

**FACULTY OF COMPUTING AND INFORMATION TECHNOLOGY****AACS2204 OBJECT-ORIENTED PROGRAMMING TECHNIQUES****ASSIGNMENT****SEMESTER 202501**

Programme (Year & Group)	:	DFTY1G5
Tutor Name	:	Yong Wen Lin
Tutorial Group	:	G5
Date Submitted	:	02-05-2025

No	Name	Student ID	Marks			Total Marks
			Section A	Section B	Section C	
1	Lai Jia Tong	2403620				
2	Chong Wei Ni	2403850				
3	Chong Zhi Yi	2403561				
4	Na Thee Lok	2411408				



FACULTY OF COMPUTING AND INFORMATION TECHNOLOGY

AACS2204 OBJECT-ORIENTED PROGRAMMING TECHNIQUES

Diploma in Information Technology (DFT)

Year 1 Semester 3

Group 5

PLAGIARISM STATEMENT

Read, complete, and sign this statement to be submitted with the written report.

We confirm that we have read and shall comply with all the terms and conditions of TAR University of Management and Technology's plagiarism policy.

We declare that this assignment is free from all forms of plagiarism and for all intents and purposes is my own properly derived work.

Declaration Statement Acknowledged by

No	Name	Student ID	Signature	Date
1	Lai Jia Tong	2403620	<i>Jiatong</i>	02/05/25
2	Chong Wei Ni	2403850	<i>Eunice</i>	02/05/25
3	Chong Zhi Yi	2403561	<i>Zy</i>	02/05/25
4	Na Thee Lok	2411408	<i>TheeLok</i>	02/05/25



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I, Name Lai Jia Tong Student ID 2403620 Programme

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I Lai Jia Tong acknowledge the use of AI generative technology.

Signature : Jiatong
Date : 02/05/25



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Date : 02/05/25



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I, Name Chong Zhi Yi Student ID 2403561 Programme
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Diploma in Information Technology (DFT)

Year 1 Semester 3

Group 5

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Signature : Na Thee Lok

Date : 02/05/25

Assignment Assessment Rubrics

No	<u>Student Name</u>	<u>Student ID</u>	<u>Final Marks</u>
1	LAI JIA TONG	2403620	
2	CHONG WEI NI	2403850	
3	CHONG ZHI YI	2403561	
4	NA THEE LOK	2411408	

Programme of Study	D (FT)
Tutorial Group	Group (5)

CLO 2	Demonstrate an object-oriented program using appropriate programming fundamentals with regards to arrays, methods and exception handling. (P4, PLO3)																		
Section A: Program Output & Correctness - Individual Marks (25 Marks)																			
Task	Weight	Max. Marks	<u>Excellent</u>	<u>Good</u>	<u>Average</u>	<u>Poor</u>	<u>Very Poor</u>	<u>Scores</u> (Point x Weight)	<u>Remarks</u>										
			5	4	3	2	1												
Completeness of the program	2.0	10	Completed 100% of the functional requirements. All operations are implemented correctly.	Completed all of the functional requirements but implemented with minor errors.	Completed most of the functional requirements but implemented with errors.	Completed < 50% of the functional requirement and < 50% of the operations implemented correctly.	Did not complete any of the functional requirement at all	<table border="1"> <thead> <tr> <th>No</th><th>Marks</th></tr> </thead> <tbody> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> </tbody> </table>	No	Marks	1		2		3		4		
No	Marks																		
1																			
2																			
3																			
4																			
Exception Handling	1.0	5	Output is correct with comprehensive exception handling.	Output is correct with appropriate exception handling.	Output is correct with little exception handling.	Output is somewhat correct with little proper exception handling.	Output is totally wrong with no proper exception handling.	<table border="1"> <thead> <tr> <th>No</th><th>Marks</th></tr> </thead> <tbody> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> </tbody> </table>	No	Marks	1		2		3		4		
No	Marks																		
1																			
2																			
3																			
4																			
Design of the Output	1.0	5	Excellent formatted output. Program displays more than expected	Good formatted output and program displays as expected.	Appropriate output design and display as expected.	Poorly designed output.	Minimum to no formatted output with messy display.	<table border="1"> <thead> <tr> <th>No</th><th>Marks</th></tr> </thead> <tbody> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></td></tr> </tbody> </table>	No	Marks	1		2		3				
No	Marks																		
1																			
2																			
3																			

								4		
Program Code Quality & Standard	1.0	5	All identifiers strictly conform to the standard Java naming convention and all are meaningful	Most of the identifiers conform to the standard Java naming convention and are meaningful	Some of the identifiers conform to the standard Java naming convention and some are meaningful	Limited numbers of the identifiers conform to the standard Java naming convention or are barely meaningful.	All of the identifiers conform to the standard Java naming convention or not meaningful	No	Marks	
								1		
								2		
								3		
								4		
Total Marks (25 marks):								1		
								2		
								3		
								4		

