

# **PUP-TAGUIG FACULTY LOADING AND SCHEDULING SYSTEM**

**Software Design  
Specification  
Version 1.0**

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**December 11, 2024**

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## Revision History

Version	Name	Reason for Changes	Date
1.0	UNTITLED	Initial Draft	August 25, 2024
1.1	HEISENBERG	Second Draft	December 11, 2024

## Approved By

Name	Signature	Department	Date
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# **1. Introduction**

## **1.1 Purpose**

This design document will provide a detailed outline of the implementation of the requirements as defined in the Software Requirements Specification of the PUP Taguig Faculty Loading and Scheduling System (PUPT-FLSS). It is intended to present the system's design to help understand the system's functionality.

## **1.2 Scope**

This document will explain how the design will accomplish the functional and non-functional requirements specified in the PUPT-FLSS Requirements Specification (SRS) document.

## **1.3 System Overview**

The PUP Taguig Faculty Loading and Scheduling System (PUPT-FLSS) is a web-based application intended to streamline the management and scheduling of faculty resources. It replaces the current manual process, aiming to provide an efficient interface for faculty members to organize their schedules and for administrators to manage and allocate teaching loads effectively.

## **1.4 Definitions and Acronyms**

<b>Term/Acronym</b>	<b>Definition</b>
SRS	System Requirement Specification
SDS	Software Design Specification
PUPT-FLSS	Polytechnic University of the Philippines Taguig Faculty Loading and Scheduling System
CSFLS	Class Scheduling and Faculty Loading System
DBMS	Database Management System. A programmable interface which provides a common layer of abstraction between a physical database and a user or external program.

## **1.5 References**

The references for this capstone project were compiled from various academic and technical sources, including the ISO 25010 standard for software quality evaluation, relevant literature on faculty management systems, and existing software requirements specifications related to educational management systems. Additionally, references include documentation and specifications related to the "PUP Taguig Faculty Loading and Scheduling System," which serves as the foundation for this project.

## **1.6 Overview of Document**

This document is meticulously crafted to serve as a comprehensive guide for the technical team responsible for the ongoing development of the "PUP Taguig Faculty Loading and Scheduling System." It outlines the software specifications, functional requirements, and operational guidelines necessary for the effective management of faculty scheduling and loading processes. Additionally, this document provides detailed instructions for system administrators to analyze, troubleshoot, and resolve any issues or errors that may arise during the system's operation, ensuring a seamless user experience and adherence to quality standards.

# **2. System Architecture Description**

## **1.1 System Description**

The PUP Faculty Loading and Scheduling System is a digital platform that integrates the Human Resource Information System (HRIS) with the Faculty Loading System (FLS). This integration ensures that faculty data is consistently updated and accessible for scheduling. Academic program directors can set the active school year, semester, and curriculum, creating a foundation for scheduling tasks. After configuration, faculty receive email notifications prompting them to log in and select their preferred time slots, courses, and year levels to teach. The system checks for any unassigned year levels or courses and alerts administrators if necessary. Once all selections are confirmed, it generates comprehensive reports summarizing faculty loads and schedules, ensuring efficient management and minimal conflicts.

## **1.2 Overview**

The PUP Faculty Loading and Scheduling System is an online tool that simplifies scheduling for faculty and program directors. It combines the Human Resource Information System (HRIS) with the Faculty Loading System (FLS) to provide up-to-date faculty information. Directors can set the academic year and courses, while faculty can choose their preferred schedules. The system checks for conflicts and creates reports, making it easier to manage faculty assignments.

## **1.3 Scope of the Development Project**

The "*PUP Taguig Faculty Loading and Scheduling System*" aims to modernize and streamline the faculty workload management and class scheduling processes at the Polytechnic University of the Philippines – Taguig Branch. This project involves the development and implementation of a functional, user-friendly, and reliable web-based system that allows administrators and faculty members to efficiently manage course assignments, faculty loads, and scheduling conflicts. The system will facilitate the submission, compilation, and review of faculty schedules and workloads by key stakeholders, including Academic Administrators, Curriculum Developers, and Faculty Members. These stakeholders will have the ability to evaluate and approve schedules, ensuring that all faculty assignments align with institutional policies and academic requirements. The system will also generate comprehensive reports and analytics to support decision-making and enhance the overall efficiency of academic administration at PUP Taguig.

## **1.4 System Context Diagram**

## 1.5 Data Flow Diagram

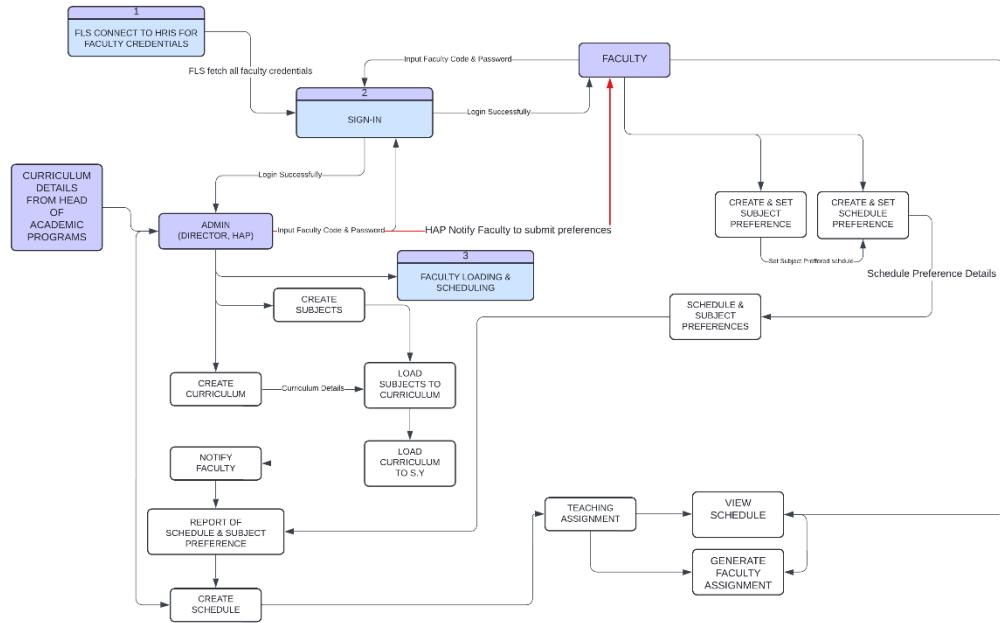


Figure 2. Data Flow Diagram

## 1.6 User Interface

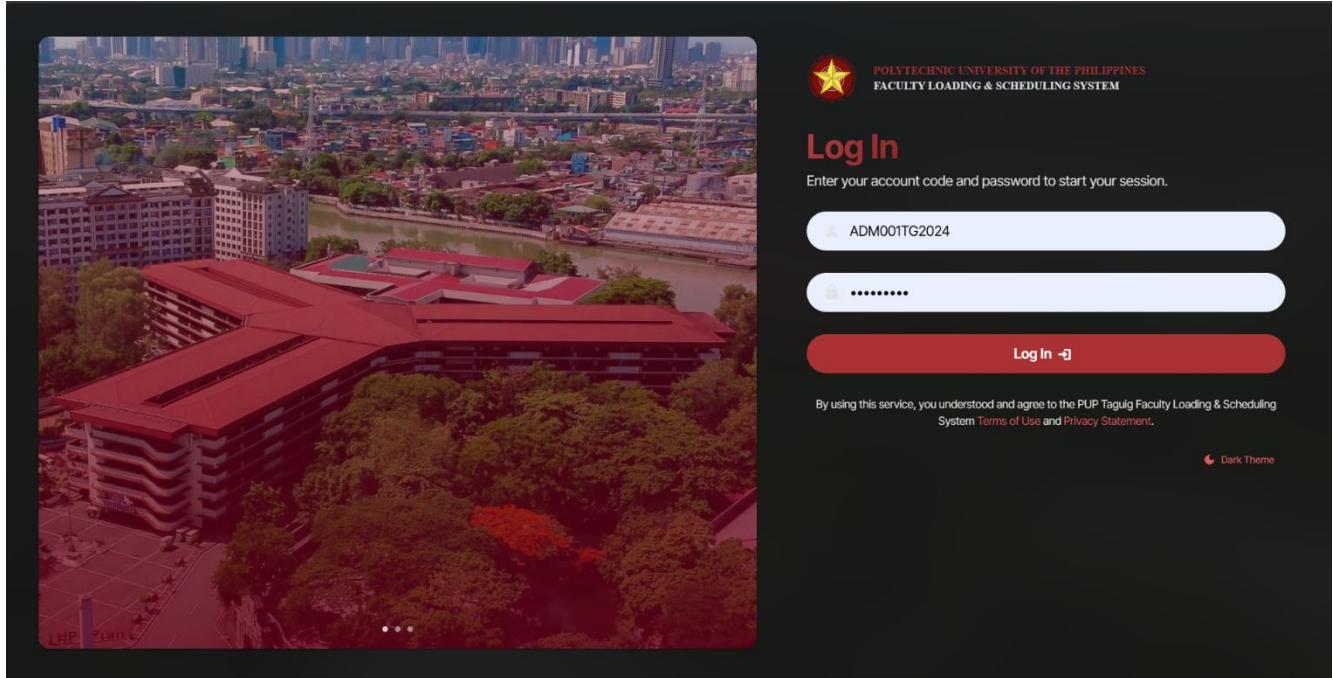


Figure 3. FLS Login Page. Faculty and Admins must login to FLS.

