

DIVISION OF INFORMATION TECHNOLOGY

ANNUAL REPORT

2016/2017 ACADEMIC YEAR



CONTENTS

4

A MESSAGE FROM
THE VP FOR IT



7

IT TOP
ACCOMPLISHMENTS,
GOAL 3



10

IT TOP
ACCOMPLISHMENTS,
GOAL 6 & 7



13

PORTAL 3.0/TITANIUM
UPGRADED
TECHNOLOGY



16

IT FACULTY/STAFF
HELP DESK
ACADEMIC
TECHNOLOGY CENTER



20

STUDENT TECH SERVICES
DIGITAL PRINT SERVICES

5

IT INDUSTRY AWARDS



8

IT TOP
ACCOMPLISHMENTS,
GOAL 4



11

IT TOP
ACCOMPLISHMENTS,
GOAL 8



14

DATA SECURITY
STAFF RECOGNITION



18

WEBSITE STATS
SOCIAL MEDIA



21

SOFTWARE
DOWNLOADS

6

IT TOP
ACCOMPLISHMENTS,
GOAL 1 & 2



9

IT TOP
ACCOMPLISHMENTS,
GOAL 5



12

CAMPUS WI-FI
LEARNING SPACES



15

IFULLERTON
ITUFFY CHATBOT
TITAN MOBILE



19

INFORMATION
LEARNING COMMONS
EQUIPMENT
CHECKOUT



22

IT SERVICES SURVEY





In 1957, a team of IBM engineers developed a scientific computing language they called Fortran, a man by the name of Robert Kirsch was the first to scan an image (a five-by-five photo of his young son) into a computer and the Soviet Union launched the first ever space satellite, Sputnik I - followed by Sputnik II later on in the year. Elvis Presley purchased a home for himself in Memphis, Tennessee and called it Graceland, Dr. Seuss introduced us to an eccentric feline in *The Cat in the Hat* and California State University, Fullerton was founded.

Since then, we've gone to the moon, sent a rover to Mars and lost ourselves in a digital world of virtually limitless information- all available at our fingertips.

IT strives to be on the cutting edge of innovation and technology. In the 2016/17 academic year we introduced new academic and accessible software to the campus, increased the campus network coverage, piloted and deployed the new Portal, iTuffy Chatbot and Titan Mobile app and much more.

As you read through some of our notable accomplishments, please note that this would not have been possible without the exceptional work and dedication of every team member in the Division.

The Division of Information Technology is proud to celebrate the last 59 years of Titan Legacy with you all and we are looking forward to making great strides in year 60.

We hope you have a great and successful year and will do our part to help all Titans Reach Higher.

– Amir Dabirian, *Vice President for the Division of Information Technology*

IT INDUSTRY AWARDS

CSUF IT was presented with two CSU Tech Achievement Awards at the Tech, Innovation, Education and Exchange conference which took place on August 9, 2017 at the Kellogg Center on Cal Poly Pomona's campus. The Tech Achievement Awards "recognize Information Technology teams whose accomplishments demonstrate exceptional and ongoing growth and contribution to information technology including increased levels of leadership and responsibility."

To be considered for such a prestigious award, teams must "follow the CSU's mission of teaching, research, public service and/or improve the effectiveness of academic, business or administrative processes."

Joseph Luzzi, Enterprise Resource Planning Director, and Amir Dabirian, Vice

President for the Division of Information Technology/CIO accepted the Gold Award for the IT Watson eAdvisor Chatbot project (known around campus as iTuffy). CSUF IT shared the Silver Award with CSU Dominguez Hills for Cost Savings & Efficiencies through shared VOIP PBX Solutions. Berhanu Tadesse, Associate Vice President for Information Technology/Infrastructure Services, and Amir Dabirian accepted the award on behalf of the Division. The Division was also awarded monetary stipends to be used to help the CSUF faculty and students incorporate academic technology services in the classroom. All of these honors reflect the dedication of the campus as a whole to embracing a world of new and innovative technology and information.



