Student Dashboard

Figure 1: Student Dashboard

University Management System (UniConnect) - System Overview

Introduction

UniConnect is a modern, unified digital platform designed to streamline the complex administrative, academic, and financial operations of the university. It provides a tailored, intuitive experience for every member of the university ecosystem—Students, Academic Staff, Administrators, and Financial Officers.

The system is built on a **secure, real-time cloud infrastructure**, ensuring that data is always up-to-date, accessible from anywhere, and protected with enterprise-grade security.

Key Capabilities at a Glance

- **For Students**: A single hub for all academic and campus life needs. View results, pay fees, register for courses, and access welfare services without standing in queues.
- **For Staff**: Digital tools to manage teaching, grading, and research. Automated attendance tracking and streamlined mark entry reduce administrative burden.
- **For Administration**: Strategic oversight with real-time analytics. manage curriculum, users, and compliance from a central command center.
- **For Finance (Bursar)**: Real-time financial reconciliation, automated fee tracking, and transparent auditing tools.

System Structure (User-Wise)

The following diagrams illustrate the robust feature set available to each user role.

1. Student Portal

Focus: Personal Academic Journey & Campus Services

```
graph TD
    Student[Student Services]

    Student --> Overview[Overview]
```

Staff Dashboard

Figure 2: Staff Dashboard

```
    Overview --> Dashboard[Personal Dashboard]

    Student --> Academic[Academic Affairs]
    Academic --> Reg[Course Registration]
    Academic --> MyCourses[My Courses & Materials]
    Academic --> Results[Exam Results & GPA]
    Academic --> Attendance[Digital Attendance Record]

    Student --> Finance[Financial Services]
    Finance --> Wallet[Digital Wallet]
    Finance --> Fees[Fee Payments]
    Finance --> Mahapola[Mahapola Scholarship]
    Finance --> Bursary[Bursary Management]

    Student --> Welfare[Student Welfare]
    Welfare --> Hostel[Hostel Allocation]
    Welfare --> Health[Medical Centre]
    Welfare --> Career[Career Guidance]
```

2. Academic Staff Portal

Focus: Teaching, Evaluation & Research

```
graph TD
    Staff[Academic Staff]

    Staff --> Overview[Overview]
    Overview --> Dashboard[Staff Dashboard]
    Overview --> Schedule[Teaching Schedule]
    Overview --> Tasks[Admin Tasks]
    Overview --> Log[Work Log]

    Staff --> Courses[Course Management]
    Courses --> Modules[Module Planning]
    Courses --> Content[Upload Learning Materials]
    Courses --> Attendance[Digital Roll Call]
    Courses --> Eligibility[Exam Eligibility Checks]

    Staff --> Exams[Exams & Grading]
    Exams --> Grading[Final Grading]
    Exams --> Marks[Enter Continuous Assessment]
    Exams --> Plagiarism[AI Plagiarism Check]
```

Admin Dashboard

Figure 3: Admin Dashboard

```
    Staff --> Research[Research & Impact]
    Research --> Pubs[Publications Repository]
    Research --> Grants[Grant Management]
```

3. Administration Portal (Registrar & VC)

Focus: Governance, Strategy & Operations

```
graph TD
    Admin[Administration]

    Admin --> Lead[Leadership & Strategy]
    Lead --> Overview[Executive Overview]
    Lead --> Analytics[University Analytics]
    Lead --> QA[Quality Assurance]
    Lead --> Plan[Strategic Planning]

    Admin --> Reg[Registrar Operations]
    Reg --> Users[User Management]
    Reg --> Curr[Curriculum Development]
    Reg --> Exams[Exam Scheduling]
    Reg --> MOU[International MoUs]

    Admin --> Fin[Finance Oversight]
    Fin --> Fees[Fee Structures]
    Fin --> Funds[Fund Allocation]
    Fin --> Assets[Asset Management]
    Fin --> Audit[Internal Audit]

    Admin --> Sys[System]
    Sys --> Settings[Configuration]
```

4. Bursar (Finance) Portal

Focus: Financial Integrity & Reconciliation

```
graph TD
    Bursar[Bursar Office]

    Bursar --> Fin[Financial Operations]
    Fin --> Dashboard[Financial Overview]
    Fin --> Reconcile[Daily Reconciliation]
```

```
Fin --> Payments[Verify Payments]
Fin --> Reports[Financial Reporting]
```

Role-Based Menu Explorer & Walkthroughs

This section describes exactly what a user sees and does in each menu option.