The screenshot shows the FLS Faculty Homepage. At the top left is the PUP - TAGUIG BRANCH logo and "FACULTY LOADING & SCHEDULING". Top navigation includes "Home", "Set Preferences", and "Load and Schedule". On the right, a user profile for Emmanuel Quinco Martinez (emmanuelmartinez013@gmail.com) is shown. A red banner at the top right indicates the current academic year and semester: "A.Y. 2024-2025, 1st Semester Current Academic Year & Semester". Below the banner is a "Notifications" section with a placeholder icon of a person carrying boxes and the message "No notifications yet.". The main content area displays a monthly calendar for December 2024, with days from Sunday to Saturday. Specific dates like December 17 and 18 are highlighted in red. Below the calendar is a search bar with the placeholder "Search Courses".

*Figure 4. FLS Faculty Homepage or Dashboard Displays the monthly class schedule and notifications for the current academic semester.*

The screenshot shows the "Set Preferences" page. At the top left is the PUP - TAGUIG BRANCH logo and "FACULTY LOADING & SCHEDULING". Top navigation includes "Home", "Set Preferences", and "Load and Schedule". On the right, a user profile for Emmanuel Quinco Martinez (emmanuelmartinez013@gmail.com) is shown. Two large red boxes on the right indicate "20 Total Units Selected" and "24 Total Hours Selected". The main content area has a search bar for "Search Courses" and a sidebar for selecting a program. The sidebar lists "BSIT-TG Bachelor of Science in Information Technology", "DICT Diploma in Communication Information Technology", "BSA Bachelor of Science in Accountancy", and "DIT Diploma in Information Technology". The main table lists selected courses with columns for Course Code, Course Title, Lec, Lab, Units, and Preferred Day & Time. Each row has a delete icon (red circle with a minus sign). The table rows are:

	Course Code	Course Title	Lec	Lab	Units	Preferred Day & Time
COMP 001	Introduction to Computing	2	3	3		Friday, Wednesday
COMP 002	Computer Programming 1	2	3	3		Monday, Saturday, Wednesday
LAW 101	Law on Obligation and Contracts	3	0	3		Click to select day and time
GEED 007	Science, Technology, and Society	3	0	3		Click to select day and time
PATHFIT 1	Physical Activity Towards Health and Fitness 1	2	0	2		Click to select day and time
ACCO 203	Income Taxation	3	0	3		Click to select day and time
LAW 014	Updates in Regulatory Frameworks	3	0	3		Click to select day and time

*Figure 5. FLS Faculty Set Preference Pages. Allows faculty to select preferred courses, schedules, and total units for the upcoming semester*

**Set Preferences**

Select your preferred courses and schedule for the upcoming A.Y. 2024-2025, 1st Semester.  
Submission Deadline: December 18, 2024 (Today)

20	Total Units Selected	24	Total Hours Selected
Lec	Lab	Units	Preferred Day & Time
2	3	3	Friday, Wednesday
2	3	3	Monday, Saturday, Wednesday
3	0	3	Click to select day and time
3	0	3	Click to select day and time
2	0	2	Click to select day and time
3	0	3	Click to select day and time
3	0	3	Click to select day and time

**Preferred Day & Time**  
For COMP 001 - Introduction to Computing

Mon Tue **Wed** Thu Fri Sat Sun

**Wednesday**

Start Time: 07:30 AM End Time: 09:00 AM

**Friday**

Start Time: 09:00 AM End Time: 10:00 AM

LAW 014

Figure 6.FLS Preferred Day & Time Modal. Allows faculty to set specific days and time slots for selected courses during preference submission.

## Set Preferences

Select your preferred courses and schedule for the upcoming A.Y. 2024-2025, 1st Semester.



Faculty preferences submission has been closed.

[View my preferences](#) [Request for access](#)

Figure 7.FLS Preference Submission Closed. Indicates that faculty preference submission is closed, with options to view preferences or request access.

## Set Preferences

Select your preferred courses and schedule for the upcoming A.Y. 2024-2025, 1st Semester.

#	Course Code	Course Title	Lec	Lab	Units	Preferred Day & Time
1	COMP 001	Introduction to Computing	2	3	3	Friday (09:00 AM - 01:30 PM), Wednesday (07:30 AM - 09:00 AM)

Close

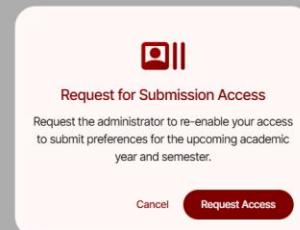
● Faculty preferences submission has been closed.

[View my preferences](#) [Request for access](#)

*Figure 8.FLS View Submitted Preferences. Displays the faculty's submitted course preferences, including selected days, times, and units for the upcoming semester.*

## Set Preferences

Select your preferred courses and schedule for the upcoming A.Y. 2024-2025, 1st Semester.



● Faculty preferences submission has been closed.

[View my preferences](#) [Request for access](#)

*Figure 9.FLS Request for Preference Submission Access. Allows faculty to request administrator access to re-enable preference submission for the upcoming semester.*

## Load and Schedule

Here's your latest official load and schedule for A.Y. 2024-2025, 1st Semester.

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7:00 AM							
7:30 AM							
8:00 AM							
8:30 AM							
9:00 AM							
9:30 AM							
10:00 AM							
10:30 AM							
11:00 AM							
11:30 AM							
12:00 PM							
12:30 PM							
1:00 PM							
1:30 PM							
2:00 PM							
2:30 PM							
3:00 PM							
3:30 PM							
4:00 PM							
4:30 PM							
5:00 PM							
	<b>8:00 AM - 2:00 PM</b>			<b>8:00 AM - 10:00 AM</b>		<b>8:00 AM - 4:30 PM</b>	

**Schedule Summary**  
Total Units: 12 units  
Total Hours: 16 hours

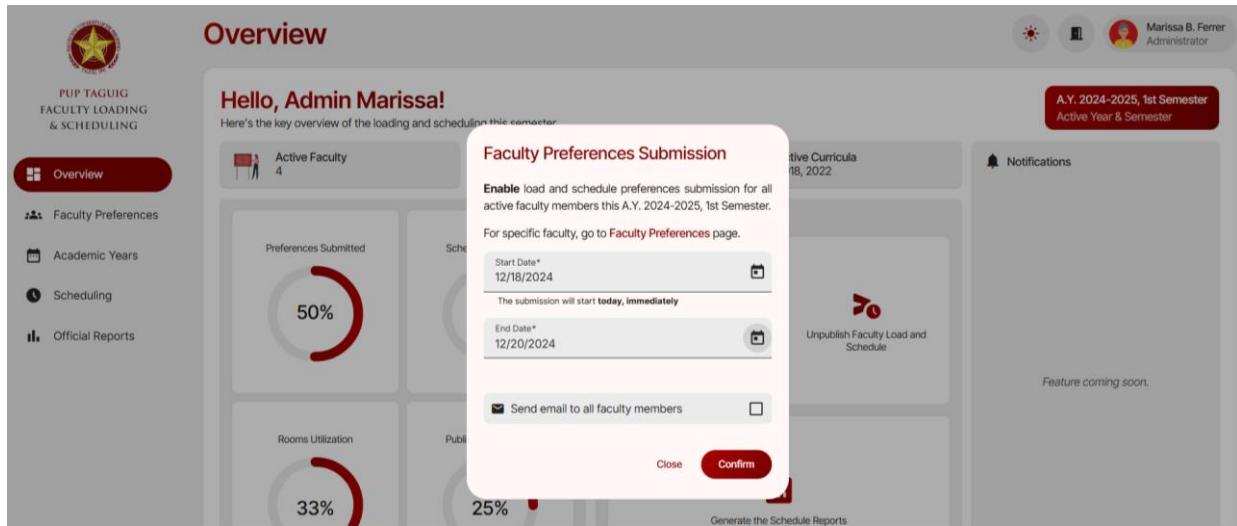
**Schedule History**  
View your past load and schedule here.

Figure 10. FLS Load & Schedule Page. Displays the official teaching schedule for the semester, including course details, time slots, and total units and hours summary

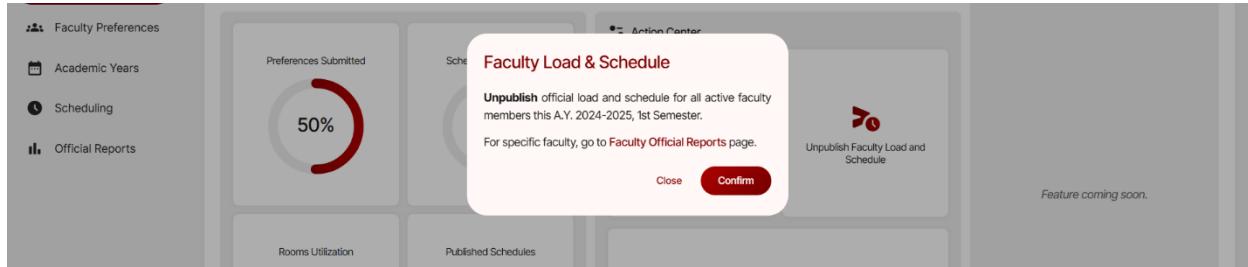
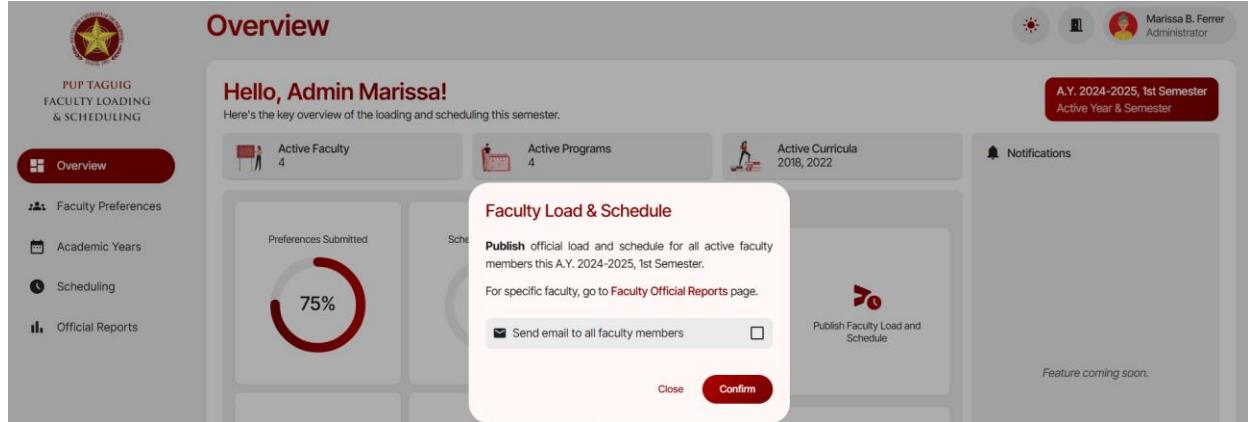
The screenshot shows the Admin Overview page with the following sections:

- Left Sidebar:** PUP TAGUIG FACULTY LOADING & SCHEDULING. Includes links for Overview, Faculty Preferences, Academic Years, Scheduling, Official Reports, and Notifications.
- Header:** Overview, Hello, Admin Marissa!, A.Y. 2024-2025, 1st Semester, Active Year & Semester, and user profile for Marissa B. Ferrer, Administrator.
- Key Overview:** Hello, Admin Marissa! Here's the key overview of the loading and scheduling this semester.
- Metrics:**
  - Active Faculty: 4
  - Active Programs: 4
  - Active Curricula: 2018, 2022
  - Action Center: Enable Faculty Preferences Submission, Unpublish Faculty Load and Schedule
  - Notifications: Feature coming soon.
- Progress Indicators:**
  - Preferences Submitted: 50%
  - Scheduling Progress: 4%
  - Rooms Utilization: 33%
  - Published Schedules: 25%

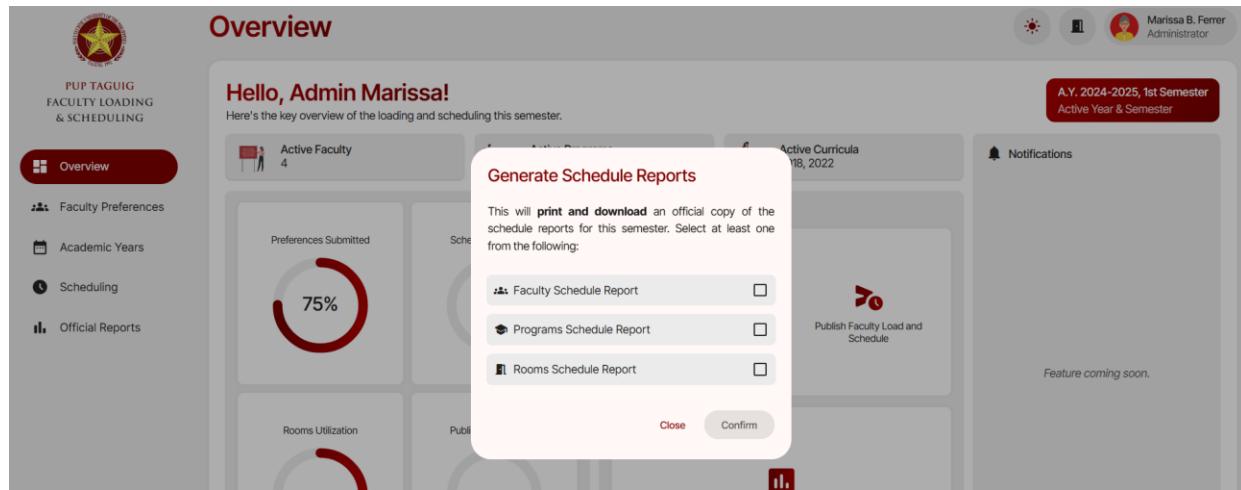
Figure 11. FLS Admin Overview Page. Provides a summary of faculty preferences, scheduling progress, room utilization, and published schedules, with quick actions for managing preferences, schedules, and reports.



*Figure 12. FLS Faculty Preference Submission Quick Action Modal. Allows the admin to enable faculty preference submissions by setting start and end dates, with an option to notify all faculty via email.*



*Figure 13. FLS Loading And Schedule Publishing Quick Action Modal. Allows the admin to unpublish official faculty loads and schedules for all active faculty members for the current academic semester.*



*Figure 14. FLS Loading And Schedule Generate Schedule Reports Quick Action Modal. Enables the admin to print and download official schedule reports, including Faculty, Program, and Room Schedule Reports, for the current semester.*

#	Faculty Name	Faculty Code	Faculty Type	Action	Requests ⓘ	⋮
1	Malaluan, Kyla Catu	FA0003TG2024	Full-time (Temporary)	<a href="#">View Preferences</a> <a href="#">Download</a>	None	<input type="checkbox"/>
2	Martinez, Emmanuel Quinco	FA0001TG2024	Full-time (Permanent)	<a href="#">View Preferences</a> <a href="#">Download</a>	None	<input type="checkbox"/>
3	Naoe, Adrian Bico	FA0002TG2024	Part-time	<a href="#">View Preferences</a> <a href="#">Download</a>	None	<input type="checkbox"/>
4	Rasquero, Via Abrilla	FA0004TG2024	Full-time (Designee)	<a href="#">View Preferences</a> <a href="#">Download</a>	None	<input type="checkbox"/>

*Figure 15. FLS Admin Faculty Preferences Management Page. Displays a list of faculty members, their types, and actions to view or download submitted preferences, with an option to export the list as a PDF.*

#	Faculty Name
1	Malaluan, Kyla Catu
2	Martinez, Emmanuel Quinco
3	Naoe, Adrian Bico
4	Rasquero, Via Abrilla

*Figure 16. FLS Admin Faculty Preferences Submission Modal (Specific Faculty). Enables the admin to open preference submissions for a specific faculty member, setting start and end dates with an option to notify them via email.*

#	Faculty Name
1	Malaluan, Kyla Catu
2	Martinez, Emmanuel Quinco
3	Naoe, Adrian Bico
4	Rasquero, Via Abrilla

*Figure 17. FLS Admin Faculty Preferences Submission Modal (All Active Faculty). Enables the admin to open preference submissions for all active faculty member, setting start and end dates with an option to notify them via email.*

The screenshot shows a modal window titled "Faculty Preferences Submission" with a progress bar icon. It states: "Preferences submission is currently scheduled to open from Dec 18, 2024 until .". Below the modal is a table listing four faculty members: Malaluan, Kyla Catu; Martinez, Emmanuel Quinco; Naoe, Adrian Bico; and Rasquero, Via Abrilla. Each row has a "View Preferences" button, a "Download" button, and a "Requests" toggle switch set to "None". The main interface includes a sidebar with "Faculty Preferences" selected, and a header with "PUP TAGUIG FACULTY LOADING & SCHEDULING".

*Figure 18. FLS Admin Faculty Disabling Preferences Submission Modal (Specific Faculty). Enables the admin to close preference submissions for a specific faculty member.*

The screenshot shows a modal window for "Naoe, Adrian Bico" with the message "Submitted Preferences for A.Y. 2024-2025, 1st Semester". It displays a table of courses: GEED 032 (Filipinohiya at Pambansang Kaunlaran) and INT-401 (Information Assurance and Security 2). The main interface includes a sidebar with "Faculty Preferences" selected, and a header with "PUP TAGUIG FACULTY LOADING & SCHEDULING".

Below the modal is a PDF viewer showing the "Faculty Preferences Report" for Naoe, Adrian Bico. The report includes the university logo, faculty name, academic year, semester, and a table of the same course information. The PDF viewer has "Table view" and "PDF view" buttons, and a "Download PDF" button at the bottom.

*Figure 19. FLS Admin Faculty View Preference submission Modal (Specific Faculty). Displays a specific faculty member's submitted course preferences, including course details, lecture/lab units, and preferred days and times, with options to view in table or PDF format*

The screenshot shows a modal window titled "Faculty Preferences" from the "PUP TAGUIG FACULTY LOADING & SCHEDULING" application. The modal displays "Export All Faculty Preferences" for the "Academic Year 2024-2025, 1st Semester". It includes the logo of the Polytechnic University of the Philippines - Taguig Branch and the name of the faculty member, Malahan, Kyla Catu. Below this, there is a table showing course details and preferred days/times. At the bottom right of the modal is a "Download PDF" button.