IT TOP ACCOMPLISHMENTS

GOAL 1

Strengthen alignment of the Information Technology Organization to support the IT Strategic Plan (Aligned with Strategic Planning Goals 1 & 3)

In collaboration with the Division of Academic Affairs, develop a plan and integrate the IT staff from the Colleges of Ed, Art, HHD, NSM, ECS and the Library into the Division of IT by Spring 2017

- COMPLETED: College of Arts was successfully transitioned to IT October 2016
- COMPLETED: One MPP from UEE IT has transitioned to the Division of IT in Spring 2017

In collaboration with the Division of Academic Affairs, develop a plan to integrate the Admissions and Records IT staff into the Enterprise Application staff of the Division of IT in support of the Enrollment Management task force

Allocate appropriate funding to support individual professional development for IT departments

- COMPLETED: Link Professional Development plan to budget

Award recognition certificates to IT Staff

- COMPLETED: Recipients were awarded in Fall 2016 & Spring 2017 at the IT All Hands meetings

Redesign and publish a monthly newsletter to the campus community

- COMPLETED: Published IT newsletter in Fall 2016 and Spring 2017

Develop relocation plan - IT staff in the library affected by LOFT project

- COMPLETED: The Applications and Security teams were temporarily relocated to the 2nd floor of College Park

In partnership with the Division of Academic Affairs, refine the Faculty Commons through organizational restructuring

- COMPLETED: Faculty Affairs & Records were successfully relocated to the library

GOAL 2

In Collaboration with Associated Students Inc., and the Divisions of Academic Affairs, Student Affairs, and Administration and Finance, plan and implement Information Technology-focused Student Success Initiatives for 2016/17 (Aligned with Strategic Planning Goals 1 & 2)

Provide instructional software and training for students at no charge (Microsoft Office, Microsoft Windows 10, Adobe Creative Cloud, Lynda.com/LinkedIn, MatLab, SPSS, Dropbox, Mathematica, AutoDesk)

- COMPLETED: Software is available to all students on an ongoing basis

Upgrade 30 classrooms

- COMPLETED: Utilizing a new classroom upgrade delivery model. Completing the rooms in phases; 1) IT/AV phase, 2) furniture phase, 3) cosmetic upgrade phase
- COMPLETED: 40 rooms with IT/AV only upgrades
- COMPLETED: Nine rooms completely remodeled (two more than planned). Computer Science (4) and McCarthy Hall (5)

Expand outdoor Wi-Fi coverage

- COMPLETED: Thirty new wireless access points deployed

Upgrade technology in the library, including 350 desktops, 3 smart group study rooms, 20 laptops

- COMPLETED: 386 OptiPlex desktop machines have been deployed
- COMPLETED: 65 laptops have been purchased for the student loaner laptop program



GOAL 3

Expand Technology components for Student Success (Aligned with Strategic Planning Goals 1 & 2)

Improve Campus Portal user interface by providing search, direct links, and mobile-friendly interface

- COMPLETED: Soft roll-out of the new Campus Portal in Fall 2016; officially launched January 12, 2017

Implement the technology tracking system for HIPs courses and programs

- COMPLETED: Add designation for HIPs courses and programs on academic transcript
 - COMPLETED: The process for designation of HIPs courses
- Expand iBeacon deployment for student attendance in all classrooms and Labs
 - COMPLETED: Attendance tracking (iBeacon) available in all HIPs courses

Zoom conferencing tool piloted by Summer 2016 and available to Faculty, Staff and Students by Fall 2016

- COMPLETED: Zoom conferencing implemented; Website setup (www.Fullerton.edu/Zoom) and provided road show training sessions to all colleges and Irvine campus

Roll-out of Titan Mobile starting Fall 2016 for Spring 2017 registration

- COMPLETED: Official release of Titan Mobile June 2017
 - Titan Mobile hosts the Titan Online applications from a mobile device
 - It is available for students from the iFullerton App
 - Using an Android or Apple device, it allows students to register, drop classes, view grades, view class schedule, etc.
 - Additional features for Summer 2017 includes Make a Payment – Cashnet, Admissions Status and Financial Aid Status

Pilot Transferology software with identified community colleges

- COMPLETED: Setup and configuration of Transferology equivalencies. Students can search for courses in Transferology and see course equivalencies for CSU Fullerton
- COMPLETED: A plan is completed to deploy Transferology to community colleges participating in the grant

Install u.Direct interactive degree planning tool ready for roll-out by Fall 2016

- COMPLETED: Pilot of Titan degree planner (u.Direct)



— IT TOP ACCOMPLISHMENTS — CONT.

GOAL 4

*In collaboration with campus divisions, re-engineer campus-wide administrative process
(Aligned with Strategic Planning Goals 2 & 3)*

Expand the current faculty recruitment system to include staff and management

Implement the new travel software solution

- COMPLETED: Selection and implementation plan with Huron Consulting. Piloted in Spring 2017.