CLO 3	Analyse the concepts of encapsulation, inheritance and polymorphism based on programming problems. (C4, PLO2)								
Section B: Object-Oriented Concept - Group Marks (45 Marks)									
<u>Task</u>	<u>Weight</u>	<u>Max. Marks</u>	<u>Excellent</u>	<u>Good</u>	<u>Average</u>	<u>Poor</u>	<u>Very Poor</u>	<u>Scores</u> <u>(Point x Weight)</u>	<u>Remarks</u>
Class Implementation	1.0	5m	Identified the proper classes, methods and attributes to solve particular problems.	Identified appropriate classes, methods and attributes to solve particular problems with minor errors.	Able to identify only some classes, methods and attributes to solve particular problems.	Inappropriate classes, methods and attributes are used.	Unable to show understanding on the usage of classes, methods and attributes.		
Object Implementation	1.0	5m	Able to create a structure of objects collaborating among themselves to carry out tasks properly.	Able to create a structure of object collaborating among themselves to carried out task properly with little minor mistakes	Structure of collaborating object created with some mistakes	Structure of collaborating objects created is barely correct.	Wrong structure of object collaboration like one object doing everything itself.		
Abstraction	1.0	5m	Define the class at the proper level of abstraction (abstract classes and methods).	Define the class at the proper level of abstraction with minor mistake	Classes defined at the proper level of abstractions with some mistakes	< 50% of correct abstraction is used	Lack of abstraction (abstract classes and methods).		

Encapsulation	2.0	10m	Completely correct implementation of encapsulation (private modifier, setter and getter methods).	Correct implementation of encapsulation with only some minor mistakes	Acceptable amount of correct implementation of encapsulation is applied in program	< 50% of correct implementation for encapsulation applied in program	Completely incorrect implementation of encapsulation (private modifier, setter and getter methods)		
Inheritance	2.0	10m	Completely correct use of inheritance (correct use of extends keyword, super & sub class)	Correct implementation of inheritance with only some minor mistakes	Acceptable amount of correct implementation of inheritance is applied in program	< 50% of correct implementation for inheritance applied in program	Completely incorrect use and implementation of inheritance		
Polymorphism	2.0	10m	Completely correct use and implementation of polymorphism. Methods <code>toString()</code> & <code>equals()</code> correctly overridden.	Correct implementation of polymorphism with only some minor mistakes	Acceptable amount of correct implementation of polymorphism is applied in program	< 50% of correct implementation for polymorphism applied in program	Completely incorrect use and implementation of polymorphism.		
Total Marks (45 marks):									

CLO 3	Analyse the concepts of encapsulation, inheritance and polymorphism based on programming problems. (C4, PLO2)								
Section C: Object-Oriented Concept - Group Marks (30 Marks)									
Task	Weight	Max. Marks	<u>Excellent</u>	<u>Good</u>	<u>Average</u>	<u>Poor</u>	<u>Very Poor</u>	Scores (Point x Weight)	Remarks
			5	4	3	2	1		
Cohesion	1.0	5m	The code demonstrates exceptional cohesion with all modules, classes, or functions having a clear and single responsibility.	The code demonstrates good cohesion overall where most modules, classes, or functions have a clear and single responsibility.	Some modules, classes, or functions have a clear and single responsibility, but others may be slightly ambiguous	Few modules, classes, or functions have a clear and single responsibility.	Modules, classes represent more than one entity and lack of clear responsibility. Poor class cohesion.		
Coupling	1.0	5m	Minimal or no direct dependency between modules, classes, or functions. Coupling is effectively managed, resulting in highly maintainable and modular code	Most modules, classes, or functions have minimal direct dependencies.	Some modules, classes, or functions have moderate direct dependencies.	Many modules, classes, or functions have significant direct dependencies.	Modules, classes, or functions have excessive and tightly coupled dependencies which make module be harder to reuse or test.		
Association, Aggregation	2.0	10m	Associations between classes	Associations between classes	Some associations	Several associations	Completely incorrect use and		

and Composition			are accurately identified and properly established.	are generally identified and properly established.	between classes may be missing or improperly established.	between classes are missing or improperly established.	implementation of association, aggregation and composition relationship.		
UML Class Diagram	2.0	10m	The UML class diagram demonstrates excellent understanding and implementation. All classes, attributes, and methods are accurately represented with appropriate visibility, data types, and associations.	Most classes, attributes, and methods are accurately represented with appropriate visibility, data types, and associations.	Some classes, attributes, and methods may be missing or inaccurately represented, with visibility, data types, or associations not fully defined.	Many classes, attributes, and methods are missing or inaccurately represented, with visibility, data types, or associations not adequately defined.	Classes, attributes, and methods are missing or inaccurately represented, with visibility, data types, or associations lacking clarity or definition.		
Total Marks (30 marks):									

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1.0 Introduction of System

The University Examination System is a digital platform designed to streamline academic management processes within a university. It facilitates tasks such as course setup, subject record management, student information handling, and processing examination results. The system supports three main user roles: **Admins**, **Faculty Members**, and **Students**. Admins are responsible for setting up and maintaining data related to courses, subjects, faculty, staff, examinations, and students. Faculty Members manage examination results by adding, viewing, updating, or deactivating student records. Students use the system to view their final examination results and access their examination timetables. Overall, the system is designed to improve the accuracy of academic data, reduce manual effort, and enhance the efficiency of academic operations.

