



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

# A Smoother Path to Education:

## UNC Offers Students More Online Learning Options

*“Informatica is helping students across all UNC System schools with the real-time information and flexibility they need to take courses required for graduation via online courses offered within the UNC System.”*

Fran Dykstra, Associate Vice Chancellor  
for Enterprise Applications and Reporting,  
University of North Carolina at Chapel Hill



### Goals

Enable students to take UNC Online courses hosted by schools throughout the UNC system

Satisfy demand for real-time data and integrations to support enrollment at 17 different institutions

Devote more time to value-added application development and less time building interfaces among systems

### Solution

Informatica Intelligent Cloud Services automates data integrations between schools in the UNC System

Informatica Cloud Application Integration consolidates real-time data between student information systems

Prebuilt Informatica Cloud Connectors for Oracle Database, REST Web Services and other key data sources accelerate deployment

### Results

Makes it easier to accommodate requests for real-time data integrations across the university

Reduces development time up to 50-60%, enabling UNC to deploy new web services into production approximately 4x faster

## Business Requirements:

- Automate participation in UNC Online and data sharing between UNC institution systems
- Deploy a real-time, cloud-based solution university-wide

### About the University of North Carolina at Chapel Hill

The University of North Carolina located in Chapel Hill, North Carolina is the United States' oldest public university. Its mission is to serve as a center for research, scholarship, and creativity and to teach a diverse community of undergraduate, graduate, and professional students to become the next generation of leaders.

The University of North Carolina at Chapel Hill (UNC-Chapel Hill) is a global leader in higher education, offering 78 bachelors, 112 masters, 68 doctorate, and 7 professional degree programs through 14 graduate and professional schools and the College of Arts and Sciences. UNC-Chapel Hill is part of the University of North Carolina System, which serves as a statewide educational and economic beacon through teaching, research, and community engagement.

When the University of North Carolina system launched UNC Online, a program to enable students across all 17 of its institutions to enroll in online courses, UNC-Chapel Hill wanted to participate fully. The program is intended to facilitate timely graduation by making it easier for students to enroll in courses not offered by their home institution. However, participation required the development of 29 separate web services to maintain and exchange information about classes, registration, grades, and transcripts. Manually building the required interfaces would have taken more than seven months of development and testing time.

Although the UNC Online initiative was the most pressing need, there was also increasing demand for real-time data and integrations to support new digital services across the university. Instead of wasting precious development resources on building and maintaining interfaces among systems, UNC-Chapel Hill wanted to focus those resources on modernization and building new applications.

"Over the course of a year, approximately 42,000 students, faculty, and staff are associated with this institution, and just about all of them could benefit from new applications and automation," says Fran Dykstra, Associate Vice Chancellor for Enterprise Applications and Reporting at UNC-Chapel Hill. "We want to say yes to these projects as much as possible because it improves experiences for everyone. But we're facing exploding demand that we can no longer meet by manually building connectors and interfaces among applications."

### Building a cross-institution registration process

After evaluating the top products in the Gartner Magic Quadrant for Enterprise Integration Platform as a Service (iPaaS), UNC-Chapel Hill selected Informatica Intelligent Cloud Services to build the web services required to participate in UNC Online. Informatica Cloud Data Integration handles batch integrations, while Cloud Application Integration combines real-time data from cloud and on-premises applications. UNC has now built over 50 application integrations between UNC Chapel Hill's Finance, Human Resources, Payroll and Student Administrative applications as well as other UNC applications and applications external to UNC.

In one project, the university's application developers used Informatica Intelligent Cloud Services to exchange UNC Chapel-Hill data with data from the University of North Carolina System in an application called UNC Online. UNC Online identifies a student's home institution, where the student is primarily enrolled and allows



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them to enroll in courses from other course-hosting institutions. The course host institutions publish the courses they wish to make available for inter-institutional registration through UNC online. In the past, cumbersome manual registration processes were required for a student from one UNC university to enroll in an online course at another institution. The use of prebuilt Informatica Cloud Connectors to Oracle databases and REST Web Services accelerated the process.

“The web services we built using Informatica Intelligent Cloud Services allow us to consume data from and expose it to the UNC System Office data hub and enable inter-institutional registration for UNC Online, as well as exchange student grades between the 17 campuses in the UNC System,” says Vetrivel Thiagarajan, Architect and Director of Enabling Tools at UNC-Chapel Hill.

### **Increasing online enrollment, boosting graduation rates**

UNC-Chapel Hill students can now choose from many online courses available through UNC Online. By enabling the university to offer so many educational options in one place, the Informatica solution not only fulfilled the business requirement for inter-institutional registration, it also helped UNC-Chapel Hill expand enrollment in UNC Online.

With real-time information about course enrollment and availability, finding and registering for the courses needed for graduation becomes much easier. For example, students can easily sign up for a spot that becomes available at the last minute because someone dropped out of a class that was previously full.

“Informatica helps us give students the real-time information and flexibility they need to take the right courses wherever and whenever they’re offered within the UNC System, which may help them complete their requirements for graduation more quickly,” says Dykstra.

### **Reducing development time up to 60 percent**

The UNC Online initiative showed the potential of Informatica Intelligent Cloud Services to streamline the university’s development and testing processes for interfaces with quick and reliable services that improve efficiency, reduce upfront integration costs and time, and emphasize fast, lower-cost development.

“Informatica Intelligent Cloud Services helped us reduce our development time by 50 to 60 percent versus the manual approach to data integration we utilized before,” says Thiagarajan. “It’s also much easier for us to do maintenance on integrations if data fields change or are added to applications.”

Adds Dykstra: “I have read that at most large educational institutions, web services take four to six weeks to build, validate, and deploy into production. We can now do that nearly four times faster, in just a few weeks. That makes it much easier for us to accommodate new requests.”





### Inside The Solution:

- Informatica Intelligent Cloud Services (IICS)
- Informatica Cloud Application Integration
- Informatica Cloud Data Integration

## Optimizing experiences and resources

UNC-Chapel Hill is using Informatica Intelligent Cloud Services beyond UNC Online, helping students achieve a better balance of athletics and academics by making class schedules and changes more easily visible to coaches, who can optimize practice times accordingly. It's also sending information to and from hospital systems at UNC Health, connecting the systems that support its UNC OneCard personal identification system, and interfacing with benefits providers. It is also using Informatica to interface applicant information from Slate into UNC's student administrative application.

"We have a strong relationship with Informatica, and we're continuing to build trust and collaboration," says Dykstra. "Our goal is to use Informatica Intelligent Cloud Services to build a library of data services, which will reduce the burden of administrative processing at the University so we have more resources to devote to more value-added activities. Informatica reduces much of the work involved with getting information from one system into another, which is a major challenge across higher education."