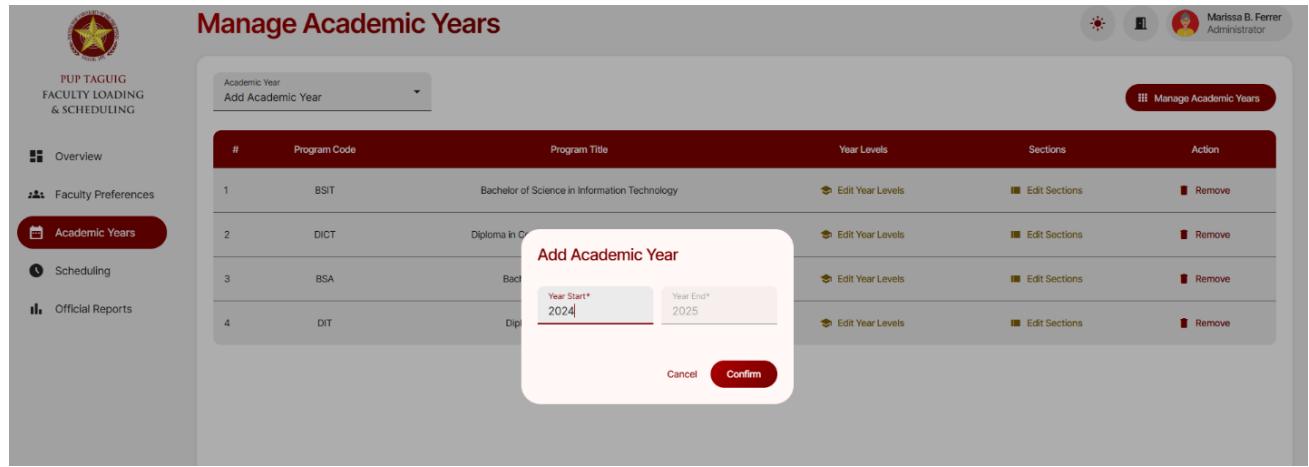
#	Course Code	Course Title	Lec	Lab	Units	Preferred Day & Time
1	COMP 007	Operating Systems	2	3	3	Tuesday - 11:30 AM to 3:30 PM Friday - 8:00 AM to 9:30 AM Sunday - 10:30 AM to 2:30 PM

*Figure 20. FLS Admin Export All Faculty Preferences Report Modal. Displays a consolidated PDF report of all faculty preferences, including course details, units, and preferred schedules, with an option to download the report.*

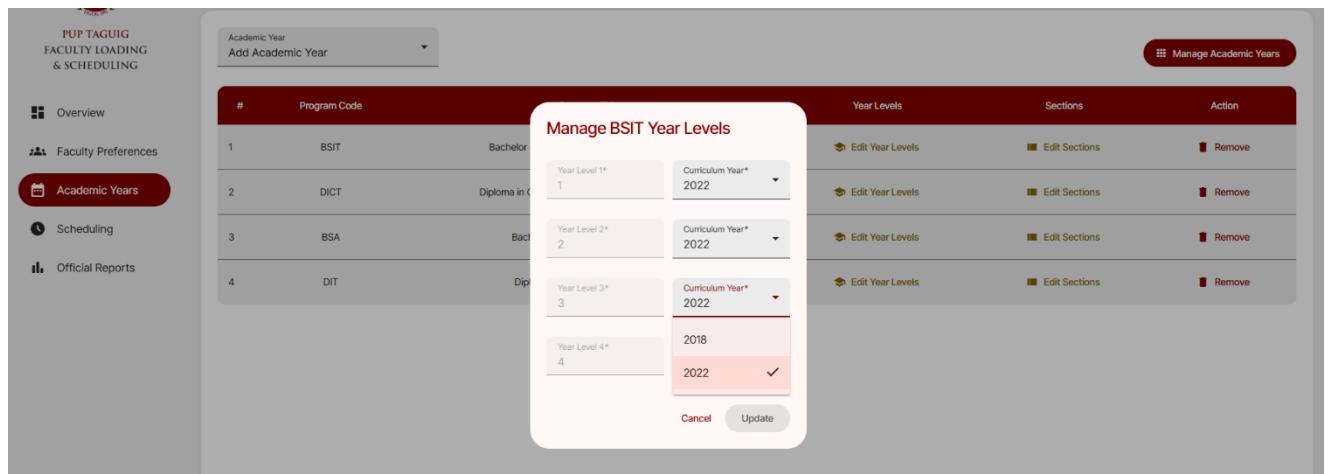
The screenshot shows the "Manage Academic Years" page from the "PUP TAGUIG FACULTY LOADING & SCHEDULING" application. The page lists academic programs for the "Academic Year 2024-2025". Each program entry includes the program code, title, year levels, sections, and actions (Edit Year Levels, Edit Sections, Remove). A "Manage Academic Years" button is located at the top right of the table.

#	Program Code	Program Title	Year Levels	Sections	Action
1	BSIT-TG	Bachelor of Science in Information Technology	Edit Year Levels	Edit Sections	Remove
2	DICT	Diploma in Communication Information Technology	Edit Year Levels	Edit Sections	Remove
3	BSA	Bachelor of Science in Accountancy	Edit Year Levels	Edit Sections	Remove
4	DIT	Diploma in Information Technology	Edit Year Levels	Edit Sections	Remove

*Figure 21. FLS Admin Manage Academic Years Page. Allows administrators to manage academic programs, edit year levels and sections, and remove entries for a selected academic year.*



*Figure 21. FLS Admin Add Academic Year Modal.  
Allows administrators to input and confirm the start and end year for a new academic year.*



*Figure 22. FLS Admin Curriculum Year Level Assignment Modal.  
Allows administrators to assign and manage curriculum years for each year level of a specific program, academic year, enabling course assignments based on the selected curriculum.*

The screenshot shows the 'Manage Academic Years' interface. On the left is a sidebar with icons for Overview, Faculty Preferences, Academic Years (which is selected), Scheduling, and Official Reports. The main area has a dropdown menu 'Academic Year' with 'Add Academic Year' and a 'Manage Academic Years' button. A modal window titled 'Manage BSIT Sections' is open, displaying four sections for the program BSIT. Each section row contains 'Year Level 1\*', 'Number of Sections\*', 'Year Level 2\*', 'Number of Sections\*', 'Year Level 3\*', 'Number of Sections\*', and 'Year Level 4\*', all with the value '1'. Below the modal are buttons for 'Cancel' and 'Update'.

*Figure 23. FLS Admin Sections Per Year Level Assignment Modal.  
Allows administrators to manage sections for each year level of a specific program, academic year.*

The screenshot shows the 'Manage Academic Years' interface with the 'Academic Years' tab selected. A modal window titled 'Confirm Delete' asks if the user is sure they want to delete the program 'BSIT'. It states that this action cannot be undone. Below the question are 'Cancel' and 'Delete' buttons.

*Figure 24. FLS Admin Program Deletion Modal.  
Allows administrators to remove specific program in current selected academic year.*

The screenshot shows a table of academic programs with columns for Program Code, Program Title, Year Levels, Sections, and Action. A modal window titled 'Manage Academic Years' is open over the table, centered on the row for 'DICT'. The modal contains a red delete icon, a 'Delete' button, a 'Cancel' button, and a 'Confirm' button.

#	Program Code	Program Title	Year Levels	Sections	Action
1	BSIT-TG	Bachelor of Science in Information Technology	Edit Year Levels	Edit Sections	Remove
2	DICT	Diploma in Communication I...	Edit Year Levels	Edit Sections	Remove
3	BSA	Bachelor of Science in Accountancy	Edit Year Levels	Edit Sections	Remove
4	DIT	Diploma in Information Technology	Edit Year Levels	Edit Sections	Remove

*Figure 25. FLS Admin Academic Year Deletion Modal.  
Allows administrators to remove specific academic year.*

The screenshot shows a 'Scheduling' page with a table of courses and a modal window titled 'Set Active Year and Semester'. The modal includes fields for 'Academic Year\*', 'Semester\*', 'Start Date\*', and 'End Date\*'. It also has 'Cancel' and 'Confirm' buttons. The main scheduling table has columns for Units, Day, Time, Professor, Room, and Action.

#	Course Code	Program	Year Level	Section	Units	Day	Time	Professor	Room	Action
1	ACCO 20213	DICT - Diploma in Communication I...	1	1	3	Not set	Not set	Not set	Not set	
2	COMP 20013				3	Not set	Not set	Not set	Not set	
3	COMP 20023				3	Not set	Not set	Not set	Not set	
4	GEED 10053	Mat...			3	Not set	Not set	Not set	Not set	
5	GEED 10063				3	Not set	Not set	Not set	Not set	
6	ICTE 10013	Basic...			3	Not set	Not set	Not set	Not set	
7	NSTP 10013				3	Not set	Not set	Not set	Not set	

*Figure 26. FLS Admin Setting the Active Year and Semester for scheduling. Enables administrators to set the active academic year, semester, and define the start and end dates for scheduling purposes.*

*Figure 27. FLS Admin Loading and Scheduling Page. Displays a list of courses under a selected program, year level, and section. Administrators can assign schedules, professors, and rooms for each course using the edit option.*

*Figure 28. FLS Admin Loading and Scheduling Edit Schedule Details Modal. Allows administrators to assign schedules based on faculty preferences, including day, time, professor, and room assignment for a specific course.*

#	Faculty Name	Faculty Code	Faculty Type	Load (Units)	Action
1	Malaluan, Kyla Catu	FA0003TG2024	Full-time (Temporary)	0	<a href="#">View Schedule</a> <a href="#">Download</a> <input type="checkbox"/>
2	Martinez, Emmanuel Quinco	FA0001TG2024	Full-time (Permanent)	12	<a href="#">View Schedule</a> <a href="#">Download</a> <input type="checkbox"/>
3	Naoe, Adrian Bico	FA0002TG2024	Part-time	0	<a href="#">View Schedule</a> <a href="#">Download</a> <input type="checkbox"/>
4	Rasquero, Via Abrilla	FA0004TG2024	Full-time (Designee)	0	<a href="#">View Schedule</a> <a href="#">Download</a> <input type="checkbox"/>

Items per page: 10 | 1 - 4 of 4 | < > >>

Figure 29. FLS Admin Official Reports Page for Faculty.

Displays a summary of faculty members, their assigned load in units, and the ability to view or download schedules. Administrators can export the report as a PDF for record-keeping.