Implement Door Key, Preventive Maintenance, and Self-Service modules of Facilities Link application

- COMPLETED: Implemented Preventive Maintenance function; pilot and testing of Door Key

Provide Resource Planning and Analysis Office with reporting dashboard for position management

- COMPLETED: Development of a prototype application for position budgeting using Oracle Planning and Budgeting Cloud Service (PBCS) and Oracle Planning and Budgeting Proof of Concept

Provide 25Live as a room reservation system for all campus users with the ability to publish events on websites and door electronic display plate

- COMPLETED: Implement 25Live room reservation and event publishing. The Scheduling Office is using the product to schedule general use classrooms. CollegeNet provided 3-day onsite training for the pilot groups

Implement IBM forms and develop a phased migration plan

- COMPLETED: Identification of functional requirements for IBM forms and Pilot Group selection

GOAL 5

Upgrade the campus technology infrastructure to provide a high performing, reliable and secure network infrastructure (Aligned with IT Strategic Planning Goal 4)

Major buildings (CP, MH, LH, H, SGMH, UH, PLS, PLN, KHS, EC, E, CS, CPAC) will be upgraded to 10Gbps network

- COMPLETED: Common Network Initiative (CNI) refresh (route/switch) project

Upgrade network infrastructure in the data center

- COMPLETED: User and server migration to the new network

Deploy MS Windows 10 and Office 2016 to Rollout workstations and general use classrooms

- COMPLETED: Windows 10 and Office 2016 pilot to IT and new image developed
- COMPLETED: Deployment of Windows 10 and Office 2016 to general use classrooms

Integrate new Cloud computing platform with campus infrastructure

- COMPLETED: Cloud vendor selection
- COMPLETED: Pilot testing the Microsoft Azure cloud

Transition to next generation firewalls (Palo Alto network)

- COMPLETED: Enhance the campus security posture to meet compliance. The first phase of Border firewall was deployed in September 2016. Irvine campus Border firewall was deployed in October 2016

Begin phased deployment of multi-factor authentication

- COMPLETED: Vendor for multi-factor authentication has been selected (PCI)
- ONGOING: Phased deployment of multi-factor authentication will continue through 2017/2018
- COMPLETED: Pilot with campus University Police Department

Implement log management framework

- COMPLETED: Solution for log management has been selected (PCI)
- ONGOING: Deployment of log management for PCI segment will continue through 2017/18



IT TOP ACCOMPLISHMENTS

CONT.

GOAL 6

Campus Accessible Technology Initiative (ATI)

Explore IBM Watson technology for captioning online instructional material

- COMPLETED: The prototype of IBM Watson has been developed and being used in the Academic Technology Center (ATC)

Identify ATI managers, leads, and techs for each campus website

- COMPLETED: ATI managers, leads and techs have been identified and continuously updated

Perform monthly ATI compliancy scans on all campus websites using the Compliance Sheriff application

- ONGOING: Results of monthly scans are available for website content creators and their managers

Provide weekly training for website content creators to ensure 508 compliance

- ONGOING: Training sessions are available and provided as needed

Pilot IT centralized purchasing workflow system

- COMPLETED: Pilot of IT centralized purchasing system is in progress
- COMPLETED: The new IT centralized purchasing system went live on April 17, 2017

Migration of the campus hosted websites to OmniUpdate

- ONGOING: Continuous migration of websites that are not on OmniUpdate to OmniUpdate

GOAL 7

Establish Business Intelligence and Decision Support Services Strategy (Aligned with Strategic Planning Goals 1 & 2)

Implement IBM Watson Content Analytics to provide analysis of unstructured data (advising notes, social media, etc.) using natural language processing (NLP)

- COMPLETED: IBM Watson content analytics installation
- COMPLETED: Cloud-based Watson Analytics and Watson Developer Cloud have been deployed to the campus
- COMPLETED: Phase 1, which is the initial roll out of iTuffy ChatBot (campus locations, services, contacts and events)

Produce feasibility report for implementation of a Data Visualization Center

- COMPLETED: VPs Dabirian & Kim visited Metropolitan State University in Denver in June
- COMPLETED: Data Visualization Center (CSUF Titan Hall)

