

NSBM Green University

Faculty of Computing

Business Process and ERP

MODULE CODE: IS201.3

Group No: 17

UNI CONNECT ERP SYSTEM



1. Library Management System

Description:

The Library System handles all operations related to library resource management. It tracks books, journals, digital media, and borrowing activities. The system provides students and staff with an online catalog, supports book reservations, manages fines for overdue items, and maintains an up-to-date inventory. It ensures quick access to academic resources and simplifies the librarian's administrative work.

Key Users:

- Librarian
- Students
- Academic Staff (Lecturers)
- Library Administrator

Sub-Processes:

Book Acquisition

Request for new materials \rightarrow Approval \rightarrow Cataloging \rightarrow Barcode assignment \rightarrow Inventory update.

Book Issue/Return

Student login \rightarrow Search & request \rightarrow Issue confirmation \rightarrow Due date tracking \rightarrow Return/fine process.

Reservation Management

Book reservation → Availability alert → Auto-cancel if uncollected.

Inventory & Maintenance

Periodic audits → Lost/damaged book reports → Record updates.

Report Generation

Borrowing trends \rightarrow Overdue reports \rightarrow Inventory summaries.

2. HR & Payroll System

Description:

The HR & Payroll module manages all human resource activities within the university, including staff recruitment, attendance, leave management, and payroll processing. It ensures efficient record-keeping for academic and non-academic staff, automates salary calculations, tax deductions, and generates payslips. This module improves administrative efficiency and accuracy in handling employee-related data while maintaining compliance with university policies and labor laws.

Key Users/Roles:

- HR Administrator
- Payroll Officer
- Department Heads
- Academic/Non-Academic Staff
- System Administrator

Sub-Processes : Recruitment & Onboarding

Job posting \rightarrow Application screening \rightarrow Interviews \rightarrow Hiring \rightarrow Employee record creation.

Attendance & Leave Management

Daily attendance \rightarrow Leave requests \rightarrow Approvals \rightarrow Updates to payroll.

Payroll Processing

Salary generation \rightarrow Allowances/deductions \rightarrow Tax/EPF/ETF calculation \rightarrow Payslip generation.

Performance Evaluation

Appraisal setup \rightarrow Evaluation \rightarrow Feedback & grading \rightarrow Record update.

Employee Exit Management

 $Resignation \ submission \rightarrow Clearance \ process \rightarrow Final \ settlement.$

3. Examination & Grading System

Description:

The Examination & Grading module manages the complete academic evaluation process — from exam scheduling to grade publication. It automates question paper management, exam timetables, attendance during exams, result entry, and final grade calculation. The system ensures accuracy, transparency, and timely access to students' academic performance.

Key Users:

- Examination Officer
- Lecturers
- Students
- Department Heads
- Academic Administrator

Sub-Processes: Exam Scheduling

Course registration \rightarrow Timetable generation \rightarrow Hall & invigilator allocation.

Question Paper Management

Question submission → Approval → Secure storage/distribution.

Exam Administration

Student verification \rightarrow Attendance recording \rightarrow Conducting the exam.

Grading & Result Entry

Marks entry by lecturers \rightarrow Grade calculation \rightarrow Moderation \rightarrow Approval by HoD.

Result Publication

Finalized results → Student access via portal → Transcript generation.

High-Level Business Processes

- User Authentication & Role Management Login, role assignment (Admin, Staff, Student).
- Employee & Student Information Management Centralized profiles accessible across modules.
- Communication & Notification System Automated alerts for payroll, exams, or library due dates.
- **Data Integration & Reporting** Unified reporting dashboard combining HR, Library, and Exam data.
- Security & Access Control Role-based permissions, data backup, and audit trails

Library management system

Activities on library system.

- Create library account.
- · Verify membership details.
- If not verify reapply to library membership with valid details.
- If verify issue library ID and membership card.
- Login to the online library system.
- Search for books.
- Check availability.
- If available, reserve the book.
- If not available, show the unavailability & suggest similar books.
- Issue books as required.
- Record issuing transaction.
- Check return date.
- Request renewal of borrowed books.
- If not return the borrowed books.
- Update system on return materials.
- Pay overdue fines.

Diagram link:

https://drive.google.com/file/d/1QyiWiDbrkc84cL9q6UsscDjgjzTkb3HC/view?usp=sharing

Image link:

https://drive.google.com/file/d/13GJH0J0_P-Ypt2QqBb9nEdVDQ1-SbizX/view?usp=drive_link

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