



# Campus Management Today



A woman and a man in white shirts are looking at a laptop screen together. The woman is on the left, and the man is on the right, wearing glasses. They are both smiling and appear to be in a collaborative work environment. The background is a light, neutral color.

A Student Information System is the key component of the digital infrastructure of a modern University.

Campus on Cloud is a Student Information System built on the Microsoft Azure cloud platform. Campus on Cloud delivers rich functionality in a highly secure solution with a stunning user interface. Covering the complete student lifecycle, Campus on Cloud automates the Admissions, Academics and Finance operations across all campuses, schools, departments and programs of the Institute.

Campus on Cloud transforms the Higher Education landscape by integrating business processes and analytics in a cloud solution delivered on desktop and mobile.

# Introduction

A Student Information System (SIS) is the beating heart of University operations. The SIS is an integrated solution covering Admissions, Academics and Financials. It captures key information for the entire student lifecycle: from initial application for admission through enrollment, graduation and beyond. By providing a single source of data, the SIS allows the university to analyze its performance from both a mission perspective (enabling quality learning outcomes) and from a financial perspective (managing and securing the day to day and future operations of the University).

In implementing a SIS, most Universities grapple with the build versus buy choice. However, increasingly, the realization that the core competence of the Higher Education Institution lies in teaching and research, and not software development, is a compelling argument in favor of the buy option. Even universities which are using a home grown solution find it very difficult to maintain the software over an extended period of time as the software development team is beset with employee turnover and knowledge retention becomes a major challenge. Finally one-off efforts in creating software mean that over time, the software technology used to initially develop the system becomes increasingly difficult to support and maintain. Finding new talent trained or even willing to work in a decade older technology becomes next to impossible for universities.

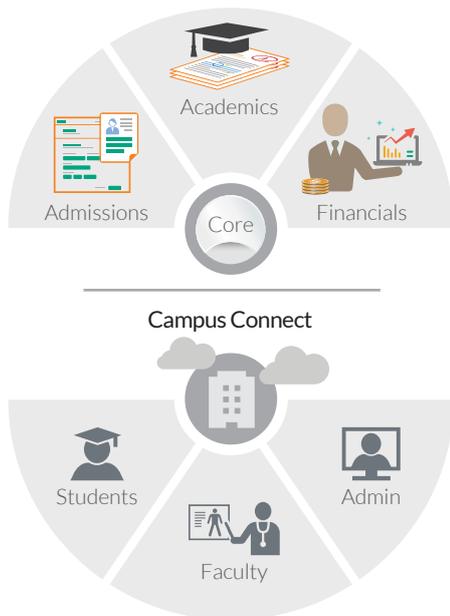
These dynamics are nothing new. Twenty years ago, the business world started transitioning from custom made or home grown accounting systems to modern ERP solutions for all of these reasons. Over time, as universities grow in size and complexity, the IT system becomes mission critical. Universities faced with same compelling logic which drove ERP adoption, realize that a Student Information System is now a mandatory part of a modern university's digital infrastructure and the only sustainable option is to purchase a commercial solution.

Implementing a world class SIS offers the following advantages:

- Consistent data views across different functions in the University; something that disparate, disconnected systems never provide;
- Web-based and mobile solutions that offer extensive self-service facilities so that students, faculty and staff have access to pertinent information at any time or place;
- Robust, secure, scalable and extensible solutions that offer flexibility and growth;
- Reduction in administrative overhead by leveraging technology. The ensuing savings can be reallocated to other areas.

# The 4 Major Functions of a SIS

A modern SIS typically covers four main areas:



**Core:** Definition of the academic and administrative structure of the university. Management of terms, sessions and associated academic calendars. Management of policies and rules across various functions.

**Admissions:** Management of the admissions process from online applications, through receipt of online and paper applications, the selection process, management of candidate offers and their acceptance and the collection of application and admission fees etc.

**Academics:** Setting up the course catalog and offering courses. Enrollment of students in classes. Course add, drop, swap. Course grading and its components. Scheduling of classes, exams and faculty. Marking examinations, homework and attendance by faculty. Start of term, mid-term and end of term activities. Student academic standing and Graduation. Transcript generation.