Expand support of current campus data warehouse to include dashboard reports supporting HRDI business intelligence (BI) needs

- COMPLETED: HRDI Dashboard created, testing and validation by HRDI

Visit other campuses and study feasibility of implementing Big Data Visualization

- COMPLETED: Campus visits



GOAL 8

Continue to operationalize the High Impact Practices (HIP) project and technology tracking system (Aligned with Strategic Planning Goals 1 & 2)

Expand the technology tracking system for HIPs courses and programs

- Expanding attendance tracking to all University classrooms
 - COMPLETED: iBeacon installed in all classrooms
- Expand HIPs tracking via Titanium
 - COMPLETED: Class selections adding more courses
- Develop and implement HIPs in PeopleSoft campus solutions (CMS)
 - COMPLETED: HIPs designation

— A YEAR IN REVIEW —



Campus Wi-Fi Coverage

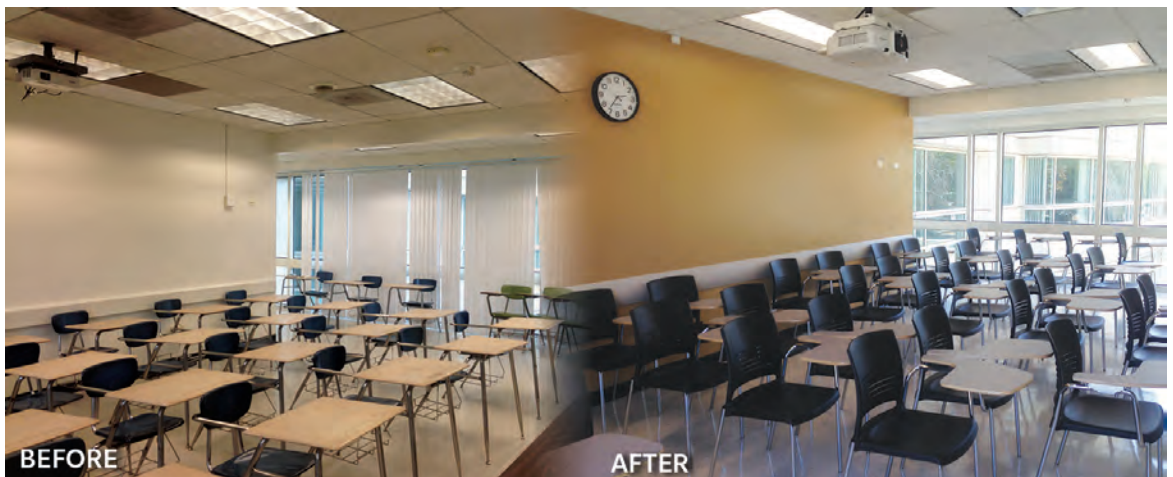
In the 2015/16 school year, we increased the Wi-Fi coverage inside the buildings on campus. Last year, we expanded the campus Wi-Fi, eduroam, to include the outdoor areas as well. We swapped out 364 old access points with a newer model and added an additional 143 access points around campus. These new access points are located indoors and outdoors to help the campus stay connected.

Learning Spaces

IT originally planned to upgrade 30 general use classrooms over the course of the 2016/17 academic year. We ended up upgrading over 70 classrooms with more in progress in Summer 2017 and planned for the 2017/18 academic year.

All of the upgraded classrooms received new technology, while some also got brand new furniture and a fresh coat of paint.

We will continue to work on upgrading the remainder of the general use classrooms in order to provide students and faculty with state-of-the-art learning spaces.





Portal 3.0

Students, faculty and staff can now log in to the new portal for a fresh and customizable look. This portal interface has a new search button, direct links and is mobile friendly. Portal 3.0 was introduced to the campus as a pilot in Fall 2016 and officially launched in Spring 2017.

Portal Logins

20,008,028 Total Student Logins

1,923,782 Total Faculty Logins

Titan Apps (Email & Google Docs)

15,723 New Student Accounts Created

4,996,793 Total Logins



TITANIum

1,983 Faculty users/Semester

42,007 Student users/Semester

5,368 Courses displayed on TITANIum/Semester

Upgraded Technology in the Library

Pollak Library underwent major technological upgrades this past year.

WE UPGRADED...

3 Smart Group Study Rooms

AND...

