring of service availability

Fee for Service Components
• Travel expenses for installation and local support
• Third party support costs
• Carrier costs for internet connectivity
• Wireless controller (optional)
• Routers and firewalls for terminating carrier circuits
• Local ASA Firewall (For personal VPN connectivity)
Internet Access
Description
IT Services manages the equipment and network circuits that provide Internet access to our Hyde Park campus. We use multiple providers to ensure redundancy and performance.

IT Allocation Components
- All Services

Fee for Service Components
- Business specific VPN connections

Campus Infrastructure & Local Network Connection (Wired)
Description
This service provides wired connectivity for campus users to University resources. Each user is provided two wired jacks in one location. The campus infrastructure consists cabling in and between building network equipment and support facilities.

IT Allocation Components
- All components listed above should be factored into the cost
- Two network jacks/switch ports per user
- Two network cables and wall plate connecting from a single location to a network closet

Fee for Service Components
- Extra Switch port(s)
- Extra Cable/Jack ports, installation and cabling
- Cable/Jack installation
- User access switch UPS
- New network closet
- Medical center cable installs/support

Wireless Network
Description
This service provides wireless connectivity for campus users to University resources and the internet.

IT Allocation Components
- All Services

Fee for Service Components
- Additional wireless access points beyond standard coverage levels

Data Centers
Description
IT Services provides five datacenters with varying network service levels.
• 6045 (3) provides 10G/1G copper port speeds and firewalling
• 1155 provides 10G/1G fiber and copper port speeds. Can accommodate 40G ports
• Hinds provides 1G/100M copper ports

IT Allocation Components
• 10G/1G/100M speeds and firewalls in 6045 and 1155

Fee for Service Components
• Per port charges
• 40G connectivity
• Science DMZ connectivity

Science DMZ
Description
High speed research networking that provides connectivity for campus researchers to other University research resources.

IT Allocation Components
• All Services

Fee for Service Components
• Per port charges
• Installation and network equipment

Data Center Hosting
Description
IT Services operates five enterprise data centers across campus supporting hosting for campus computing hardware. The Data Centers provide hosting for administrative systems, faculty research systems, enterprise research clusters, and other related projects. These enterprise data centers can also host systems that may fall under certain federal guidelines (FERPA, CJIS, PCI, HIPAA, etc.).

IT Allocation Components
• Mechanical preventative maintenance
• Electrical preventative maintenance
• Administration of spaces
• Network physical infrastructure – fiber and optical cable
• Environmental (power and cooling) system monitoring
• DCIM (Data Center Information Management) environment
• Physical security and access management

Fee for Service Components
• Modifications to electrical or mechanical systems meeting new system requirements
• Purchase of cabinets, power distribution units (PDU), cooling equipment (rear door heat exchangers), and similar
System Monitoring

Description
Application monitoring with live escalation to University staff for campus partners who currently lack a 24-hour monitoring team.

IT Allocation Components
- Monitoring software annual support
- Customizable IT hardware and website monitoring
- Service level agreement (SLA) for escalation procedures on hardware
- Assists with outages and major impact events
- Access to documentation and training
- Open tickets in ServiceNow or in a requested tracking tool

Fee for Service Components
- None

TechBar

Description
The TechBar provides walk-up technology support, equipment lending, conferencing spaces, and videoconferencing capabilities for the University of Chicago faculty, students, staff, and visitors. There are currently two locations: Regenstein Library and the Polsky Exchange.

IT Allocation Components
- Loaner equipment

Fee for Service Components
- None

Email & Database Administrative Services

UChicago Box

Description
The University of Chicago has partnered with Box to create UChicago Box, a document management service available to all faculty, students, and staff. UChicago Box is a cloud-based storage service that provides online space for storing and sharing files. Files stored on Box can be synced and accessed from anywhere and from any device.