**Faculty Load & Schedule**

Publish official load and schedule for Martinez, Emmanuel Quinco this A.Y. 2024-2025, 1st Semester.

Send email to Martinez, Emmanuel Quinco

Figure 30. FLS Admin Toggle Publish Faculty Load & Schedule modal (Specific Faculty). This interface allows administrators to publish the official faculty load and schedule for a specific faculty member. An option is available to notify the faculty member via email.

**Official Reports**

**Martinez, Emmanuel Quinco**  
Official Schedule For Academic Year 2024-2025, 1st Semester

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7:00 AM							
7:30 AM							
8:00 AM	ACCO 014 Principles of Accounting (BSIT-TG 1-1) A204  8:00 AM - 2:00 PM		COMP 001 Introduction to Computing (BSIT-TG 1-1) A302  7:30 AM - 10:30 AM	GEED 004 Mathematics in the Modern World (BSIT-TG 1-1) A303  8:00 AM - 10:00 AM			
8:30 AM							
9:00 AM							
9:30 AM							
10:00 AM							
10:30 AM							
11:00 AM							
11:30 AM							
12:00 PM							
12:30 PM							
1:00 PM							
1:30 PM							
2:00 PM							
2:30 PM							
3:00 PM							
3:30 PM							

**Close**

*Figure 32. FLS Admin Preview Faculty Load & Schedule modal (Specific Faculty). Displays a detailed weekly schedule for faculty, including assigned courses, days, times, and room locations. Administrators can view the schedule in table or PDF format and export it for record-keeping.*

**Official Reports**

**Martinez, Emmanuel Quinco**  
Official Schedule For Academic Year 2024-2025, 1st Semester

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES – TAGUIG BRANCH  
Gen. Santos Ave. Upper Bicutan, Taguig City

**Martinez, Emmanuel Quinco**  
For Academic Year 2024-2025, 1st Semester

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
ACCO 014 Principles of Accounting BSIT-TG 1-1 A204 8:00 AM - 2:00 PM	COMP 001 Introduction to Computing BSIT-TG 1-1 A302 7:30 AM - 10:30 AM	GEED 004 Mathematics in the Modern World BSIT-TG 1-1 A303 8:00 AM - 10:00 AM			COMP 002 Computer Programming 1 BSIT-TG 1-1 A303 8:00 AM - 4:30 PM

**Close** **Download PDF**

*Figure 33. FLS Admin Preview Faculty Load & Schedule modal (Specific Faculty). Displays a detailed weekly schedule for faculty, including assigned courses, days, times, and room locations. Administrators can view the schedule in table or PDF format and export it for record-keeping.*

The screenshot shows the 'Official Reports' page of the FLS Admin system. At the top, there's a search bar labeled 'Search Programs' and a button to 'Export to PDF'. Below is a table with columns: #, Program Code, Program Name, Year Levels, Sections, and Action. The table lists four programs:

#	Program Code	Program Name	Year Levels	Sections	Action
1	BSIT-TG	Bachelor of Science in Information Technology	All Year Levels	All Sections	<a href="#">View Schedule</a> <a href="#">Download</a>
2	DICT	Diploma in Communication Information Technology	All Year Levels	All Sections	<a href="#">View Schedule</a> <a href="#">Download</a>
3	BSA	Bachelor of Science in Accountancy	All Year Levels	All Sections	<a href="#">View Schedule</a> <a href="#">Download</a>
4	DIT	Diploma in Information Technology	All Year Levels	All Sections	<a href="#">View Schedule</a> <a href="#">Download</a>

At the bottom, there are navigation links for Faculty, Programs, and Rooms, along with a page footer showing 'Items per page: 10' and '1–4 of 4'.

*Figure 34. FLS Admin Official Reports Page for each Program. Displays a summary of academic programs, including program codes, names, year levels, and sections. Administrators can view or download program schedules and export the report as a PDF for record-keeping.*

The screenshot shows a detailed schedule for the Bachelor of Science in Information Technology (BSIT-TG) for the Academic Year 2024-2025, 1st Semester. The title is 'Bachelor of Science in Information Technology (BSIT-TG)' and 'Official Schedule For Academic Year 2024-2025, 1st Semester'. The schedule is for 'Year Level 1 - Section 1' and is presented in a grid format from Monday to Sunday. The grid shows various classes with their details, such as subject code, name, professor, and room. A legend at the bottom indicates the colors for different subjects: red for ACCO 014, blue for COMP 001 and GEDD 004, and green for COMP 002.

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7:00 AM							
7:30 AM							
8:00 AM	ACCO 014 Principles of Accounting Martinez, Emmanuel Quinco A204		COMP 001 Introduction to Computing Martinez, Emmanuel Quinco A302	GEDD 004 Mathematics in the Modern World Martinez, Emmanuel Quinco A303		COMP 002 Computer Programming I Martinez, Emmanuel Quinco A303	
8:30 AM							
9:00 AM							
9:30 AM							
10:00 AM							
10:30 AM							
11:00 AM							
11:30 AM							
12:00 PM							
12:30 PM							
1:00 PM							
1:30 PM							
2:00 PM							
2:30 PM							
3:00 PM							
3:30 PM							
4:00 PM							
4:30 PM							
5:00 PM							

**Bachelor of Science in Information Technology (BSIT-TG)**  
Official Schedule For Academic Year 2024-2025, 1st Semester

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES – TAGUIG BRANCH  
Gen. Santos Ave. Upper Blasian, Taguig City

**BSIT-TG - Year 1 - Section 1**  
For Academic Year 2024-2025, 1st Semester

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
ACCO 014 Principles of Accounting Marez, Emmanuel Quino A204 8:00 AM - 2:00 PM	COMP 001 Introduction to Computing Marez, Emmanuel Quino A302 7:30 AM - 10:30 AM	GEED 004 Mathematics in the Modern World Marez, Emmanuel Quino A303 8:00 AM - 10:00 AM		COMP 002 Computer Programming 1 Marez, Emmanuel Quino A303 8:00 AM - 4:30 PM	

**Download PDF**

*Figure 35. FLS Admin Official Reports Page for each Program Modal.  
Displays a summary of academic programs, including program codes, names, year levels, and sections. Administrators can view or download program schedules and export the report as a PDF for record-keeping.*

**Official Reports**

Search Rooms

**Export to PDF**

#	Room Code	Location	Floor	Capacity	Action
1	A204	Building A	2nd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>
2	Aboltiz Lab	Building A	2nd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>
3	DOST Lab	Building A	2nd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>
4	A203	Building A	2nd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>
5	A202	Building A	2nd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>
6	A301	Building A	3rd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>
7	A302	Building A	3rd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>
8	A303	Building A	3rd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>
9	A304	Building A	3rd Floor	50	<a href="#">View Schedule</a> <a href="#">Download</a>

Items per page: 10 | 1–9 of 9 | < >

**Faculty** **Programs** **Rooms**

*Figure 36. FLS Admin Official Reports Page for each Rooms.  
Displays a summary of academic programs, including program codes, names, year levels, and sections. Administrators can view or download program schedules and export the report as a PDF for record-keeping.*

**Official Reports**

**Room A303**  
Official Schedule For Academic Year 2024-2025, 1st Semester

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7:00 AM							
7:30 AM							
8:00 AM							
8:30 AM							
9:00 AM							
9:30 AM							
10:00 AM							
10:30 AM							
11:00 AM							
11:30 AM							
12:00 PM							
12:30 PM							
1:00 PM							
1:30 PM							
2:00 PM							
2:30 PM							
3:00 PM							
3:30 PM							
4:00 PM							

**GEED 004**  
Mathematics in the Modern  
World  
(BSIT-TG 1-1)  
Martinez, Emmanuel Quinco  
8:00 AM - 10:00 AM

**COMP 002**  
Computer Programming 1  
(BSIT-TG 1-1)  
Martinez, Emmanuel Quinco  
8:00 AM - 4:30 PM

**Close**

**Faculty** **Programs** **Rooms**

*Figure 36. FLS Admin Official Reports Page for each Rooms Modal.*  
*Displays a summary of academic programs, including program codes, names, year levels, and sections. Administrators can view or download program schedules and export the report as a PDF for record-keeping.*

**Curriculum**

**PUP TAGUIG**  
FACULTY LOADING & SCHEDULING

**Management**

- Manage Admin
- Manage Faculty

**Maintenance**

- Curriculum**
- Programs
- Rooms

**Search Curriculum**

**+ Add Curriculum**

#	Curriculum Year	Status	Actions
1	2018	Active	View  Edit  Delete
2	2022	Active	View  Edit  Delete

Items per page: 25 | 1–2 of 2 | < < > >|

*Figure 37. FLS Super Admin Manage Curriculum Page.*  
*Displays a list of curriculum years with options to view, edit, or delete entries. Super administrators can add new curriculum years for effective academic management.*

#	Curriculum Year	Status	Actions
1	2018	Active	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
2	2022	Inactive	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>

Figure 38. FLS Super Admin Edit Curriculum Modal.

The Edit Curriculum feature allows super administrators to update curriculum details, including the curriculum year and its current status (e.g., Active or Inactive). This ensures effective maintenance of academic records

#	Curriculum Year	Status	Actions
1	2018	Active	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
2	2022	Inactive	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>

Figure 38. FLS Super Admin Delete Curriculum Modal.

The delete Curriculum feature allows super administrators to delete curriculum details.

Curriculum 2022 is currently used in an academic year and cannot be deleted. [Close](#)

Figure 39. FLS Super Admin Delete Curriculum Modal Failed to delete snack bar. This snack bar alert super admin that the current curriculum is in used and can't be deleted to avoid discrepancies on scheduling and loading of the system.