1.1 Student View

This module provides students with access to their academic information through a secure and easy-to-use interface. Students can log in to check their examination schedules, including key details such as subject names, exam dates, times, and assigned venues. Once the exams are completed and results are finalized by faculty members, students can view their final grades directly within the system. This module helps students stay up to date with their academic progress, allows them to plan effectively for upcoming assessments, and promotes a sense of responsibility for their own learning journey.

1.2 Faculty Member Management

Faculty members play a crucial role in managing student examination results. Within the system, they are responsible for adding new results for students enrolled in their assigned subjects. They can view the full list of student results to monitor academic progress and ensure records are complete. If any corrections or updates are necessary, faculty members have the ability to edit result entries. Additionally, they can deactivate outdated or incorrect results to maintain the accuracy and reliability of student performance data. This functionality helps uphold the integrity of academic records and supports transparent grading processes.

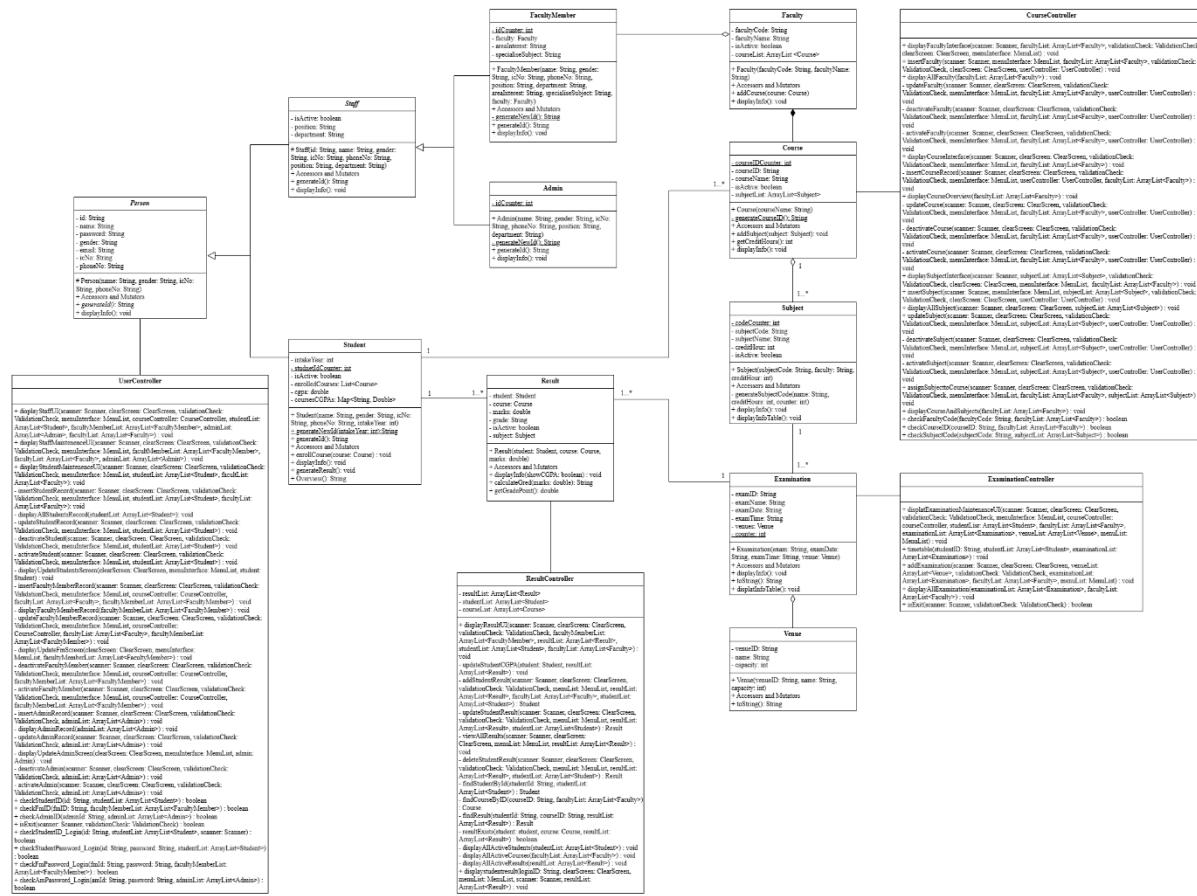
1.3 Admin Management

Admins are responsible for maintaining and viewing the academic structure of the system across various aspects. They manage courses by adding, updating, viewing, or deactivating them, and can link subjects to courses, including details like subject codes and credit hours. Admins also handle faculty and staff accounts, updating, viewing, or deactivating records as necessary. They register new students, update student profiles, manage their enrollment status, and view student data to ensure its accuracy. Additionally, admins oversee the setup and maintenance of examinations, including scheduling, assigning faculty, and ensuring that all examination-related data is processed and viewed correctly. Overall, admins play a crucial role in keeping the system's data up-to-date, accurate, and organized.