IT Allocation Components
- All Services

Fee for Service Components
- None
Network Storage (Tank)

Description
Tank is a network storage solution that allows users to access their files from anywhere (provided you are on the campus network or VPN) and share with their collaborators. Tank is based on a hardware solution that is housed in our enterprise data centers.

IT Allocation Components
- None

Fee for Service Components
- 24/7 management and monitoring
- Provisioning of shared drives and folders based on customer requirements

Email and Calendaring (Office 365, Gmail)

Description
IT Services provides all current faculty, students, and staff with an email address. This service allows for two email options: Microsoft Outlook and UChicago Gmail.

IT Allocation Components
- All Services

Fee for Service Components
- None

Collaboration Suites (Office 365, Google Apps)

Description
The Microsoft Office 365 collaboration suite provides faculty, students, and staff with the latest productivity tools. University users have access to many additional applications in the Microsoft Office 365 collaboration suite. Google Apps is a group of cloud-based productivity tools available to all faculty, students, and staff. It includes tools for collaboration, creation, and storage of documents, email, and website development.

IT Allocation Components
- All Services

Fee for Service Components
- None

Database Administration Services

Description
The Database team support MySQL, Oracle, Microsoft SQL Server and PostgreSQL.

IT Allocation Components
- Consultation with the users to understand the requirements of the application
- Installation and maintenance of supported database software according to group software policies
- Database availability and error monitoring
- Troubleshooting database issues or work on service requests 8:30 a.m.–5 p.m., Monday–Friday
• Assistance with tuning the database performance via the database setup and configuration parameters
• 24x7 database support for issues that affect database availability. Staff on-call list will be made available so that staff can be contacted directly to support critical process and availability issues

Fee for Service Components
• None

Managed Virtual Machines
Description
IT Services provides virtual machines running the Microsoft Windows or RedHat Enterprise Linux operating systems. The servers are run in our enterprise data centers using VMWare and Dell technologies.

IT Allocation Components
• None

Fee for Service Components
• Flexible provisioning of servers based on customer requirements
• 24/7 management and monitoring of servers
• Patches and updates for the operating systems

Desktop Support Services
Desktop Engineering
Description
This service provides the Operating Systems deployment and full management services for both Windows and Mac Operating systems including:

• Software packaging and deployment
• Operating Systems and Microsoft Office security patch management
• Support for workstation cloud-based backup
• Anti-Virus software installation and support
• VMware virtual desktop
• Workstation full disk encryption

IT Allocation Components
• All Services

Fee for Service Components
• All Services
Basic Desktop Support
Description
The basic desktop support model is intended for individuals within a divisional IT supported organization on campus. This service allows access to Desktop Engineering resources, software, tools, and consulting time. A Desktop Support Technician would be provided by divisional IT.

IT Allocation Components
• All Services

Fee for Service Components
• None

Standard Desktop Support
Description
The standard support model offers a customer professional desktop and laptop technical support services. IT Services would supply a Desktop Support Technician. All standard support model customers are entitled to Tier I support by contacting the ITS Service Desk. If a request or incident requires Tier II support, the Service Desk will escalate to ITS Desktop Support (ITSDS). ITSDS offers the standard support model customer a qualified desk side support technician available during standard business hours.

IT Allocation Components
• None

Fee for Service Components
• All Services

High Priority Desktop Support
Description
The high priority desktop support model offers everything included in the standard desktop support models with the addition of an expedited service level agreement. Individuals that elect to use this model will have their incidents and requests prioritized above standard desktop support subscribers. For this service IT Services would supply a Desktop Support Technician.

IT Allocation Components
• None

Fee for Service Components
• All Services
Enterprise Applications & Services

Alumni Services

Griffin

Description
IT Services provides required hardware and software to support Griffin, the University of Chicago’s system of record for alumni, prospects, and charitable contributions.

