

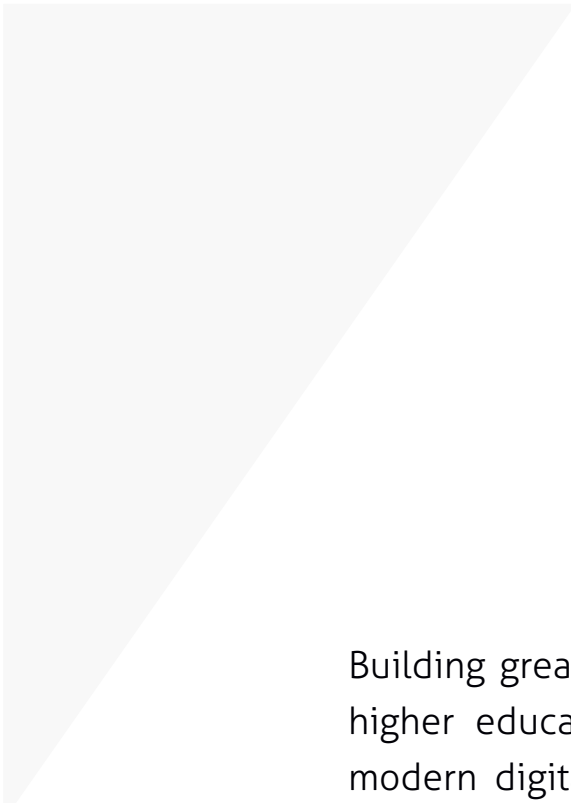
**INGENIU**X



# Solution Guide for Student Portals

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Building great student experiences is a top priority for higher education institutions. You want to provide a modern digital experience that meets current student needs. You also need to ensure the right tools are available at the student's finger tips to find the information they need and perform key activities in their day-to-day life. A Student Portal supports both of these requirements.

# The Student Portal: The Modern Alternative to Legacy Portals

Modern student portal solutions offer a contextual, content-driven experience that brings together the information and systems students and faculty require.

A combination of intranet and portal, a modern portal built with Ingeniux CMS not only securely integrates business systems such as ERPs and LMSs, but also offers content within the portal directly, giving students one place to quickly find information and engage with the institution, instructors and other students.

Ingeniux provides a modern portal solution, built following web standards and mobile responsive design. The Ingeniux Student Portal solution enables higher education institutions to provide a central hub for academic and business application access and information.

A centralized location for students and faculty to access essential information and tools required for the academic year, the Ingeniux Student Portal solution also offers secure collaboration and social features that enable engagement and improve learning and student life experiences. To ensure the security and privacy of student information, the Ingeniux CMS Student Portal enables secure access using roles and permissions.

While some student portals offer the same standard user experience regardless of institution, Ingeniux provides complete graphic design and brand control so you can create the best experience for your students.

Ingeniux believes every student deserves the best tools to support their academic endeavors and works hard to ensure educational institutions can create the right student experiences based on their specific student use cases.

# Breaking Down Information Silos Across Campus

Information is found in a myriad of systems across campus including a student information system (SIS), learning management system (LMS), ERP and more, but students are less interested in how information is stored and more interested in a cohesive experience. Students want a consistent experience that provides all

the information they need within easy centralized access.

Ingeniux is committed to providing a student experience that meets the needs of students by offering a single point of access and hub to all applications, information and content, breaking down these information silos.

*Portals have been around for a long time. But there are major differences between solutions that continue to provide legacy portal offerings and platforms like Ingeniux that provide modern agile solutions for the Student Portal.*

	Ingeniux CMS Portal Solution	Legacy Portals
<b>Content Model</b>	Support for full page and compositized content as well as applications and links.	Content model limited to links and content snippets. No page-based or narrative content.
<b>Integration</b>	Integration using modern web standards for Web Services and APIs.	Integration based on legacy portal standards for JSR and Microsoft.net.
<b>Single Sign On &amp; Permissions</b>	Pre-built support for Active Directory, LDAP, and CAS. Support for SAML 2.0 and leading identity providers.	Proprietary identity management or complex integration.
<b>Mobile Support</b>	Mobile first design model with responsive and adaptive templates.	Limited or no mobile support.
<b>User Experience</b>	Brand-forward user experience with full branding and style guide control.	Pre-built templates with limited brand control.
<b>Application Access</b>	Applications interfaces and data displayed in the portal views.	Links to external applications or widgets with application data and forms.