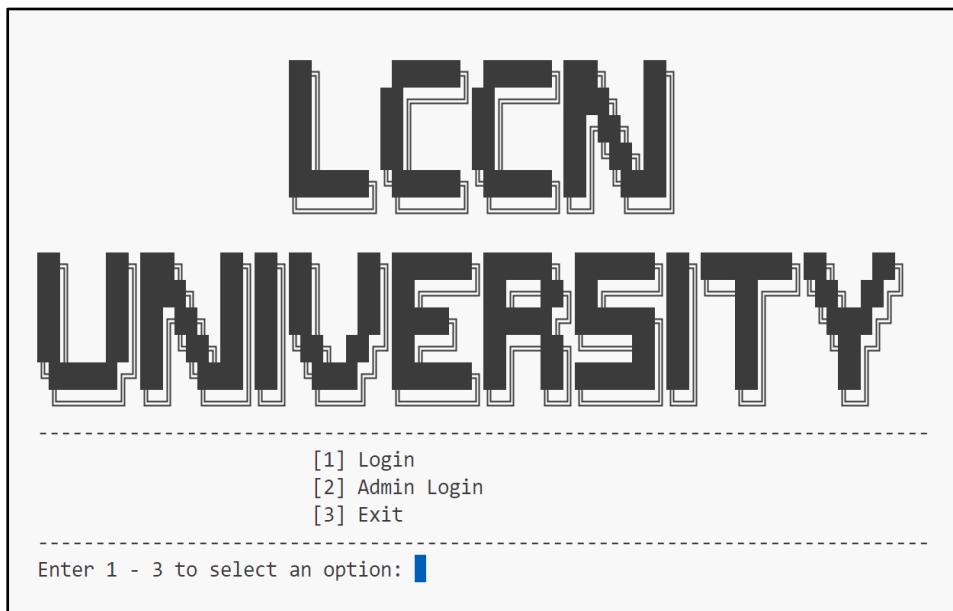
2.0 Task Allocation

Student Name	Modules Handled	Description of Responsibilities
Lai Jia Tong	Person, Staff, Student, Faculty Member, Admin, Subject, Course, Faculty	<ul style="list-style-type: none"> - Developed CRUD functionalities for key classes - Implemented validation mechanisms - Supported integration with result, examination, and login modules
Chong Zhi Yi	Person, Staff, Student, Faculty Member, Admin, Subject, Course, Faculty	<ul style="list-style-type: none"> - Contributed to CRUD features - Handled validation processes - Prepared UML diagrams and documentation
Chong Wei Ni	Result	<ul style="list-style-type: none"> - Handle CRUD operations for results - Contributed to CGPA logic - Handled student-side result display
Na Thee Lok	Examination, Venue	<ul style="list-style-type: none"> - Create and view examinations - Manage login features - Designed student timetable display

3.0 UML Diagram



4.0 System Workflows



The LCCN University menu option include:

[1] Login

- This allows students to log in to the system using their student ID and password.

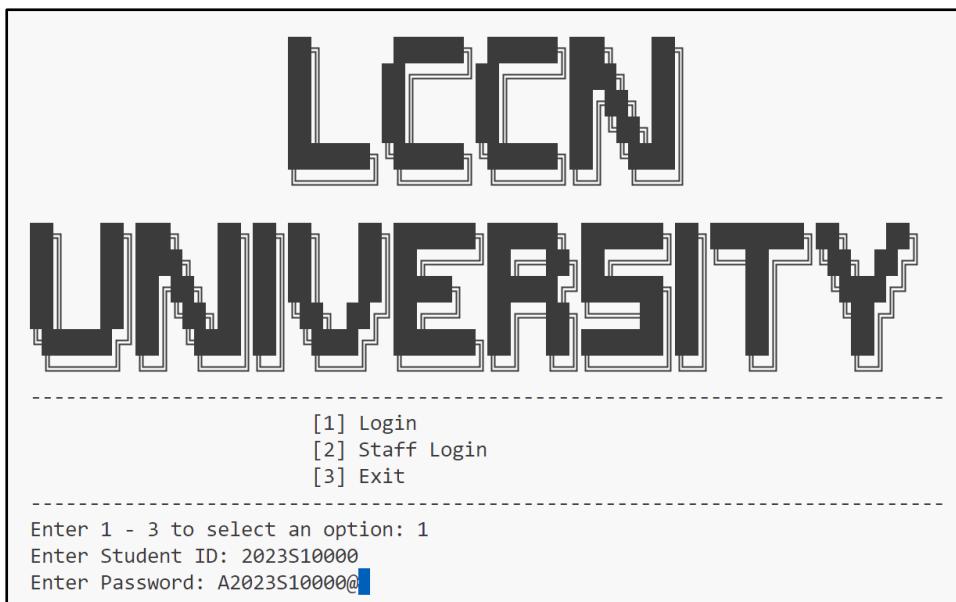
[2] Admin Login

- This allows the staff which include admin or faculty members to log in to the system using their ID and password.