1. Student Portal Navigation

Primary Goal: Academic Success & Financial Clarity

Menu Section	Item	Action / Walkthrough
Overview	**Dashboard**	**View**: Check GPA, Semester Status, and Wallet Balance.**Action**: Click widgets to jump to Results or Payments.
Academic	**Course Reg.**	**Step 1**: Browse open courses for the semester.**Step 2**: Click "Enroll" on desired modules.**Step 3**: System checks prerequisites > Confirms enrollment.
	My Courses	**View**: List of active enrolled modules.**Action**: Click a module to access learning materials, assignments, and announcements.
	Results	**View**: Full academic transcript and GPA calculation.**Action**: Download official semester reports (PDF).
	Attendance	**View**: Check attendance percentage per module.**Alert**: Flags if attendance drops below 80%.

Menu Section	Item	Action / Walkthrough
Financial	**My Wallet**	**View**: Total balance, scholarship inflows, and payment outflows.**Action**: Top up wallet via payment gateway.
	Fees	**View**: Outstanding tuition or exam fees.**Action**: Click "Pay Now" > Select Payment Method > Generates Receipt.
	Mahapola	**View**: Scholarship installment status and history.**Action**: Acknowledge receipt of funds.
	Bursary	**Action**: Apply for financial aid > Upload Income Proof > Submit for Bursar review.
Welfare	**Hostel**	**Action**: Apply for accommodation > Select Room Type > View Allocation Status.
	Health	**Action**: Book medical appointments > View digital medical history.
	Career	**Action**: View job board > Book counseling sessions.

2. Academic Staff Navigation

Primary Goal: Efficient Teaching & Evaluation

Menu Section	Item	Action / Walkthrough
Overview	**Dashboard**	**View**: Upcoming Classes timeline and "To-Do" list (e.g., "Grade CS101").

Menu Section	Item	Action / Walkthrough
	Schedule	**View**: Weekly teaching timetable with room numbers.
	Tasks	**Action**: View administrative tasks assigned by Dean/HoD > Mark as "Done".
	Work Log	**Action**: Auto-generated log of teaching hours for payroll claims.
Courses	**Modules**	**View**: List of modules taught this semester.**Action**: Select to manage specific course details.
	Upload Content	**Step 1**: Select Module.**Step 2**: Drag & Drop Lecture Slides/Notes.**Step 3**: Publish to Student Portal.
	Digital Roll	**Step 1**: Select Active Class.**Step 2**: Display QR Code or Manually check students ing.
	Eligibility	**View**: Auto-generated list of students eligible for exams based on attendance.
Exams	**Grading**	**Action**: Input final letter grades for verified students > Submit to Exam Board.
	Enter Marks	**Action**: Enter continuous assessment (assignment/mid-term) raw marks.
	Plagiarism	**Tool**: Upload student assignment > AI scans against repository > Returns Similarity Report.

Menu Section	Item	Action / Walkthrough
Research	**Publications**	**Action**: Log new research papers > Updates academic profile.
	Grants	**Action**: Track grant utilization and detailed expenditure.

3. Administration Navigation (Registrar/VC)

Primary Goal: High-Level Oversight & Configuration

Menu Section	Item	Action / Walkthrough
Leadership	**Overview**	**View**: Campus pulse (Active Users, Financial Health, Critical Alerts).
	Analytics	**Tool**: Interactive charts showing multi-year trends (Enrollment, Pass Rates).
	QA Metrics	**View**: Compliance with UGC/Quality Assurance standards.
	Strategic Plan	**Action**: Define and track long-term university KPIs.
Registrar	**Users**	**Action**: Create/Edit User Accounts > Reset Passwords > Assign Roles.
	Curriculum	**Action**: Define new Degrees/Courses > Set Credits & Prerequisites.
	Exam Sched.	**Action**: Create exam timetables > Allocate exam halls & invigilators.
	Intl. MoU	**Action**: Manage partnerships with foreign universities.
Finance	**Fee Tracking**	**View**: Real-time monitor of fee collection rates across faculties.