386 OptiPlex Desktop Machines were deployed

65 Laptops were purchased for the student loaner laptop program



DATA SECURITY

Data Security is a top priority in the Division of IT. The Information Security Office monitors and stops network attacks from inside and outside the campus to ensure all campus information remains private and secure. This past academic year, we created a new task force which implemented new security policies.



IT RECOGNITION AWARDS

FALL 2016 Recipients



From left, Kun Svay, VP Amir Dabirian and Jim O'Dell

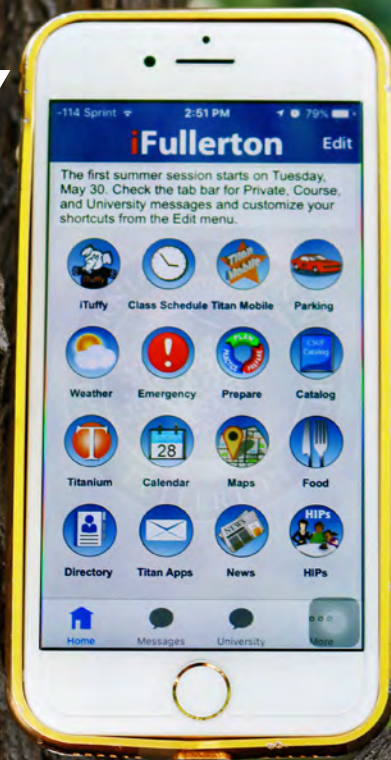
SPRING 2017 Recipients



From left, Sean Atkinson, VP Amir Dabirian and Steven Hensley

The Division of Information Technology has over 140 full-time staff members who work passionately to help give each individual on campus the tools they need to be successful. Before each semester (starting with Fall 2016), each IT staff member can nominate one of their peers who they believe has shown excellence in the field. The IT management team votes for two recipients based off of the pool of nominees. These recipients are recognized by Vice President Dabirian at the All Hands Meetings conducted before the start of each semester.

TECHNOLOGY AT YOUR FINGERTIPS



iFullerton

The iFullerton app helps students, faculty and staff get information about parking, class schedules, on campus dining options and more - all straight from their mobile devices.

Although the iFullerton app has been around for some time, it is regularly updated with new features. Two such additions are Titan Mobile and iTuffy - both of which were introduced during the 2016/17 academic year.

Titan Mobile

Titan Mobile was introduced to the campus via the iFullerton app in Summer 2017. Students can visit Titan Online to register for and drop classes, view their grades and class schedules all through their mobile device.

We've added more tools to help students use Cashnet to make campus payments and check their admission and financial aid status.

iTuffy Chatbot

Using the latest IBM Watson technology, the iTuffy Chatbot, is an interactive assistant for students. The goal of this project is to eventually work as an e-advising service in order to increase student success and retention. In its current testing stages, it works to answer campus related questions.

iTuffy uses IBM Watson's cognitive computing capability, a machine learning based process that lets students speak and ask questions as they normally would. This would allow students to ask questions in their own natural flow instead of having to adhere to a strict set of commands. iTuffy is currently in production.



IT Faculty/Staff Help Desk

The IT Faculty/Staff Help Desk consists of three teams, which include The Call Center; Deskside Support; and Asset Management. It is tasked with facilitating technical inquiries and services from faculty and staff. To contact the IT Faculty/Staff Help Desk, please call 657.278.7777 or email helpdesk@fullerton.edu.



Call Center

18,144 Calls answered
11,663 Issues resolved on the first call

Incident Management (Call Center/Deskside)