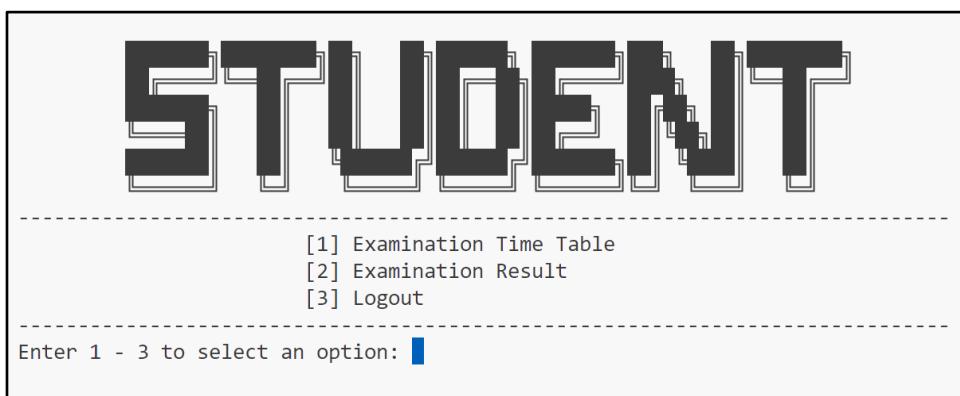
[3] Exit

- When entering this, users will exit the system.

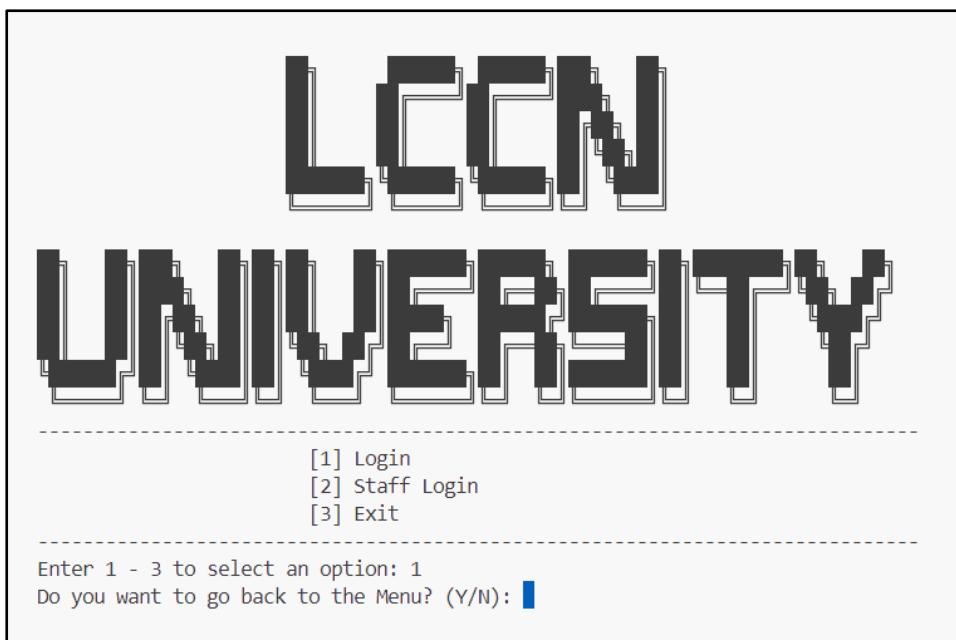
4.1 Student Login



Students may enter their ID and password to log in to the system.

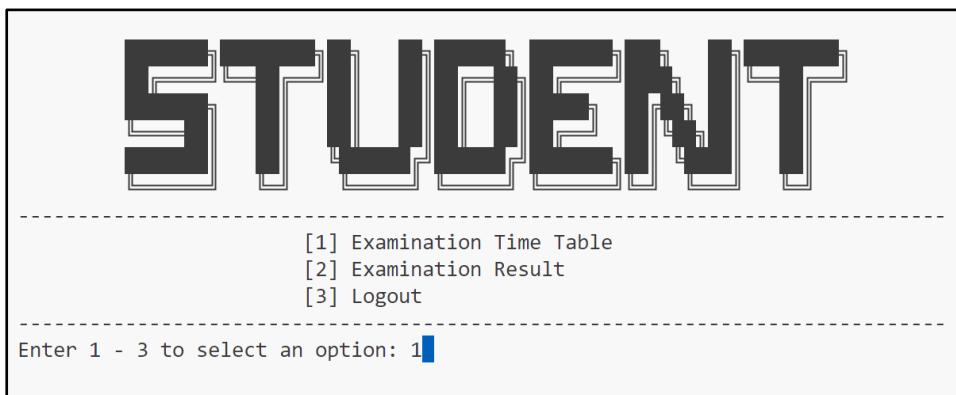


Once the ID and password are correct, students will be directed to an interface where they can check the examination time table and examination result.