**Financials:** Setting up tuition fees and other charges as they apply to different categories of students. Setup of Billing calendars. Collection of fees and recovery of late payments etc. Award and disbursement of financial aid, scholarships and waivers.

In addition, a SIS typically offers student and faculty portals so they can access relevant content directly and easily.

## Campus on Cloud: The New Standard

Campus on Cloud, is a Student Information System built on the Microsoft Azure cloud platform. Campus on Cloud delivers rich functionality in a highly secure solution with a stunning user interface. Covering the complete student lifecycle, Campus on Cloud automates the Admissions, Academics and Finance operations across all campuses, schools, departments and programs of the Institute.

Engineered by a team experienced in 25 university implementations across 10 countries, Campus on Cloud transforms the Higher Education landscape by integrating business processes and analytics in a cloud solution delivered on desktop and mobile.

---

Each of the 4 major module is built upon configurable workflows to support the University's business process

---

---

Analytics are instantly available across every area of functionality

---

## Core

The Core module manages the Administrative and Academic hierarchy of the University and allows the definition of campuses, schools, departments, programs and the specializations being offered. The Core also allows management of terms and sessions and the academic calendar. A centralized Policy Control Panel lets the university tailor the rules for Admissions, Financials, Enrollment, Grading and others at all levels in the administrative and academic hierarchy.

A configurable security framework ensures access of functions and data is restricted to specific defined user roles.

## Admissions

Campus on Cloud offers a customizable Online Admissions Application and also supports paper based application processes. The Applicant Portal enables the tracking and management of applications for both online and paper based applicants.

Campus on Cloud understands the Admissions process is unique to almost every university. The software allows the University to configure the generation of selection and merit lists as required through an exhaustive set of criteria for evaluating applications. The admissions workflow across various stakeholders within the University can also be configured and changed by the University and the workflow can be different across programs, departments etc. to address their specific needs. Offer letters are generated by the system, if required. Applicants are able to accept or reject the offers and pay the admission fee online.

## Academics

Campus on Cloud Academics spans the functions of the Registrar and the Controller of Examinations offices.

To assist start of the term, Campus on Cloud supports setting up the course curriculum, offering courses in multiple departments and scheduling classes, faculty and exams in a given term. Students can be enrolled into classes administratively and via self-service through the Student Portal. Students can add, drop or swap a course to manage their academic load and the appropriate controls and approval workflows can be configured as required.

Instructors track attendance and grade assignments, quizzes and exams through the Faculty Portal as part of the mid of term operations.

To conclude the term, Campus on Cloud facilitates the Registrar or other delegated office in approving and finalizing grades, validating

repeats, generating transcripts and processing graduating students. Faculty can also be evaluated by students.

## Financials

Campus on Cloud provides a single source for students' academic and financial data. It tracks all the financial transactions during a student's life cycle at the university. The Financials module covers:

- Setup and Processing of Application, Admission and Tuition Fees
- Award and Disbursal of Financial Aid, Waivers and Scholarships
- Collections of Payments, Dues and Age Analysis

The Student Portal lets the students view their account statement, view their bills, pay the dues online and request deferrals and installments plans.

# The 5 Major Issues that Limit a SIS

While current SIS solutions are able to address some of the basic needs of Universities, there are five major areas where significant issues are encountered by HEIs.

---

1

## Managing the IT infrastructure required by an Enterprise SIS

An Enterprise SIS is designed to operate continuously on a 24/7 basis. This requires the University to have an IT infrastructure which can support this. Additionally, an Enterprise SIS being a mission critical system also requires a Disaster Recover option in a remote data center. Most universities are not geared up from a budget or human resource perspective to support modern 24/7 data center operations. Additionally, the Enterprise SIS requires a hardware upgrade cycle every 5-7 years (if for no reason other than that older hardware is no longer even supported by the manufacturer). All of this ends up imposing a very substantial "hidden" cost that tight university budgets do not cater for.