Menu Section	Item	Action / Walkthrough
	Funds	**Action**: Allocate budget to departments.
	Assets	**Action**: Inventory management (Buildings, Labs, Equipment).
	Audit	**Report**: Generate system-wide activity logs for internal audit.
System	**Config**	**Action**: Set global variables (Academic Year, Semester Dates).

4. Bursar Navigation

Primary Goal: Financial Integrity

Menu Section	Item	Action / Walkthrough
Finance	**Finance Home**	**View**: Cash flow summary, Daily Collection, Pending Approvals.
	Reconcile	**Workflow**: 1. System flags mismatched payments.2. Bursar reviews bank feed vs system records.3. Click "Reconcile" to force match or "Flag" to investigate.

Role Responsibility Matrix

This matrix clearly defines who is responsible for each core operation within the system.

Operational Area	Action	**Student**	**Staff**	**Admin (Reg)**	**Bursar**
Onboarding	Account Creation	Applies	Verifies Docs	Final Approval	-
Coursework	Enrollment	**Initiates**	Advises	Configures	-

Operational Area	Action	**Student**	**Staff**	**Admin (Reg)**	**Bursar**
	Upload Content	Consumes	**Uploads**	-	-
	Attendance	Checks	**Marks**	Monitors	-
Examinations	Scheduling	View	-	**Creates**	-
	Grading	View	**Enters**	Publishes	-
Finance	Fee Payment	**Pays**	-	Sets Fees	**Verifies**
	Scholarship	Receives	-	-	Disburses
	Reconciliation	-	-	Audit	**Executes**
Welfare	Notifications	View	Send	Broadcast	-

Service Blueprint - Visual Evidence

Real-time snapshots of role-based workflows.

1. Student: Course Registration & Financials

Action: Browsing active modules and checking wallet balance. Student Course Registration *(Above: Student selects modules for the upcoming semester)*

2. Staff: Academic Administration

Action: Managing modules and entering grades. Staff Grading Portal *(Above: Interface for entering and finalizing student marks)*

3. Admin: System Governance

Action: Managing user access and scheduling exams. Admin User Management *(Above: Registrar's view for verifying and managing student/staff accounts)*

4. Bursar: Financial Reconciliation

Action: Verifying payments and auditing streams. Bursar Reconciliation *(Above: Active workspace for matching bank feeds with system receipts)*

Interconnected Operational Workflows

Workflow 1: The "New Student" Lifecycle (Onboarding)

Goal: Move a user from an "Applicant" to an "Active Student".

1. **Student (External)**: Visits Portal > “Apply Now” > Fills Profile > Uploads NIC/A-Level Results.
2. **System**: Creates “Provisional” account. Locked from Course Reg.
3. **Admin (Registrar)**: Receives “New Intake” Alert > Reviews Documents > Clicks “Approve”.
4. **System**: Unlocks Student Account > Generates Student ID > Sends Welcome Email.
5. **Student**: Logs in > Sees “Complete Registration Payment” task.
6. **Student**: Pays Registration Fee via Gateway.
7. **Bursar**: Payment auto-verified (or manual checks).
8. **System**: Status updated to “Active” > “Course Reg” menu unlocks.

Workflow 2: The “External Course” Application (Marketplace)

Goal: Allow a student to take an extra qualification (e.g., CIMA/MBA).

1. **Student**: Navigation > **My Courses** > “Browse External Courses”.
2. **System**: Filters courses by Student’s eligibility (e.g., Year 3 only).
3. **Student**: Selects “MBA Foundation” > Clicks “Apply”.
4. **Admin**: “Curriculum” > Sees Application > Checks capacity > Approves.
5. **Student**: Received “Offer Letter” notification > “Fees” menu updates.
6. **Student**: Pays Module Fee (Installment 1).
7. **System**: Auto-enrolls student in “MBA Foundation” module appearing in **My Courses**.

Request for Stakeholder Input

To ensure UniConnect fits your specific university culture, we need your input on: 1. **Approval Hierarchies**: Who specifically signs off on new student intakes? (Dean vs Registrar?) 2. **Fee Structures**: Are there specific installment plans for External Courses? 3. **Legacy Data**: Do we need to migrate existing records? 4. **Custom Workflows**: Are there unique departmental processes we should model?