#	Course Code	Pre-req	Co-req	Course Title	Lec Hours	Lab Hours	Units	Tuition Hours	Actions
1	GEED 032	None	None	Filipinolohiya at Pambansang Kaurilaran	3	0	3	3	Edit  Delete
2	GEED 005	None	None	Purposive Communication	3	0	3	3	Edit  Delete
3	GEED 004	None	None	Mathematics in the Modern World	3	0	3	3	Edit  Delete
4	ACCO 014	None	None	Principles of Accounting	3	0	3	3	Edit  Delete
5	COMP 001	None	None	Introduction to Computing	2	3	3	5	Edit  Delete
6	COMP 002	None	None	Computer Programming 1	2	3	3	5	Edit  Delete
7	PATHFIT 1	None	None	Physical Activities Towards Health and Fitness 1	2	0	2	2	Edit  Delete
8	NSTP 001	None	None	National Service Training Program 1	3	0	3	3	Edit  Delete

Figure 40. FLS Super Admin, Curriculum Preview / Course Management Page. This page displays the courses for a specific program and year level within the selected semester. It includes course details such as Course Code, Course Title, Lecture Hours, Lab Hours, Units, and Tuition Hours. Administrators can manage courses by editing or deleting them, as well as export the entire curriculum to a PDF file for record-keeping.

The screenshot shows the 'Add Course' modal overlaid on the Curriculum 2022 page. The modal has fields for Course Code\*, Pre-requisite, Co-requisite, Course Title\*, Lecture Hours\*, Laboratory Hours\*, and Units\*. At the bottom are 'Cancel' and 'Confirm' buttons.

#	Course Code	Pre-req
1	GEED 033	GEED 032 - Filpinolohiya at Pambansang Kaunlaran
2	GEED 002	None
3	GEED 020	None
4	COMP 004	GEED 004 - Mathematics in the M
5	COMP 003	COMP 002 - Computer Progra
6	GEED 010	None
7	PATHFit 2	PATHFit 1 - Physical Activities Towards Health

Figure 41. FLS Super Admin Course Assignment Modal. The Add Course modal allows administrators to input course details for a specific semester and year level. Required fields include Course Code, Pre-requisite, Co-requisite, Course Title, Lecture Hours, Laboratory Hours, and Units. Administrators can confirm or cancel the addition of the new course.

The screenshot shows the 'Edit Course' modal overlaid on the Curriculum 2022 page. The modal has fields for Course Code\*, Pre-requisite, Co-requisite, Course Title\*, Lecture Hours\*, Laboratory Hours\*, and Units\*. At the bottom are 'Cancel' and 'Update' buttons.

#	Course Code	Pre-req
1	GEED 033	GEED 032 - Filpinolohiya at Pambansang Kaunlaran
2	GEED 002	None
3	GEED 020	None
4	COMP 004	GEED 004 - Mathematics in the M
5	COMP 003	COMP 002 - Computer Progra
6	GEED 010	None

Figure 42. FLS Super Admin Edit Course Assignment Modal. The Edit Course modal allows administrators to input new course details for a specific semester and year level. Required fields include Course Code, Pre-requisite, Co-requisite, Course Title, Lecture Hours, Laboratory Hours, and Units. Administrators can confirm or cancel the update of the course.

#	Course Code	Pre-req	Co-req	Course Title	Lec Hours	Lab Hours	Units	Tuition Hours	Actions
1	GEED 033	GEED 032 - Filipinolohiya at Pa Kaunlaran		Geedino	3	0	3	3	Edit  Delete
2	GEED 002	None		Geedary	3	0	3	3	Edit  Delete
3	GEED 020	None	None	Politics Governance and Citizenship	3	0	3	3	Edit  Delete

Figure 43. FLS Super Admin Delete Course Assignment Modal. The Delete Course modal allows administrators to delete course details for a specific semester and year level. Administrators can confirm or cancel the deletion of the course.

#	Course Code	Pre-req	Co-req	Course Title	Lec Hours	Lab Hours	Units	Tuition Hours	Actions
4	COMP 004	GEED 004 - Mathematics in the M		3	0	3	3	Edit  Delete	
5	COMP 003	COMP 002 - Computer Progra		2	3	3	5	Edit  Delete	
6	GEED 010	None		3	0	3	3	Edit  Delete	
7	PATHFit 2	PATHFit 1 - Physical Activities Toward Fitness 1		2	0	2	2	Edit  Delete	
8	NSTP 002	NSTP 001 - National Service Train		3	0	3	3	Edit  Delete	

Figure 44. FLS Super Admin Manage Program in specific curriculum. The Manage Programs modal allows administrators to select or deselect programs for inclusion. Each program has a checkbox, and administrators can confirm changes or cancel without saving. This ensures only relevant programs appear under the curriculum for management.

The screenshot shows a web-based application for managing university curricula. On the left, a sidebar lists 'Management' (Manage Admin, Manage Faculty), 'Maintenance' (Curriculum, Programs, Rooms), and 'Curriculum'. The main area displays a table of courses with columns for #, Course Code, Pre-req, Co-req, Course Title, Lec Hours, Lab Hours, Units, Tuition Hours, and Actions (Edit, Delete). An 'Export to PDF' modal is overlaid on the table, containing two options: 'Export entire curriculum' (selected) and 'Export BSIT-TG program curriculum'. Below the modal are 'Cancel' and 'Export' buttons. At the bottom right of the main area are buttons for 'Items per page' (25), '1–8 of 8', and navigation arrows.

This screenshot shows the 'Curriculum 2022' page. The sidebar includes the PUP Taguig logo, 'FACULTY LOADING & SCHEDULING', and the same 'Management' and 'Maintenance' categories as the previous screenshot. The main content area features a large 'Export to PDF' modal. Inside the modal, the header reads 'POLYTECHNIC UNIVERSITY OF THE PHILIPPINES – TAGUIG BRANCH' and 'Curriculum Year 2022'. It displays two tables: 'BSIT-TG - Year 1' and 'BSIT-TG - Year 2'. Both tables have columns for Code, Pre-req, Co-req, Title, Lec, Lab, Units, and Tuition. The 'BSIT-TG - Year 1' table contains 10 rows of course data. The 'BSIT-TG - Year 2' table contains 8 rows. At the bottom of the modal are 'Close', 'Download PDF' (with a file icon), and 'Tuition Hours' buttons. The background of the main page shows a user profile for 'Emmanuel Quinco Martinez' and a list of courses with edit and delete actions.

*Figure 45. FLS Super Admin Export Curriculum Course Assignment Details Modal. The Export to PDF modal allows administrators to choose between exporting the entire curriculum or a specific program curriculum (e.g., BSIT-TG). Once selected, users can confirm the action by clicking the Export button, or cancel without saving changes.*

#	Program Code	Program Title	Program Info	Status	Years	Curriculum Year	Actions
1	BSIT-TG	Bachelor of Science in Information Technology	Focuses on information technology and its applications.	Active	4	2018, 2022	
2	DICT	Diploma in Communication Information Technology	Focuses on developing practical skills in IT, networking, and software for careers in the tech industry.	Active	3	2018	
3	BSA	Bachelor of Science in Accountancy	Focuses on developing skills in accounting, financial management, and auditing for careers in business and finance.	Active	4	2018, 2022	
4	DIT	Diploma in Information Technology	Focuses on essential IT skills in software, networking, cybersecurity, and modern computing technologies.	Active	3	2018, 2022	

*Figure 46. FLS Super Admin Export Curriculum Course Assignment Details Modal. The Programs Management page displays a list of academic programs, including program codes, titles, descriptions, status (e.g., Active), duration in years, and associated curriculum years. Administrators can edit or delete programs and export the list to PDF for record-keeping. There's also an option to Add Program for managing new entries.*

*Figure 47. FLS Super Admin Add Program Modal. The Programs Management page allows administrators to add new academic programs. The Add Program modal includes fields for entering the program code, title, description, status (e.g., Active), and duration in years. Administrators can confirm to save the new program or cancel to discard the entry. This ensures efficient management of program details within the system.*

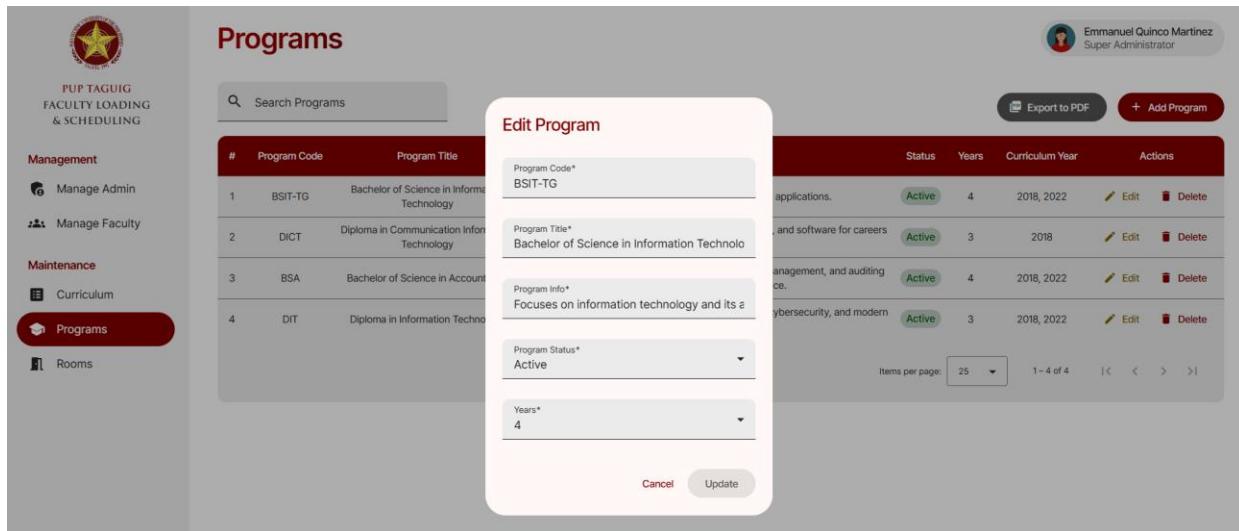


Figure 48. FLS Super Admin Edit Program Modal.