Note: If the student ID is entered incorrectly twice, the system will ask the user whether they want to exit or continue entering the student ID again.

4.1.1 View Examination Timetable



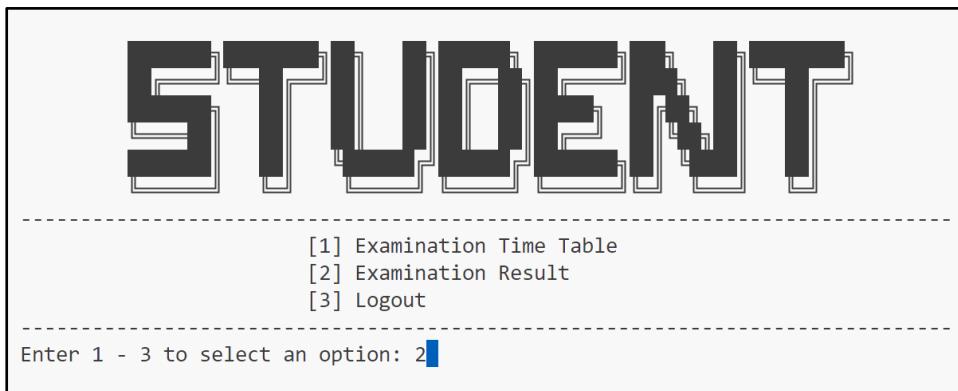
By selecting [1] Examination Time Table, students can view the scheduled examination dates and times.

===== Examination Timetable =====					
Course Name	Subject ID	Exam ID	Exam Name	Exam Date	Exam Time
Bachelor of Psychology	PSYC1001	EX1000	Introduction to Psychology	2024-04-30	08:30
Press enter key to continue.....					

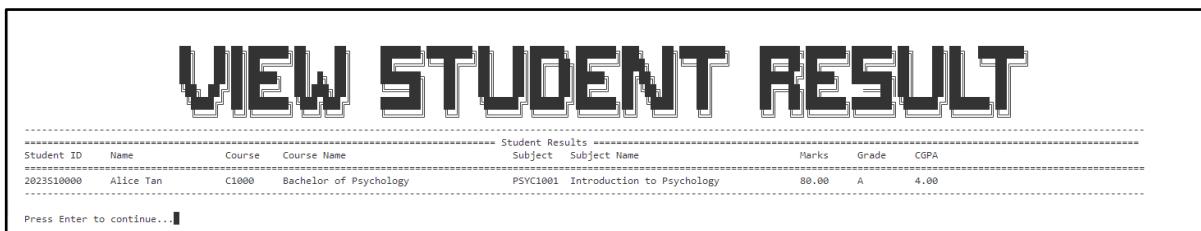
Once entered, the system displays the Time Table of the students, which includes the Course Name, Student ID, Exam ID, Exam Name, Exam Date, Exam Time.

Note: Pressing the Enter key will return the user to the main Student page.

4.1.2 View Student Result



When the student clicks [2] Examination Result, students can check their examination result through this interface.



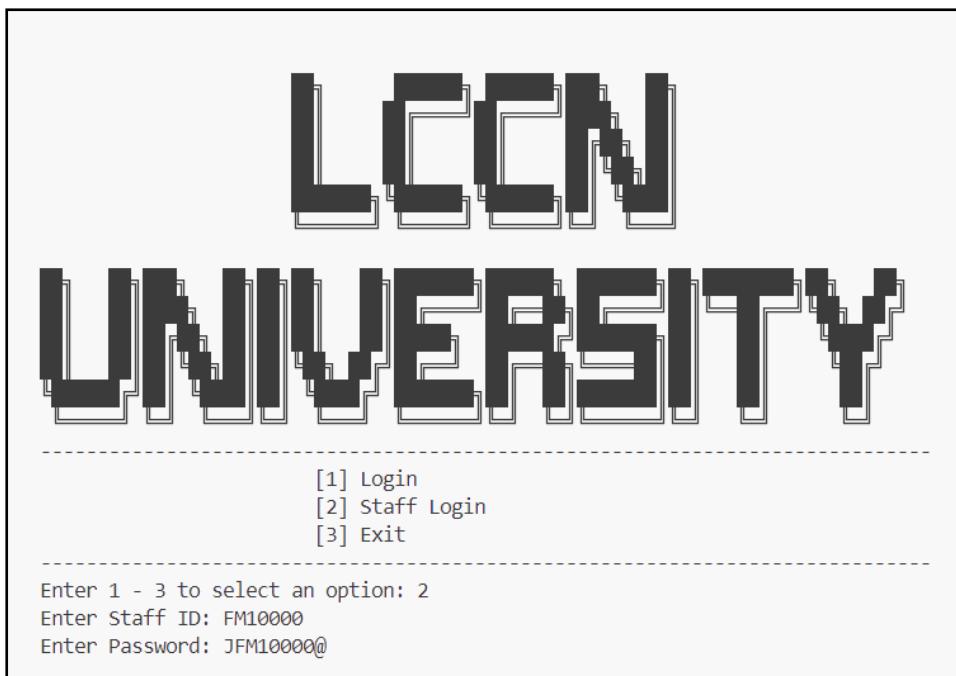
The system then displays the result of the students, which includes the Student ID, Student name, Course, Marks, Grade and CGPA.