16,056 Incidents closed

eWaste

17,238 lbs of eWaste processed

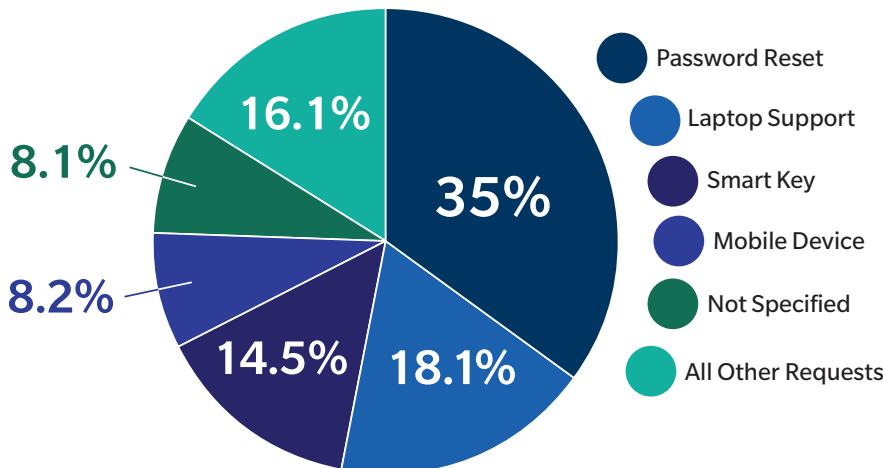
Asset Deployments

(Desktops, Laptops, iPads)
800 Deployed



Academic Technology Center

Nestled in the Faculty Commons, the Academic Technology Center (ATC) is a hub for faculty and staff to get in-person one-on-one help. At any given time, the ATC works to provide assistance with password resets, smart keys, help with mobile devices and more. The ATC also provides classes and instruction on accessibility on campus. Visitors can learn how to provide accessible course materials, how to include closed captioning in instruction videos and more.







On Average...

74,622 Users/month

148,818 Views/month

The Division of IT and subsequent departments which fall underneath it create and maintain websites to provide and promote the services we offer the campus community.

Top IT websites viewed

- 49.3%** STS Homepage (sts.fullerton.edu)
- 13.2%** Email (email.fullerton.edu)
- 4.9%** STS Software (sts.fullerton.edu/software)
- 2.7%** STS Software, Microsoft Office (sts.fullerton.edu/software/office)

Accessible Technology Initiative

In accordance with the Accessible Technology Initiative (ATI), all campus websites must follow guidelines to ensure that all users, regardless of ability, are offered equal opportunities to access information online and in the classroom.

Our endeavor to be a fully accessible campus does not end with the campus websites. We offer advice on

accessible technology purchases and work to help educate professors on how they can provide their students with accessible course materials.

The campus offers accessibility software to all students, faculty and staff. Visit the software page at IT.fullerton.edu to learn more about accessible software, Read&Write.

@CSUFIT SOCIAL MEDIA



In an effort to create a new avenue to reach students, IT re-energized its social media strategy. We posted visually appealing photos and videos of the campus and the various services the Division provides and offered incentives to students who follow us during the various tabling events held on campus. In the 2016/17 academic year, IT was able to **increase** our social media following by **over 121%**



Information Learning Commons

Users flock to Pollak Library's computers to study, browse the web between classes and finish up assignments. Windows and Macs are available to students, faculty and staff for use.

1st Floor, Pollak Library North
137 PCs, 72 MACs



ALSO AVAILABLE

- 10 Mobile device charging stations
- 6 Scanner stations
- Print-only stations
- CSVT machine for loading funds into your TitanCard

= 10,000 logins

2nd Floor, Pollak Library North
60 PCs



ALSO AVAILABLE

- 5 Mobile device charging stations
- Print-only stations

4th Floor, Pollak Library North
124 PCs, 51 MACs (in Audio Visual Rooms)



ALSO AVAILABLE

- 5 Mobile device charging stations
- Print-only stations



Laptops, iPads, Projectors and Smart Study Rooms are available to check out from the Student Genius Corner (Located on the first floor of Pollak Library, North)



527
*iPad and Projector
Check Outs*



17,065
Laptop Check outs

9,016
*Smart Room
Check Outs*





STUDENT TECHNOLOGY SERVICES

IT shares the same goal as the University: to foster student success. We offer a wide range of services targeted directly at students; from affordable software to technical help at the Student Genius Corner (located on the first floor of Pollak Library South) - we work to ensure students have access to the assistance and technology they need to be successful.

24/7 Student IT Help Desk

15,377 Issues Resolved

9,138 Calls, Chats, Emails

6,239 Walk-in Help Desk Support

Student Genius Corner
49,088 Issues Resolved

~ 320,000 Fliers Printed

Digital Print Services

Wonder where those giant IT ground stickers came from? Digital Print Services (DPS) is located on the second floor of Pollak Library and available for use by students, faculty and staff.

Want to have a poster printed for class?
Fliers for an upcoming club meeting?
What about a 3D printed elephant?

DPS offers a wide range of printing, laser engraving and 3D printing services.

Last year, DPS printed about 320,000 fliers. The most common question they're asked is if students can use them for their printing needs. The answer: YES!