IT Allocation Components
- All Services

Fee for Service Components
- None

Enterprise Data Services

Data Warehouse (DW)

Description
The data warehouse is an enterprise data repository where data is extracted from different source systems, transformed, and loaded. The DW is a sophisticated data management solution that provides user reporting, ad-hoc analysis, and high-performance analytics. Applications include:
- Arthur Data Warehouse
- AURA Data Warehouse
- GEMS (Expense) Data Warehouse
- Financial Application Service (FAS) Data Warehouse
- Payroll Application Reporting (PAR) Data Warehouse
- ServiceNow data repository
- Workday data repository
- HR (Historical Frozen)
- Fellow’s data repository
- IRF - Delphi data repository
- Budget data repository
- Ecommerce data repository
- Factbook (College Ancillary) data repository

IT Allocation Components
- All costs associated with the maintenance and license renewal and services to clients

Fee for Service Components
- Any special service requests for creation of dashboards or data sets
Hadoop System
Description
Hadoop is a high performing distributed data storage and analytics platform to build and support integrated data analytics applications for Canvas, Marketo, Slate, VOIP, Griffin, Archibus, ACO, and Affirmative Action.

IT Allocation Components
- All costs associated with the maintenance and license renewal

Fee for Service Components
- Any special service requests for creation of dashboards or data sets

Business Objects (SAP)
Description
SAP Business Objects (BO) is a reporting and analytics business intelligence (BI) platform aimed at business users. It consists of several reporting applications that allow users to discover data, perform analysis to derive insights and create reports. In addition to the enterprise platform, separate instances are also provided for ARD and Facilities. BO Administration and user support is provided for all units. Standard reports are provided, and users can create ad-hoc reports for the Finance, Payroll, Expense, AURA, Arthur, Griffin and Facilities modules.

IT Allocation Components
- All costs associated with maintenance

Fee for Service Components
- Business Object Platform as a service for any new units

Tableau
Description
Tableau is an interactive data visualization tool for units requiring the visualization platform. Tableau has been made available to some University units where the users create their own worksheets and dashboards using Tableau desktop and the publish it on the server to share it amongst other users. Larger units have their own site administrators, which requires minimal support from IT Services. IT Services also provides Tableau administration for the platform and user support for participating units.

IT Allocation Components
- All costs associated with the maintenance and license renewal

Fee for Service Components
- Additional desktop licenses and annual maintenance for new Tableau developer(s) or user(s)

Enterprise Help Desk Services
ServiceNow
Description
ServiceNow is the University’s tool that provides campus departments and organizations a reliable and supported way to efficiently organize issues and streamline response times to inquiries by setting up ticketing management systems and reports. These can include sophisticated workflows, custom intake forms, custom portals, alerting and
cross-departmental inquiry and issue tracking. ServiceNow supports primary ITIL processes for IT Services such change, incident, problem, and request.

**IT Allocation Components**

- Support from the team (8 a.m.–5 p.m.)
- Regular maintenance to ensure ongoing functionality and security
- Ongoing enhancements (IT Services internal, Shared Services Office, and others)
- Major annual updates driven by the vendor
- Integrations with other systems (e.g. LDAP)

**Fee for Service Components**

- New processes onboarded into ServiceNow
- Seat licenses

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**Enterprise Imaging Services**

**OnBase**

**Description**

Document management and imaging system.

**IT Allocation Components**

- All Services

**Fee for Service Components**

- None

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**Enterprise Web Services**

**Campus Events Calendar**

**Description**

IT Services maintains a public event system for campus where event information can be published, maintained and shared. The system supports the embedding of events onto webpages for specific units/areas/groups.

**IT Allocation Components**

- Support from the team (8 a.m.–5 p.m.)
- Regular maintenance to ensure ongoing functionality and security
- Integration and support for centrally-supported services: Shibboleth single sign-on, LDAP

**Fee for Service Components**

- None
Custom Development

Description
The Application Development Team consults, plans, designs, builds, implements, and integrates applications. The team also can if you already have an existing application, the team of developers can analyze, compile findings, gather recommendations, and make suggestions for improvement on existing applications.