The Programs Management page allows administrators to edit new academic programs. The Add Program modal includes fields for entering the program code, title, description, status (e.g., Active), and duration in years. Administrators can confirm to save the new details on specific program or cancel to discard the entry.

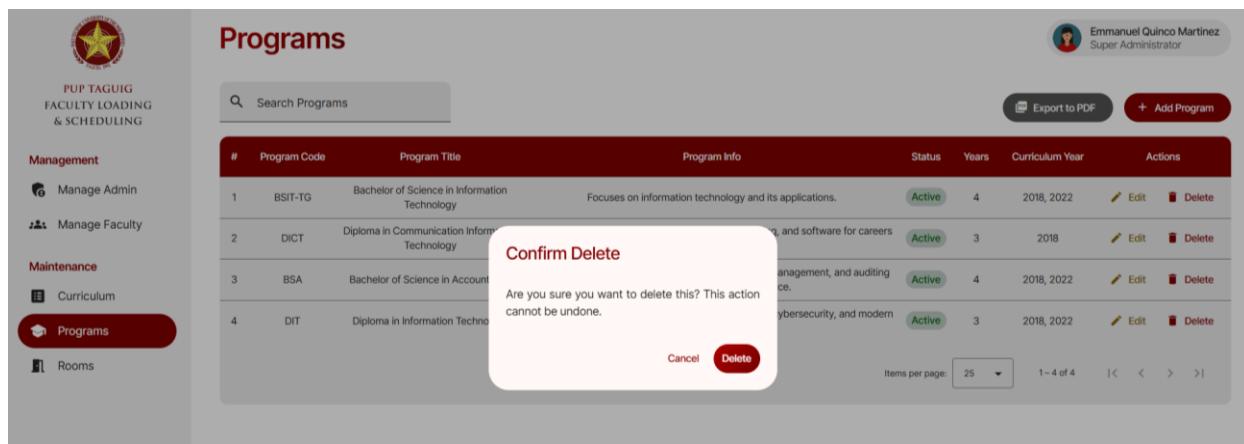


Figure 49. FLS Super Admin Confirm Delete Modal.

The Programs Management page displays a confirmation modal when attempting to delete a program. The modal warns administrators that this action cannot be undone. It provides options to Cancel the operation or Delete the program permanently, ensuring cautious program management.

#	Program Code	Program Title	Program Info	Status	Years	Curriculum Year
1	BSIT-TG	Bachelor of Science in Information Technology	Focuses on information technology and its applications.	Active	4	2018, 2022
2	DICT	Diploma in Communication Information Technology	Focuses on developing practical skills in programming, analysis, and software for careers in the tech industry.	Active	3	2018
3	BSA	Bachelor of Science in Accountancy	Focuses on developing skills in accounting, financial management, and auditing for careers in business and finance.	Active	4	2018, 2022
4	DIT	Diploma in Information Technology	Focuses on essential IT skills in software, networking, cybersecurity, and modern computing technologies.	Active	3	2018, 2022

*Figure 50. FLS Super Admin Export Programs Report Modal.*

The Programs Management page allows administrators to export a detailed report of all academic programs. The report includes program codes, titles, descriptions, status (e.g., Active), duration in years, and associated curriculum years. The exported report can be downloaded as a PDF for record-keeping or documentation purposes.

#	Room Code	Location	Floor Level	Room Type	Capacity	Status	Actions
1	A204	Building A	2nd	Lecture	50	Available	Edit  Delete
2	Aboiliz Lab	Building A	2nd	Laboratory	50	Available	Edit  Delete
3	DOST Lab	Building A	2nd	Laboratory	50	Available	Edit  Delete
4	A203	Building A	2nd	Lecture	50	Available	Edit  Delete
5	A202	Building A	2nd	Lecture	50	Available	Edit  Delete
6	A301	Building A	3rd	Lecture	50	Available	Edit  Delete
7	A302	Building A	3rd	Lecture	50	Available	Edit  Delete
8	A303	Building A	3rd	Lecture	50	Available	Edit  Delete
9	A304	Building A	3rd	Lecture	50	Available	Edit  Delete

*Figure 51. FLS Super Admin Rooms Management Page.*

The Rooms Management page displays a list of rooms, including room codes, locations, floor levels, room types (e.g., Lecture, Laboratory), capacities, and their availability status (e.g., Available). Administrators can edit or delete room details, export the list of rooms to a PDF for record-keeping, and add new rooms to the system.

The screenshot shows the 'Rooms' section of the FLS Super Admin interface. On the left, there's a sidebar with 'Management' (Manage Admin, Manage Faculty), 'Maintenance' (Curriculum, Programs, Rooms), and a logo for PUP TAGUIG Faculty Loading & Scheduling. The main area has a search bar and a table of existing rooms. A central modal window titled 'Add Room' is open, containing fields for Room Code\*, Location\*, Floor Level\*, Room Type\*, Capacity\*, and Status\*. Below the form are 'Cancel' and 'Confirm' buttons. In the top right corner of the main area, there's a user profile for Emmanuel Quinco Martinez (Super Administrator) and buttons for 'Export to PDF' and '+ Add Room'.

*Figure 52. FLS Super Admin Add Room Modal.*

*The Add Room modal allows administrators to input details for a new room, including the room code, location, floor level, room type (e.g., Lecture, Laboratory), capacity, and status (e.g., Available). Upon completing the required fields, administrators can confirm to add the room to the system or cancel to discard changes*

This screenshot is similar to Figure 52 but shows the 'Edit Room' modal instead. The modal displays the current details for Room A204: Room Code A204, Location Building A, Floor Level 2nd, Room Type Lecture, Capacity 50, and Status Available. It includes 'Cancel' and 'Update' buttons. The background and sidebar are identical to Figure 52.

*Figure 53. FLS Super Admin Edit Room Modal.*

*The Add Room modal allows administrators to update details for a room, including the room code, location, floor level, room type (e.g., Lecture, Laboratory), capacity, and status (e.g., Available). Upon completing the required fields, administrators can confirm the update of the room details to the system or cancel to discard changes*

The screenshot displays the 'Rooms' management interface. On the left, there's a sidebar with 'Management' (Manage Admin, Manage Faculty), 'Maintenance' (Curriculum, Programs, Rooms), and the 'Rooms' button, which is highlighted. The main area shows a list of rooms with columns: #, Room Code, Location, Floor Level, Room Type, Capacity, and Status. A modal window titled 'Export All Rooms' is open, showing a preview of a PDF report titled 'Room Report' from 'POLYTECHNIC UNIVERSITY OF THE PHILIPPINES – TAGUIG BRANCH'. The report includes a table with the same columns as the list. The modal has a 'Download PDF' button and a 'Close' button. The background shows the 'Actions' column with 'Edit' and 'Delete' buttons for each room.

#	Room Code	Location	Floor Level	Room Type	Capacity	Status
1	A204	Building A	2nd	Lecture	50	Available
2	Aboltz Lab	Building A	2nd	Laboratory	50	Available
3	DOST Lab	Building A	2nd	Laboratory	50	Available
4	A203	Building A	2nd	Lecture	50	Available
5	A202	Building A	2nd	Lecture	50	Available
6	A301	Building A	3rd	Lecture	50	Available
7	A302	Building A	3rd	Lecture	50	Available
8	A303	Building A	3rd	Lecture	50	Available
9	A304	Building A	3rd	Lecture	50	Available

*Figure 54. FLS Super Admin Export All Rooms Modal.*

*The Export All Rooms modal displays a preview of the room report in PDF format. The report includes details such as room code, location, floor level, room type (e.g., Lecture, Laboratory), capacity, and status (e.g., Available). Administrators can download the report as a PDF for record-keeping or close the modal to return to the Rooms Management page.*

### **3. Architectural Strategies**

The "PUP Taguig Faculty Loading and Scheduling System" employs a modern architectural framework that integrates various technologies to ensure a robust and efficient system. The primary framework utilized for the backend development is the Laravel Framework, a powerful PHP framework known for its elegant syntax and expressive capabilities. Laravel follows the Model-View-Controller (MVC) design pattern, which effectively separates the application's logic into distinct components, enhancing maintainability and scalability.

For the frontend development, the system leverages Angular, a popular framework for building dynamic web applications. Angular provides a responsive and interactive user interface, allowing faculty members and administrators to navigate the system seamlessly.

The system utilizes MySQL as its Relational Database Management System (RDBMS) to store essential data, ensuring reliable data management and easy access for users. XAMPP is employed as the local server environment for development and testing, providing a comprehensive package that includes Apache, MySQL, and PHP.

For deployment, the system is hosted on Hostinger, ensuring that the application is accessible online and can handle user requests efficiently. This combination of technologies and strategies creates a cohesive and effective architecture for the PUP Taguig Faculty Loading and Scheduling System, facilitating improved faculty workload management and class scheduling processes.

## **4. System Architecture**

### **4.1 Structure and Relationships**

#### **4.1.1 Platform**

- Must at least work on any computer with a stable internet connection.

#### **4.1.2 Operating System**

- Must at least work on any operating system.