2

## Managing Business Processes with the SIS

Most older SIS have been designed as transactional systems. What does this mean in practice? For example, the SIS will allow a faculty member to capture the grade for a student. But it won't cater for the process by which that grade has to be internally approved before final posting (for example, an approval process which requires signoff from a Department Head followed by the Registrar). This lack of process support means that the burden of entering critical data tends to get concentrated in the Registrar or Bursar's office and the steps preceding the entry of the data in the SIS are captured via email or through paper forms. This ultimately results in the lack of control and poor efficiency which marks all such manual processes.

### 3 Lack of Analytics

Traditional SIS are focused on transactional and operational reporting with very little capacity to support sophisticated interactive analysis. For many solutions, the analysis capabilities are part of a separate Data Warehousing solution with its own licensing and implementation costs. This disconnection between analytic content and day to day usage means that most users never access the insights which can be obtained from such data analysis. As a result, a key benefit of an enterprise solution is lost to the users.

### 4 Difficult to Use

Most older SIS were developed between ten and twenty years ago and their user interaction design reflects an older outdated paradigm of application usage. As business users around the world are exposed to and are comfortable with world class software like Facebook and Gmail, their expectations for corporate and enterprise systems change. Users become increasingly vocal in demanding the same high quality user interfaces in their office applications like the SIS. Having simple to use and intuitive applications also becomes a major driver in managing and reducing training and HR costs for the university.

### 5 Time to Implement

A typical SIS takes approximately 12 months to implement. The implementation time is so long largely because the software is not designed to be easily and centrally configurable through a consistent set of policies and rules. The implementation requires users to understand how the SIS treats core data entities such as courses, students, grades and then attempt to map them onto how the university itself functions. Additionally, the SIS requires data in very specific formats and universities find it difficult to provide the required data structured the way it is required by the SIS.

# The Answer: Campus on Cloud



Campus on Cloud has been designed to address all the pain points which afflict a typical SIS

---

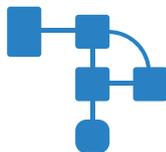
## Delivered on Azure, the Microsoft Cloud

Campus on Cloud is built and delivered on Azure, the Microsoft cloud available worldwide. For the University, Campus on Cloud includes all the necessary hardware and technology software within a single solution which is secured and managed by Microsoft. The University's data remains secure and encrypted and can only be accessed by the university itself. However, Microsoft takes the burden of managing a computing infrastructure for 24/7 availability and protecting against cyberattacks. The Campus on Cloud solution also includes a built Disaster Recovery option to ensure optimal uptime for the University. Finally, the burden of upgrading hardware over 5-7 year cycles is also taken by Microsoft which ensures that the solution runs on the most current generation of server hardware.

With 24/7 availability of Campus on Cloud ensured, the University is free to use Campus on Cloud like a service utility. In the morning, when the university users want to access the system, its already there. In the evening as users head home, the system is still available and will remain accessible to the university users at any time without any additional headcount or expense or burden.

The University thus gets four major benefits from the deployment of Campus on Cloud:

- 24/7 availability of the system at no additional cost
- Fully backed up solution with a Disaster Recovery option at no additional cost
- Hardware upgrades at no additional cost
- Protection from cybersecurity attacks by the world's leading operator of data centers



## Campus on Cloud as a Process Centric solution

Campus on Cloud is inherently process aware: this means that workflows can be configured to manage large scale processes (such as the overall flow of the Admissions process). In addition, any specific transaction can be associated with a configurable multi-step approval process (for example, finalizing final grade in a course). For additional flexibility, a specific workflow can be associated with any element in the administrative or academic structure (allowing, for example, two departments to have different approval workflows for finalizing the final grade). The configuration of workflows is done by administrators themselves and does not require any change in the software.



## Pervasive Analytics

Campus on Cloud is built on the concept of pervasive analytics. Along with the standard operational reports delivered out of the box, Campus on Cloud includes analytic content associated with every major data element. For example, clicking on a course shows a set of pre-computed KPIs specific to that course which are automatically refreshed every night. In addition, dashboards provide rich content that can be filtered and analyzed interactively.