# At a Glance: Student Portal Capabilities

 SSO, Permissions and Access	 LMS Integration	 SIS / ERP / CRM Integration
 Collaboration	 Social / Community	 Search
 Analytics	 Web Content	 Notifications/ Activity Feeds
 Mobile	 Profile Management	 Developer APIs

# A New Approach to Student Portals

The Ingeniux Student Portal solution provides a seamless, consistent student experience where students have a single point of access to all the information they need. Ingeniux takes advantage of native content management capabilities and the Page Builder visual portal designer to deliver a content-driven portal experience. Using Page Builder, web managers can pull in content from student and business systems directly into the portal experience offering immediate access to a range of information, while also providing secure access to the applications directly when required.

## Dashboards

When a student enters the Student Portal they often view a dashboard customized to their needs. The portal dashboard (or Home Page) may offer common sections such as the Learning Management Center, Help, and Financial Services, in addition to personalized sections or links based on the student's prior portal use. The dashboard may be a content-driven interface that surfaces the most important information and links personalized to each student.

## Content Management

The Ingeniux Student Portal provides a full-featured content management system. Portal administrators can give access to authors, editors and publishers for each department or other area to create and manage content published in the portal.

Ingeniux CMS includes a Page Builder to visually develop web pages that are automatically responsive and follow standard templates defined by the institution. Robust workflow is also available to ensure that all content published on the portal has gone through the appropriate reviews and approvals before going live.

Another key benefit of Ingeniux content management is its web governance capabilities. Ingeniux offers built in features for quality assurance (so you can be sure the portal experience is free of unreadable text and broken links) and accessibility, including a built-in accessibility checker.

## LMS Integration

Integration is available for leading Learning Management Solutions including Moodle, Blackboard, and Sakai, including single-sign on access to the LMS through the portal.

You can also pull in LMS content into Portal web pages such as a list of the courses the student attends, courses they are required to take, along with notifications, grades and other information – all without having to enter the LMS system.

## Student Information Systems (SIS), ERP and CRM Integration

Integration is available for CRMs such as Salesforce and MS Dynamics, as well as ERP and SIS systems such as Colleague, Banner, PowerCAMPUS from Ellucian, Jenzabar, and PeopleSoft.

Integrate with these systems to connect student and faculty profiles, registration and course catalog information, financial aid and more.

## Facilities

Integration with Facilities software enables institutions to provide class locations, and identify when rooms are available to book for meetings, seminars and other events.

## Campus Maps & Parking

Institutions can integrate with map software to provide maps for class locations and other places on campus. It can identify parking permit requirements and offer alerts for important information.

## Payments

The Ingeniux Student Portal can integrate with e-commerce platforms to accept payments for the school year, ensuring those payments are automatically updated in the ERP or SIS and reflected in the Student Portal in real-time.

The Portal can integrate with the ERP to show students payments made, outstanding balances, or credits. It can also alert students to upcoming or late payments.



## Bookstore

Another integration may include direct access to the campus bookstore, enabling students to order and pay for books through the Student Portal.

## Profile Management

Student profiles are stored in the Student Portal and connected to their student profile in the SIS or ERP. This means the profile in the student portal is a combination of SIS profile information and custom profile elements in the portal.

Students may be able to update certain parts of their profile as identified by the institution, including SIS profile information. Changes to core SIS profile information are reflected in the backend systems in real-time, so you can ensure profile data is accurate across systems.

The institution defined the additional profile fields in the portal.

## Notifications & Activity

A student portal can provide an activity feed feature that allows students to follow professors, classes, students and other interesting activity feeds to stay up to date on events and activities. This feed is often shown on the Portal Homepage and can offer an email option that sends regular updates in a feed to the student's email address.

Notifications are also available within the portal to provide alerts and items of interest to students and faculty – such as classes cancelled due to storms, major institution events and news and other alerts. Notifications can appear highlighted in the portal, be sent via email or SMS.

## Enterprise Search

The ability to find information quickly is critical in a Student Portal. Along with a well define information architecture set up by the institution, the Ingeniux Student solution also provides built-in enterprise search.

Ingeniux Search provides a rich set of capabilities out of the box, including federation, faceted or guided search, secure search, and multilingual search. Portal administrators can customize search results by configuring search rankings and creating a custom search results UI.

## Single Sign-On, Permissions and Access

There is robust security and permissions for users, groups and content assets built into the Ingeniux Student Portal.

Single Sign-on and Access: End user SSO is done depending on the platform integrations and requirements. The most common form is to use SAML 2.0 and any number of Identity Providers (IDP) such as Active Directory Federation Services (ADFS), Azure AD/Office 365, Shibboleth, Ping, Okta, and other providers. When using an external IDP Ingeniux delegates credential management to the external system.

The Ingeniux Student Portal can integrate directly with Active Directory, LDAP, work with Central Authentication Service (CAS) or a host of custom providers, or it can provide security directly. Because it

provides cascading authentication, it can utilize multiple identity providers to manage access and group-level security in the Portal.