Note: Pressing the Enter key will return the user to the main Student page.

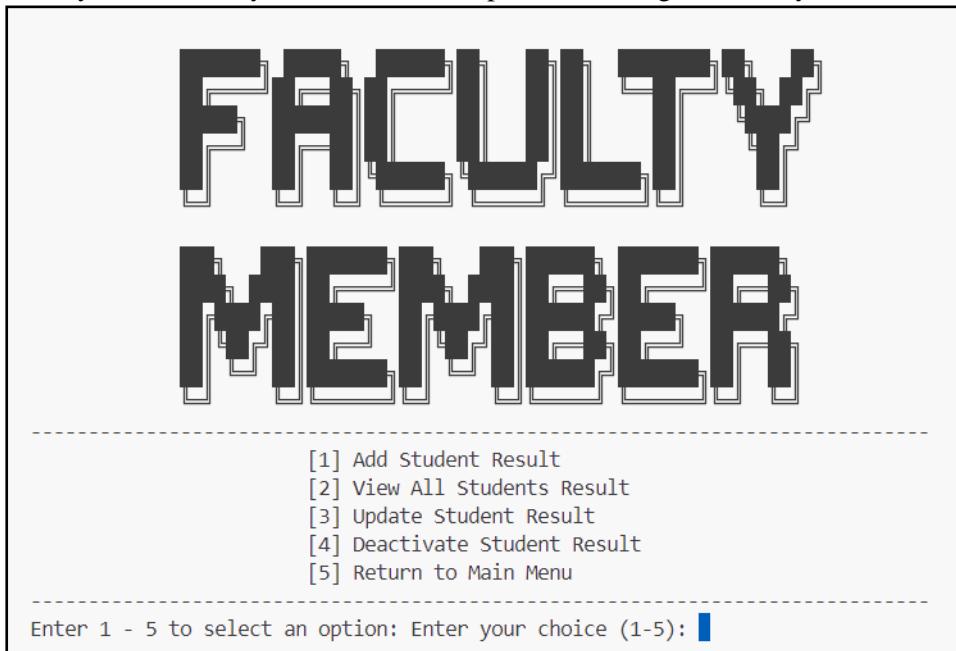


Note: If there are no results, the system will display the message 'No result found.'

4.2 Faculty Member Login



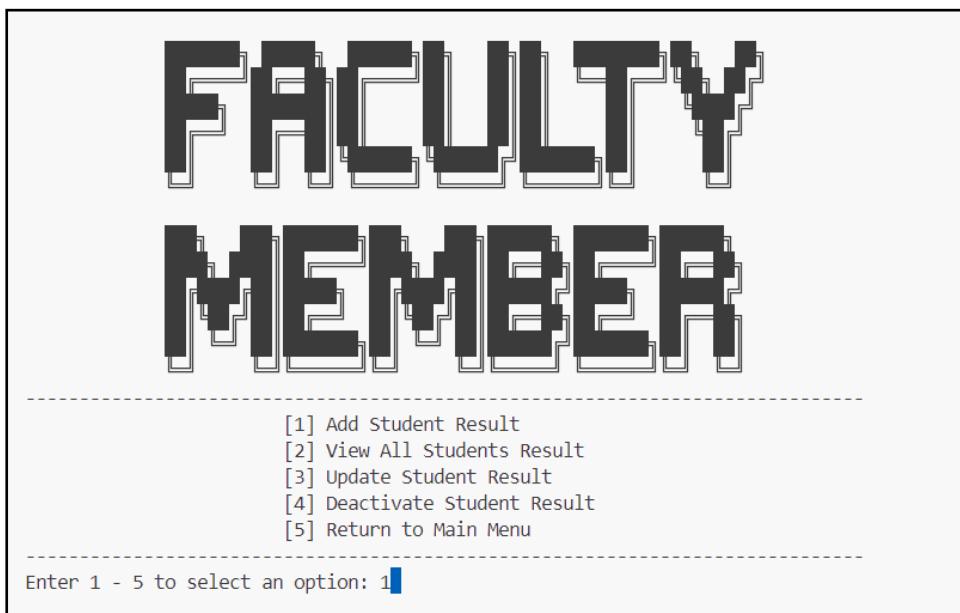
Faculty members may enter their ID and password to log in to the system.