## Low Touch Implementation

Campus on Cloud has been designed for low touch implementation. The entire setup and structure of Campus on Cloud has been designed to be simple to understand and consistent across the entire application. For example, policies and rules related to all four major areas of the application are clearly and consistently marked and modified in the Policy Center. Additionally, the data migration strategy is built around creating a staging environment for data which is very simple to use and represents the simplest possible structure for the data. Once data is loaded into this environment, a set of pre-defined quality checks run within Campus on Cloud which allow the university IT administrators to clearly understand any problematic data which can then be simply and easily resolved. Once the data in the staging area passes all the built-in quality checks, it is automatically uploaded into Campus on Cloud.

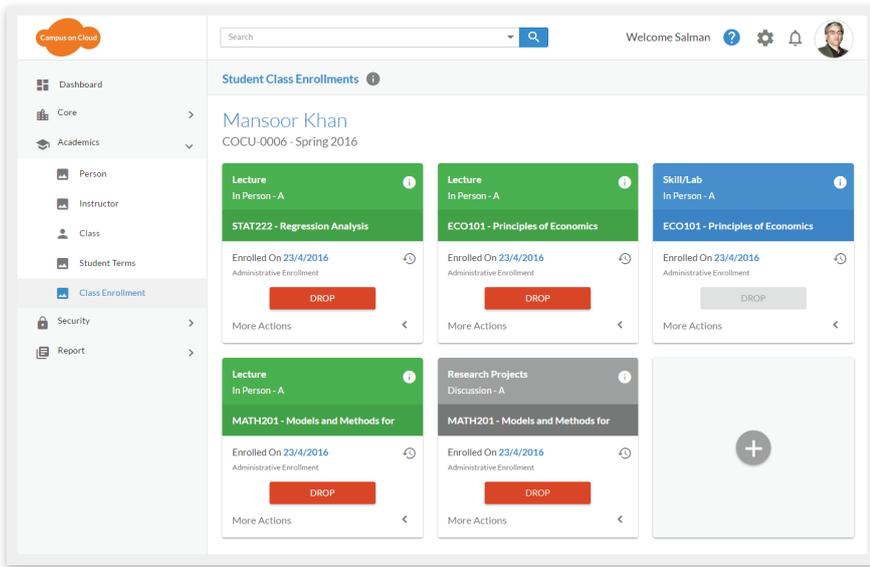


## Design Excellence: Thoughtful and Aesthetic design

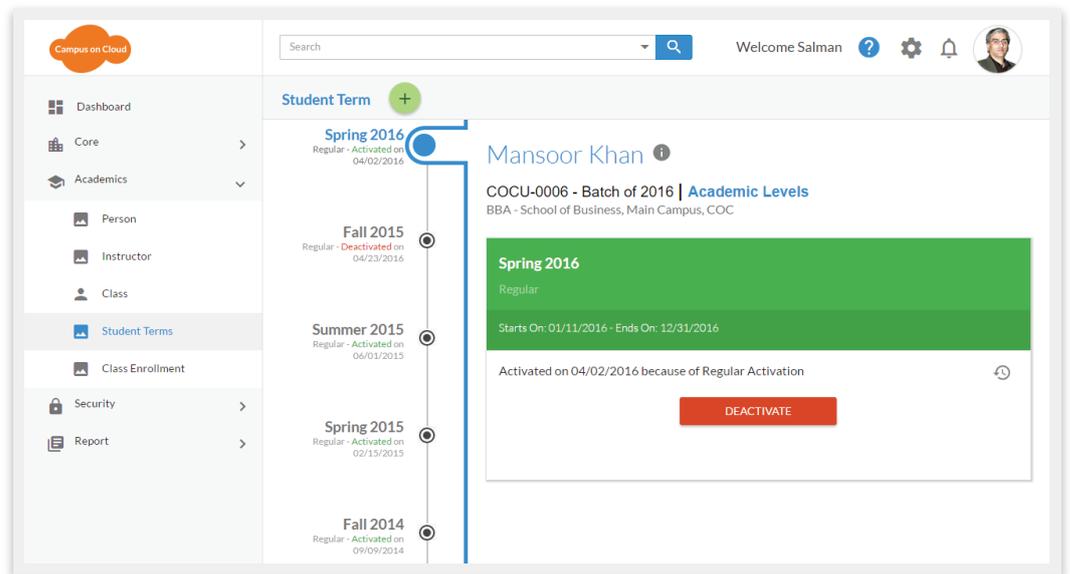
In designing the user experience in Campus on Cloud, the fundamental principle adopted was Human Centered Design.