TOP 3
most popular services

1 Wide Format Posters

2 Color Fliers

3 Exams

DIGITAL PRINT SERVICES

SOFTWARE ↓ DOWNLOADS

From Microsoft Office to SPSS and the Adobe Creative Cloud suite; students, faculty and staff have access to a wide range of software – available to use and download. IT works to acquire new licenses for the latest in industry applications. In the 2016/17 academic year, we introduced the campus to Zoom Video Conferencing, EndNote, Beyond Compare, IBM Watson Analytics and accessibility software, Read&Write.

The campus received a grant from Adobe® for the Spring 2017 semester to introduce their products to classes and majors that would otherwise not be exposed to them. IT worked with five business professors to integrate Adobe® Spark and Adobe InDesign® into their curriculum.

By the end of the Spring 2017 semester, these classes had the second highest number of students who created Adobe Creative Cloud® accounts, with 134 accounts (figure 1).

For the most up-to-date list of softwares available to you, please visit it.fullerton.edu.



| 2016/2017 | SOFTWARE DISTRIBUTION

- 34,388** Microsoft Office 365
- 23,981** Lynda.com
- 11,121** Dropbox
- 7,338** Adobe Creative Cloud®
- 5,306** IBM SPSS
- 3,781** MathWorks MATLAB
- 2,444** Microsoft Windows 10
- 1,695** Zoom Video Conferencing
- 653** Thompson Reuters EndNote
- 365** Texthelp Read&Write
- 73** Scooter Software
Beyond Compare

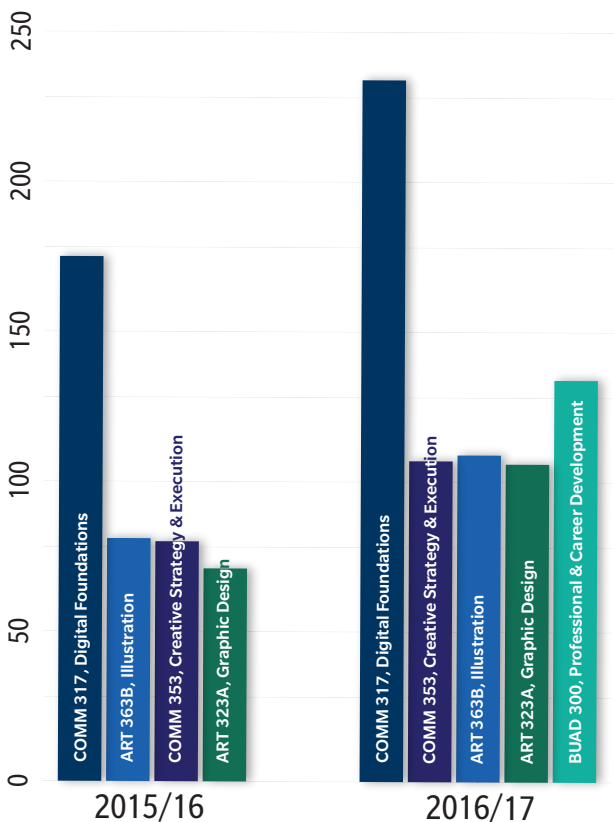


Figure 1 (left) illustrates how the BUAD 300 class surpassed most of the other courses in number of students enrolled in Adobe Creative Cloud®.

IT Services Survey

In Spring of 2017, the Division of Information Technology conducted an online survey with more than 1,800 faculty, staff and students participating.

Faculty and staff were asked a series of questions regarding their satisfaction with various services including the wired internet connection, email performance and the IT Help Desk's customer service. Of those surveyed, 91.7% reported they were satisfied with the wired internet connection where 5.7% were neutral and 2.6% reported they did not think of the wired internet connection favorably. 90% of faculty and staff were satisfied with their email performance and 87.5% were happy with the customer service of the IT Help Desk.

Faculty/Staff Survey Results

Wired Internet Connection



Email Performance



IT Help Desk Customer Service



Student Survey Results

Student Emails



Titan Online Dashboard



New Campus Portal



Students were asked about their own experiences with email, the Titan Online Dashboard and the New Campus Portal which debuted earlier in the year. 86% of those surveyed were satisfied with their student email accounts compared to the 76.6% of those happy with the Titan Online Dashboard and the 76.7% of those who favored the new Campus Portal.

In all, students, faculty and staff reported an 82.3% satisfaction rate with IT's services. Common requests include more online training. The Division of IT will use the results of these surveys to pinpoint where we can improve and what the campus community would like to see in the coming years.