By applying permissions by Role or Group, institutions can easily manage access to content within the Portal, as well as access to systems integrated with the portal through Single-sign on.

## Social Community

An important aspect of student life is community. The Ingeniux Student Portal supports a social and community environment through a number of features including blogs, forums, activity feeds, social feedback (commenting, likes, ratings, etc.) and interest groups. Gamification is another feature that encourages engagement through features such as leaderboards, badges and games.

The institution can identify community managers for the campus or extend community manager capabilities to departments and student groups for their own communities.

## Collaboration

Students often work in groups or teams for classes. Likewise, professors want a place to store class information, lessons and assignments and important dates.

The Student Portal provides collaboration capabilities that enable students to work together including shared workspaces and calendars, activity feeds and notifications.

## Reports and Analytics

Ingeniux CMS provides web analytics dashboards on a page-by-page and portal-wide basis. Analytics data is integrated via a provider model with pre-built connectors for Google Analytics, WebTrends, and Adobe Analytics/SiteCatalyst.

Create custom reports or view a standard set out of the box to track how the Student Portal is used. Regular monitoring helps institutions see what areas of the portal are accessed most often and enables them to adjust the student experience by bringing more important, or accessed information into the Dashboard.

Analytics on communities can help faculty and student groups monitor how well their community is performing, including most popular content and frequent community members.

In addition, there is reporting on enterprise search usage, giving the institution a view into what information students and faculty are searching for. Again, this information helps them improve the experience by creating more content or bringing widely searched content into the dashboard, common links or navigation.

## Third-Party Application Integration

Ingeniux software is built on the latest Microsoft technology; including ASP.NET 4.5 and MVC 5.

It features a true three-tier architecture, support for the latest ASP.NET technologies including MVC and the Razor view engine, full Visual Studio integration, and open RESTful API elements. The Ingeniux Student Portal provides a Developer API written

in ASP.NET. The API is available in REST and SOAP. A CS API provides access to the content store and content management application services. It is built around a NoSQL document database. The DSS API (Dynamic Site Server API) provides access to the content delivery tier and is used to integrate content and other systems in the Student Portal.

## Mobile Experience

Ingeniux CMS supports mobile experiences out of the box. The Student Portal natively supports the Bootstrap 2-4 and Foundation 4-6 responsive frameworks. A plug-in system supports additional responsive frameworks. The Ingeniux Page Builder uses responsive frameworks to generate the grids in which content items are added, and rows and columns set to visually layout a new page or modify an existing template.

You can make your student portal device-aware using Ingeniux CMS. A device-aware portal solution detects that detects the user agent and device for each content request. The portal can target and render content based on device types and capabilities.

Ingeniux packages a device profile library of over 20,000 mobile devices that is automatically updated weekly with new specifications. Use the library for loading emulations (the Portal supports desktop, tablet and smartphone content emulation and preview) and real-time device and capabilities detection for intelligent content display.

# Portal Deployment Options

The Ingeniux Student Portal is available as a software service managed in the Cloud, or as an on-premises application. The managed hosting solution enables institutions to accelerate growth and scale operations while controlling costs and reducing IT infrastructure support risks.

Ingeniux offers more than traditional multitenant SaaS solutions by providing each customer with a dedicated environment for its Student Portal application. Using this approach, each customer can define the network configuration needed to meet business, security, and compliance requirements.

The Ingeniux approach also provides greater flexibility: upgrade when you

want, manage file-level access, write customizations and integrations, install additional applications or databases, and, perhaps most importantly, move the application to your servers if you want in the future.

Ingeniux's industry leading software-as-a-service goes beyond traditional hosting by providing application management, change management, performance management, and application optimization.

The Cloud provides greater scalability, less management overhead for IT teams, and the peace of mind of having one number to call to address your web software, performance, and uptime services.

## About Ingeniux

Ingeniux is the leading provider of web content management and digital experience software. We enable organizations to orchestrate the entire customer experience from acquisition through to sales to support and service, across any device, application, or website.

Used by over 140 colleges and universities, we offer best-in-class content management and portal software, and .edu website solutions, including

- Course catalogs, student portals, event calendars, intranets, newsletters, and other EDU solutions
- Professional service staff with expertise in EDU requirements and technology
- Standards-based technology that supports XHTML, CSS and accessibility requirements

Ingeniux software is available as a fully managed software service or an on-premise application. Ingeniux delivers unparalleled service and support to customers worldwide.

To learn more about Ingeniux portal and web content management solutions for higher education, call our Higher Education Solutions group at 206.788.4305 or e-mail [info@ingeniux.com](mailto:info@ingeniux.com).

**INGENIUX**

PO Box 21466  
Seattle, WA 98111

[info@ingeniux.com](mailto:info@ingeniux.com)  
877 445 8228