IT Allocation Components
- Support from the team (8 a.m.–5 p.m.)
- Regular maintenance to ensure ongoing functionality and security
- Consultation on potential new projects and general inquiries from campus
- Custom Applications and Integrations that support other Enterprise Systems (e.g. AIS) and central Finance & Administration priorities (e.g. Website Registry)
- API layer used around campus, serving primarily AIS data at this time
- Integration and support for centrally-supported services: Shibboleth single sign-on, LDAP, Events

Fee for Service Components
- Custom development and consultation work that falls outside of central F&A priorities

Custom Websites

Description
Web Services can create custom designed websites that meet University guidelines. Web Services can propose and implement a solution that meets those goals. This can be a website templating system specific to a department, area, or unit.

IT Allocation Components
- Support from the team (8 a.m.–5 p.m.)
- Consultation on potential new projects and general website inquiries from campus
- Custom websites that are part of development of University websites such as www.uchicago.edu

Fee for Service Components
- New website implementations
- Monthly maintenance fee for Expression Engine solutions and for Drupal solutions
  - Regular maintenance to ensure ongoing functionality and security
  - Integration and support for centrally-supported software: Shibboleth single sign-on, LDAP, Events Calendar

Vita (Website Platform)

Description
Vita is a templated website offering that is designed to follow University brand standards while providing a higher level of flexibility in terms of content, layout, and functionality than Voices along with a more tailored CMS experience for the website content editors.

IT Allocation Components
- Support from the team (8 a.m.–5 p.m.)

Fee for Service Components
- New website implementations
Voices (Website Platform)

Description
Voices is a primarily self-service offering provided to campus so that anyone can create a University branded website for their own purposes. It is only recommended for personal blogs and websites, lab sites, and small organization websites. It is not recommended for departmental websites.

IT Allocation Components
- Support from the team (8 a.m.–5 p.m.)
- Regular maintenance to ensure ongoing functionality and security
- Development, maintenance of, and ongoing enhancements, to University site templates
- Integrations with other systems (e.g. LDAP)

Fee for Service Components
- None

Website Hosting

Description
IT Services offers hosting websites in an easier and more cost-effective method for all of campus by establishing Master Agreements with the right vendors and setting standard sizing options with pre-set pricing per site.

IT Allocation Components
- None

Fee for Service Components
- All Services

Facility Services

Facilities Systems

Description
IT Services maintains multiple applications such as AutoCAD, e-Builder, Fuel Master, Maximo, and Yardi that facilitates and enables the work that the Facilities Services team does to maintain and enhance the University campus and environment. This allows Facilities Services to provide ongoing superior client service to our community including faculty, students, staff, neighbors and visitors.

IT Allocation Components
- All Services

Fee for Service Components
- None
Financial Services

**Buysite (SciQuest-Jagger)**

**Description**
Buysite is the University’s electronic purchasing and automatic invoice payment system. This application is used for creating, submitting, approving, and tracking the status of purchase orders.

**IT Allocation Components**
- All Services

**Fee for Service Components**
- None

**Delphi (Hyperion)**

**Description**
Hyperion supports budget managers with forecasting and budgeting. The modules supported are Planning, Essbase, Hyperion Strategic Finance (HSF). Web Forms and Smart View allows users to retrieve data for UCBUD (Non-Compensation) and UCSAL (Compensation).

**IT Allocation Components**
- Maintenance
- Consulting cost

**Fee for Service Components**
- None

**GEMS (SAP Concur)**

**Description**
GEMS is the University’s expense management system. It covers all employee reimbursements for travel and non-travel expenses and employee reimbursement made through payroll system.

**IT Allocation Components**
- Operational and software support
- New or enhancement requests
- Integrations with FAS, Workday, and Chase

**Fee for Service Components**
- None

**Information Builders**

**Description**
Information Builders is a reporting tool for the Mainframe used by Financial Services and IT Services.
IT Allocation Components

- All Services

Fee for Service Components

- None

Pinnacle

Description
Pinnacle is the transactional system of record to facilitate campus internal recharge operations. It is the primary tool used by IT Services to recharge other campus entities for IT services. It supports the monthly recharge cycle and reporting.