Faculty, Staff and Student Survey Results

Overall Satisfaction



Contact Us

For more information on our specific services, please visit it.fullerton.edu

For Faculty & Staff

Faculty/Staff IT Help Desk

657.278.7777

HelpDesk@fullerton.edu

Academic Technology Center

PLS-237

For Students

Student Genius Corner

(For walk-in help)

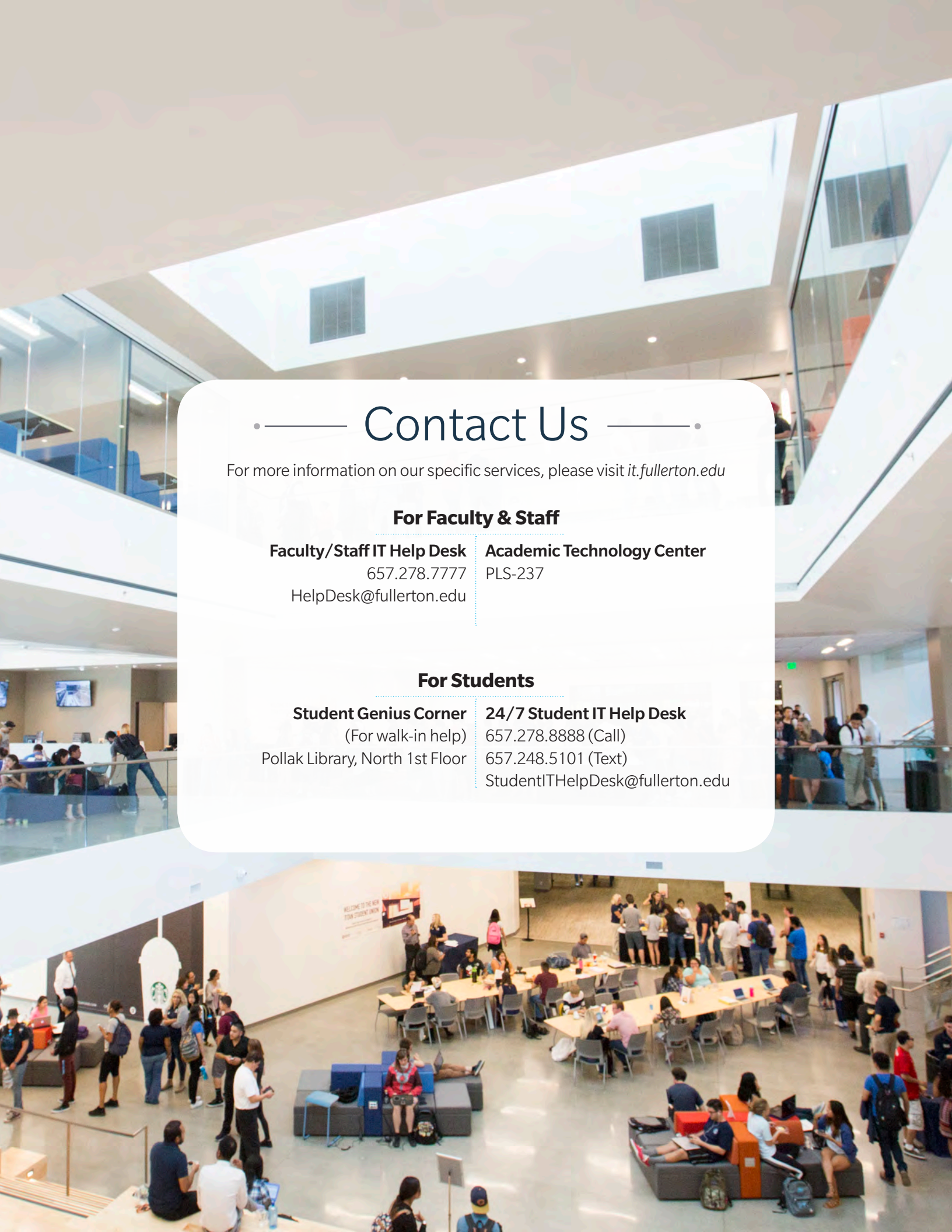
Pollak Library, North 1st Floor

24/7 Student IT Help Desk

657.278.8888 (Call)

657.248.5101 (Text)

StudentITHelpDesk@fullerton.edu





TITANS REACH HIGHER