#### **4.1.3 Software**

- Must at least work in any modern web browser.

#### **4.1.4 Hardware**

- Required hardware specification for client side: Intel Pentium III / AMD equivalent (800 MHz), 1 GB of RAM, and 500MBs of available disk space.

## 4.2 Proposed System Architecture

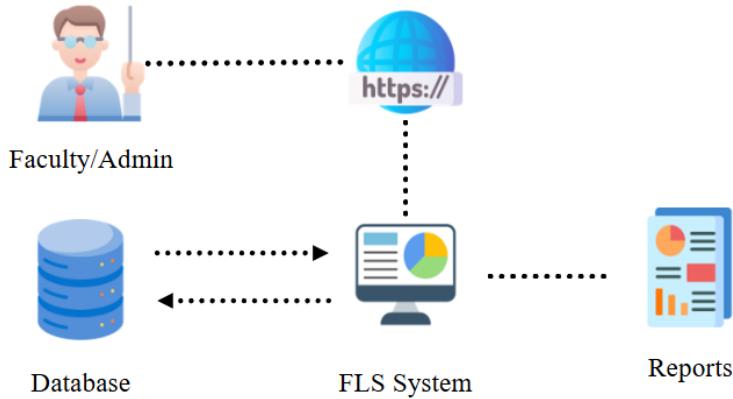


Figure 19. Proposed System Architecture

## 4.3 Component Table Description

The information below provides a fundamental outline of the architecture and the purpose of the main components of the "PUP Taguig Faculty Loading and Scheduling System":

- **Server Software:** The server software will utilize XAMPP for the local server environment, facilitating the development and testing of the application by providing an integrated package that includes Apache, MySQL, and PHP.
- **Client Software:** The client software consists of computers and smartphones that access the system. The front-end will be built using Angular, providing a responsive and dynamic user interface that will offer various features to assist faculty members and administrators in managing and submitting their teaching assignments and schedules. It will also enable users to automatically generate reports as needed, enhancing the overall user experience.
- **Database:** MySQL, accessed through phpMyAdmin, will serve as the system's database management system. It will store all relevant tables and critical data necessary for the operation of the system, ensuring efficient data retrieval and management for faculty loading and scheduling processes.

## 4.4 Functions of the System

### Faculty Member Account

<b>Security</b>	
Login	Enables users to log into their accounts within the system
Logout	Enables users to log out and terminate access to the system.
<b>Homepage</b>	
Tabs	Enables users to navigate and access links to various modules within the system.
Profile	Allows users to view their profile
<b>Modules</b>	
Set Preference	Allows user to create and set preferred course and schedule
Load & Schedule	Enable user to view their designated schedule
Reports	Allow users to access reports from HAP that provide relevant context on loading and scheduling details
Generate	Allows users to generate reports in an pdf format.

### Admin Account

<b>Security</b>	
Login	Enables users to log into their accounts within the system
Logout	Enables users to log out and terminate access to the system.
<b>Homepage</b>	
Tabs	Enables users to navigate and access and do quick actions such as generating report, publishing faculty load and schedules, opening the submission of faculty preferences and links to various modules within the system.
Profile	Allows users to view their profile

<b>Settings</b>	
Set Active Academic School Year	Allows the admin to set active Academic School Year

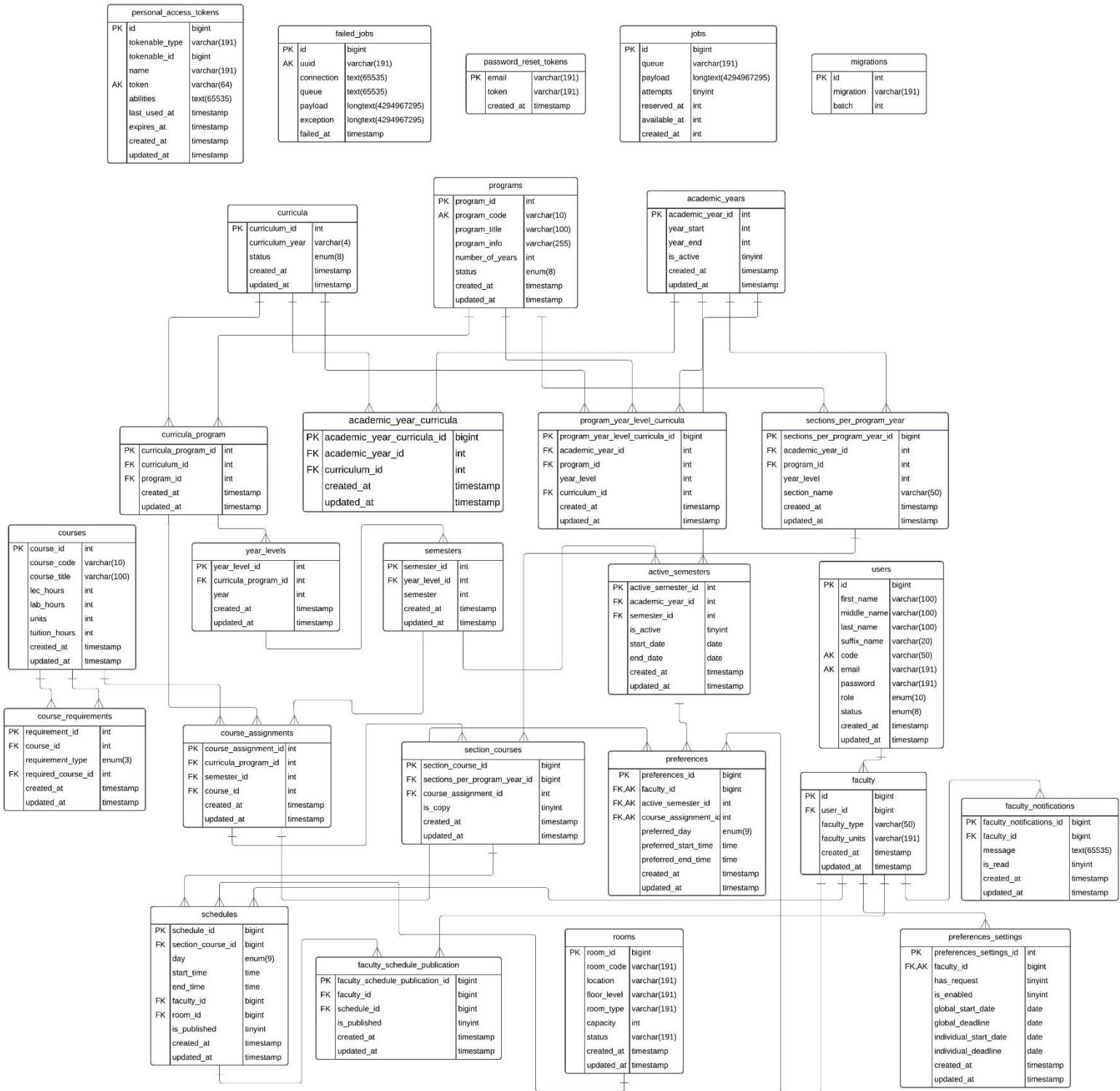
Set Active Curriculum	Allows the admin to set active Academic Curriculum in Specific Program and Year Levels
Set Active Section	Allows the admin to set active Section in Specific Academic Year, Program and Year Levels
Edit Active Curriculum	Allows the admin to edit list of Academic Curriculum in Specific Program and Year Levels
<b>Loading And Scheduling</b>	
Faculty Loading and Scheduling	Allows the admin to review and select Faculty to handle specific course, program and section.
Faculty Loading and Scheduling Reports	Allows the admin to generate reports base on created Loading and Scheduling information

## Super Admin Account

<b>Security</b>	
Login	Enables users to log into their accounts within the system
Logout	Enables users to log out and terminate access to the system.
<b>Homepage</b>	
Tabs	Enables users to navigate and access links to various modules within the system.
Profile	Allows users to view their profile
<b>Settings</b>	
Curriculum Management	Allows the super admin to View, Add, Edit, Delete on curriculum

Course Management	Allows the super admin to set and load courses in specific curricula that have specific program, year levels and semesters
Program Management	Allows the super admin to manage view, add, edit, delete program
Room Management	Allows the super admin to manage view, add, edit, delete sections
Edit Active Curriculum	Allows the admin to edit list of Academic Curriculum in Specific Program and Year Levels
<b>Reports</b>	
Curricula Report	Allows the super admin to generate curricula report in pdf format
Courses Report	Allows the super admin to generate load courses in specific curricula that have specific program, year levels and semesters in pdf format
Program Report	Allows the super admin to generate program report in pdf format
Section Report	Allows the super admin to generate section report in pdf format

## 5. Design Schema



## 5.1 Tables, Fields and Relationships

## 6. Glossary

Term/Acronym	Definition
<b>Faculty Loading</b>	The process of assigning teaching responsibilities and workloads to faculty members based on their qualifications, availability, and institutional requirements.
<b>Laravel Framework</b>	A popular PHP framework used for building web applications, known for its elegant syntax and adherence to the Model-View-Controller (MVC) architectural pattern.
<b>Angular</b>	A front-end web application framework developed by Google, used for building dynamic and responsive user interfaces for web applications.
<b>MySQL</b>	An open-source relational database management system (RDBMS) that uses Structured Query Language (SQL) for managing and retrieving data
<b>XAMPP</b>	A free and open-source cross-platform web server solution stack package that includes Apache, MySQL, PHP, and Perl, used for developing and testing web applications locally.
<b>Model-View-Controller (MVC)</b>	A software architectural pattern that separates an application into three interconnected components: the model (data), the view (user interface), and the controller (business logic), promoting organized code and separation of concerns