IT Allocation Components

- Support from the team (8 a.m.–5 p.m.)
- Regular maintenance to ensure ongoing functionality and security
- Ongoing enhancements
- Monthly recharge cycle for feeding into FAS
- Integrations with other systems (e.g. LDAP)

Fee for Service Components

- New internal recharge processes onboarded into Pinnacle

HR Services

PeopleAdmin

Description
Supports ACO Job Board for faculty. It will be replaced by Innerfolio in spring 2020.

IT Allocation Components

- All Services

Fee for Service Components

- None

Workday

Description
Benefits management, employee self-service and reporting are done in Workday.

IT Allocation Components

- All Services

Fee for Service Components

- None
Research Services

AURA – Automated University Research Administration

Description

AURA (Automated University Research Administration) supports four major functions within the institution to support research administration: Grants, IRB (Institutional Review Board), COI (Conflict of Interest), and IBC (Institutional Biosafety Committee). A fifth implementation, the Master Store, was created to better manage self-service items handled via the ITS Service Desk.

IT Allocation Components

- Grants
- IRB
- COI
- IBC
- Master Store
  - Used to centrally manage accounts, roles and self-service items via the help desk
- Microsoft Team Foundation Server (TFS)
  - Used to manage source control for development
- SQL Server Reporting Services (SSRS)
  - Used to produce performance reports and other reports not available via the data warehouse
- Development Database Server
  - Windows VM servers (shared dev DB for all 5 environments)
- Atlassian / JIRA
  - Used to manage work backlog, sprints, and releases

Fee for Service Components

- None

EHSA- Environmental Health and Safety

Description

EHSA is used to track lab and environmental safety inspections and resolution of deficiencies and training for safety repository for inventory of chemicals in specific labs.

IT Allocation Components

- All Services

Fee for Service Components

- None

Student Services

Academic Information Systems (AIS)

Description

IT Services supplies 24x7 application support for the following student systems:
• Registration
• Enrollment
• Grading
• Student Records
• Student Finance
• Financial Aid
• Advising
• Graduation

IT Allocation Components
• All Services

Fee for Service Components
• None

Student Information Analytics – SIA (OBIA/OBIEE/ODI)
Description
Oracle Business Intelligence Applications (OBIA) analytics solution for Campus Solutions provides comprehensive reports on student data for Student Records and Student Financials. Oracle BI Applications is built on Oracle Business Intelligence Suite Enterprise Edition (Oracle BI EE), Metadata management applications, Oracle Data Integrator (ODI) and Oracle Middleware. OBIA provides integrated data model, scalable and efficient query and analysis server, an ad-hoc query and analysis tool, interactive dashboards and scheduled reports.

IT Allocation Components
• All costs associated with the maintenance and license renewal

Fee for Service Components
• None

Information Security
Identity Management
Trusted Agent (TAG) program
Description
The Trusted Agent (TAG) program allows distributed authority to approved departments, divisions, and schools to grant various levels of account services to support the work of the University.

IT Allocation Components
IT Services maintains servers running Account Administration Management System (AAMS) and UChicago Card and Account Tool (UCAT).
• Development and maintenance of software associated with supporting the services
• Provide access and support for all services running on the AAMS and UCAT systems, including Prefeed, Temporary account provisioning, Hull account provisioning, Bridging, and Extend services
Fee for Service Components
- None

Human Resource Professional (HRP) UCAT access

Description
IT Services provides backend support for Human Resources use of the UCAT system for pre-feeding new employees as part of onboarding. This enables Human Resource professionals to create a UChicagoID, enter the new employee into Workday, and allow new employees to claim their CNetID and associated account services.