This seemingly obvious idea means understanding that the software is meant to be used by people. That there are variations amongst these people: for example, over time, administrative staff that use the software every day become expert users, while students who may use the software a few times a week remain novices or intermediate users at best. Thus the software must adapt to the requirements of different levels of user expertise and provide efficient pathways for novices as well as power users.

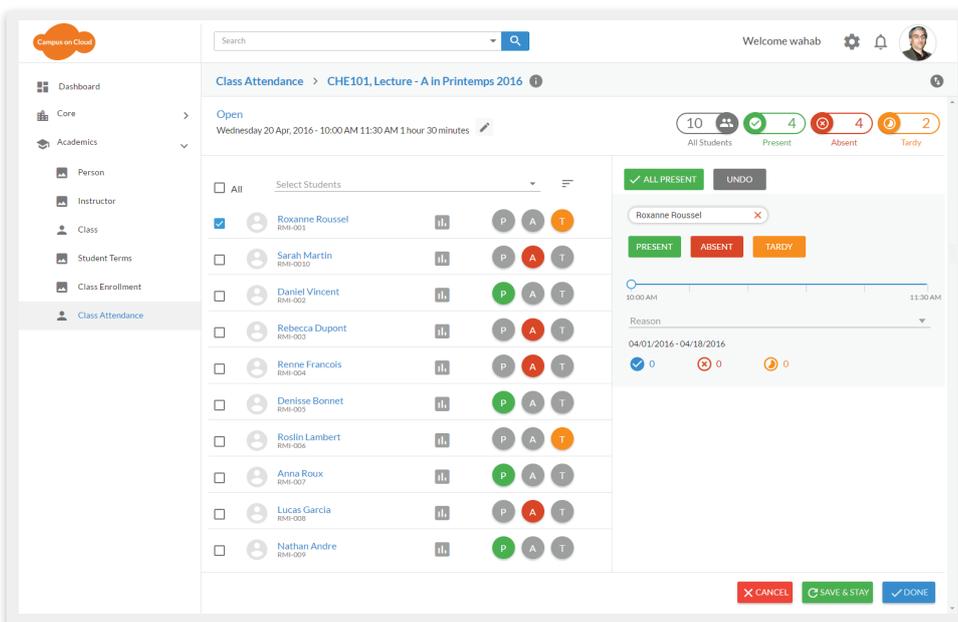
A second key goal for Campus on Cloud was to design beautiful software. Software that sets high standards for aesthetics is a pleasure to use and results in users who enjoy working with the system.



Student Enrollment Screen



Student Term Registration



Marking Class Attendance

# Integration with other solutions

Integrated with the world's leading ERP solutions (SAP, Oracle and Microsoft) and campus support systems like Koha Library Management, Unitime Timetabling and Moodle and Sakai Learning Management, Campus on Cloud addresses the complete set of university operations.

## **ERP Financials & HR**

The integration support for ERP Financials consolidates the financial impact of the student transactions into the General Ledger for operational reporting and business critical analysis. The faculty and staff information in Campus on Cloud can be integrated with the HR Module of the ERP solution.

## **Learning Management and Timetabling**

The LMS integration allows scheduled courses to be automatically reflected in Sakai or Moodle with the appropriate registered students. Unitime Timetabling support allows the university to create an optimized classroom, exam and faculty schedule which can then be imported back into Campus on Cloud.

# Conclusion

Campus on Cloud is a world class application covering all major operations of a University delivered via the Microsoft Cloud. Transforming IT into a service Campus on Cloud allows the University to focus on its core mission: the delivery of quality education.

## Contact

For more information please visit [almusnet.com](https://almusnet.com)  
Or send an email to [info@almusnet.com](mailto:info@almusnet.com)

---

The logo for AlmusNet, featuring a stylized orange 'A' icon followed by the text 'AlmusNet' in a sans-serif font.