IT Allocation Components
- Maintenance and development of UCAT software and integrations with Workday

Fee for Service Components
- None

Directory

Description
All faculty, students, staff, and Medical Center employees appear in the University Directory. The Directory is used both for internal and external lookup of contact information. University faculty and staff may modify their Directory listings to include contact information as well as to modify their display name, which changes the display in the Directory from the legal name to a name of the user’s choosing. The display name will also propagate to the user’s Office365 account.

IT Allocation Components
- Support Analysts for tickets
- Maintenance and development of the underlying software behind the directory system

Fee for Service Components
- None

Directory Reviewers

Description
As part of the Directory service, Directory Reviewers are distributed users in every division, department, and school who can update both their departmental/sub-departmental Directory listing as well as claim and modify all the staff members’ data within their groups. They use an admin Directory Reviewers site to make modifications.

IT Allocation Components
- Support Analysts for tickets
- Support for Directory Training
- Maintenance and development of underlying software

Fee for Service Components
- None
Grouper
Description
Grouper is a system for creating and maintaining institutional groups in a central repository.

IT Allocation Components
- Maintenance of servers
- Creation of Grouper groups for service provisioning
- Support both for individuals creating their own groups and for groups who need Grouper groups created for their service

Fee for Service Components
- None

Authentication Services
Description
LDAP and Radius servers that allow users to authenticate to various services.

IT Allocation Components
- LDAP servers and maintenance
- Radius servers and maintenance

Fee for Service Components
- None

Shibboleth
Description
Shibboleth is the University’s web-based single sign-on service (SSO). All active users on campus use Shibboleth for authentication. Identity and Access Management (IAM) provides developmental support to divisions, departments, and schools that wish to upgrade their sites to use SSO. Additionally, IAM provides Shibboleth workshops where administrators are trained to upgrade their sites to use Shibboleth for authentication.

IT Allocation Components
- Maintenance and development of the service
- Assistance with onboarding new applications to the Shibboleth Identity Provider

Fee for Service Components
- Training classes in how to deploy shibboleth on departmental applications

Account Administration Management System (AAMS)
Description
AAMS has modules that are used by groups to provide technical support to organizations across campus for programs such as two-factor authentication, to verify account information for security-related incidents, assist with password changes, upload Associate feeds from groups who are not directly part of the University but whose contract with the University entitles them to various levels of account services.
IT Allocation Components

- Maintenance and development of the software
- Maintenance of the servers supporting the software

Fee for Service Components

- None

CNetID Claims

Description
Members of the University community and authorized individuals from other IAM services that provision access may claim their CNetIDs with their central account services and set up two-factor authentication (2FA) from the cnet.uchicago.edu site.

IT Allocation Components

- Maintenance of the servers that run claims
- Maintenance and development of the underlying software and databases supporting CNetIDs

Fee for Service Components

- None

Two-Factor Authentication (DUO)

Description
Two-factor authentication (2FA) enhances the security of your CNetID by using your device (e.g., mobile phone, landline, tablet, or hardware token) to verify your identity.

IT Allocation Components

- Licensing fees to DUO, which provides the Two-Factor interface
- User support
- Authentication fees to DUO

Fee for Service Components

- Yubikey tokens (one of many 2FA device options) are available from the Identity and Privileges Office

UChicago ID Card

Description
UChicago ID card services are available for identification, building access, dining services, transportation, and other services. The UChicago Card is the official University of Chicago identification card and are issued to all faculty, staff, academic employees, and students who are enrolled in for-credit programs.

IT Allocation Components

- Cost of materials used to create cards
- Cost of printing the ID Card
- Development and maintenance of underlying software/servers

Fee for Service Components

- Replacement cards
Campus Card
Description
Campus Cards are available for individuals on campus who need access to services via a card, but are not eligible for a UChicago Card.

IT Allocation Components
- Development/maintenance of underlying software and servers

Fee for Service Components
- Replacement cards

Short Term Access Card
Description
The Short-Term Access (STA) program provides building access to visitors on campus who require access for two weeks or less, and employees who need to move into their office space prior to their start date.

IT Allocation Components
- Development/maintenance of underlying software/servers

Fee for Service Components
- Fee for each card

CheckIn
Description
CheckIn is an attendance monitoring system that allows users to track attendance of staff and students and retrieve information about each attendee for reporting and planning purposes.

IT Allocation Components
- Maintenance / Development of underlying application software

Fee for Service Components
- None

Information Security Services

IT Security Monitoring & Incident Response
Description
IT Security monitors for security issues involving campus resources and provides incident response when an incident is reported or detected, or when an interface with Office of Legal Counsel, Human Resources, or outside law enforcement is needed.

IT Allocation Components
- Hardware and software infrastructure components (network sensors, event logging, threat intelligence data sources, antivirus, intrusion prevention, email security)
Fee for Service Components
- Third-party forensic investigation for incidents in which specialized forensic investigation is indicated, IT Security can engage a professional third-party firm

Confidential Data Finder Software and Service
Description
Spirion software detects common categories of sensitive, confidential, and restricted data on end user devices. Spirion provides departments and individuals the ability to mitigate the risk of storing such data. Using a campus license, individuals can run a standalone instance of the software for their own review, and departments can engage with Spirion as a service in which their users run a custom version of the software, with managed configuration, and custom reporting from a central console.

IT Allocation Components
- All Services

Fee for Service Components
- None

Vulnerability Management Service
Description
The Vulnerability Management Program provides tools and expertise to assist schools and department in the auditing, identification, and remediation of security vulnerabilities in their server infrastructure. The service includes access to the vulnerability management console as well as initial consultation, setup, training, and ongoing support (including periodic health checks).

IT Allocation Components
- Campus license for InsightVM software

Fee for Service Components
- None

Digital Certificate Service
Description
This service provides digital certificates which are commonly used to create TLS (SSL) connections between web browsers and web servers.

IT Allocation Components
- Campus license for InCommon Certificate Service

Fee for Service Components
- None
Campus Anti-Virus

Description
Campus-wide license for anti-virus allows for individual use on end-user devices and department-managed deployments for servers and end-user devices.

IT Allocation Components
- Campus license for anti-virus software

Fee for Service Components
- None

ECommerce Hosting Compliance

Description
Credit card activities that interact through the campus network or business processes, such as contracts or equipment deployments, must be vetted for compliance with the PCI-DSS compliance framework. This process is run in conjunction with the Bursar and involves routine meetings. Technical integration reviews are also a part of this service.

IT Allocation Components
- All Services

Fee for Service Components
- None

IT Security Advisory & Compliance Request

Description
The IT Risk and Compliance team is often asked to consult on various security matters, from contracts to policies to data usage agreements in research. The team also writes reports for IT risk efforts and conducts ad-hoc reviews to meet any client needs in the security, risk, or compliance area.

IT Allocation Components
- All Services

Fee for Service Components
- None

Security Awareness Training

Description
IT Services provides an online training module customized for information security topics relevant to campus. The training is available to all faculty, staff, and students. Some units require completion of the training as a prerequisite to accessing sensitive data.

IT Allocation Components
- All Services
Fee for Service Components

- None

Operations & Service Management

Project Management Office

Description
The IT Services PMO offers project management services and oversight for information technology projects using clearly defined tools, techniques, methodologies and framework appropriate to the project. The PMO organization consists of a PMO Director and Project Managers. The PMO will facilitate best practices for those who are working on these projects. Project Management services may include:

- Project initiation and planning assistance
- Project management
- Project support and monitoring
- Project collaboration space
- Customizable project management toolkit
- Project management training

IT Allocation Components

- All Services

Fee for Service Components

- None
# Availability Goals for Business-Critical Systems

<table>
<thead>
<tr>
<th>Category</th>
<th>Platform</th>
<th>Service</th>
<th>Service Offering</th>
<th>Availability Goal</th>
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<td>Human Resources Systems</td>
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<td>Learning Management Systems</td>
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