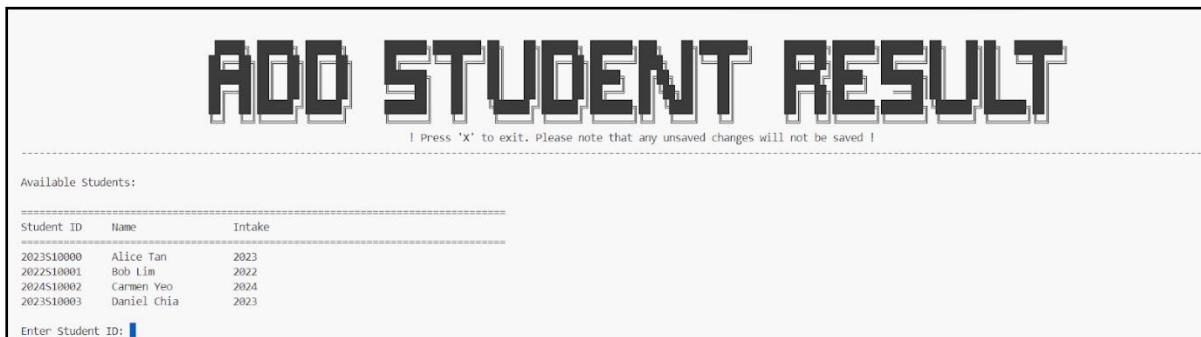
Once the ID and password are correct, faculty members will be directed to an interface where they can add student results, view all results, and update, deactivate existing records or return to the main menu.

Updated version: Faculty members are able to reactivate records for the new selection [6].

4.2.1 Add Student Result

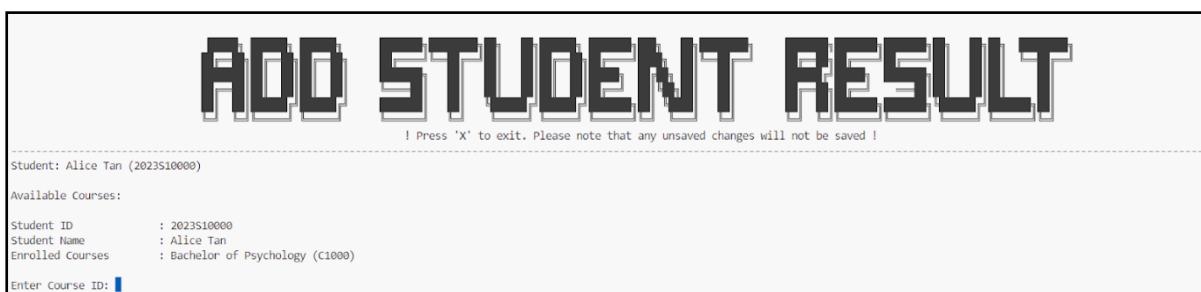


When the faculty member clicks [1] Add Student Result, the system displays all available students.



The faculty member can add new results to students they want by entering their corresponding student ID.

Note: Pressing 'x' or 'X' will return the user to the main Faculty Member page.



After the faculty member enters the student ID, the system displays the student details and the courses they take. Faculty members can enter the course ID to key in their result.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Bachelor of Psychology (C1000)

Available Subjects (without existing results):

Code	Subject Name
PSYC1001	Introduction to Psychology
PSYC1002	Cognitive Psychology

Enter Subject Code to add marks (or 'X' to cancel):

After the faculty member enters the course Id, the system displays the student details, course details and the subject code and subject name. Then, the faculty member can enter subject code to add marks to the student's results.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Diploma in Electrical Engineering (C1001)

Available Subjects (without existing results):

Code	Subject Name
EEEN1001	Circuit Theory
EEEN1002	Digital Electronics

Enter Subject Code to add marks: EEEN1001

You cannot enter results for this subject because the exam has not yet occurred.
Press Enter to continue...

Note: Pressing 'x' or 'X' will return the user to the main Faculty Member page.

Note: If the subject has an exam and the exam has not yet passed the current date and time, the faculty member will not be able to add the student result.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Diploma in Electrical Engineering (C1001)

Available Subjects (without existing results):

Code	Subject Name
EEEN1001	Circuit Theory
EEEN1002	Digital Electronics

Enter Subject Code to add marks: EEEN1002

No exam found for this subject.
Is this subject assessed by assignment only? (Y/N):

Note: If the subject does not have an examination, the system will ask the faculty member if the subject is assessed by assignment only. If the answer is yes, the faculty member will be able to add the student result.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Diploma in Electrical Engineering (C1001)

Available Subjects (without existing results):

Code	Subject Name
EEEN1001	Circuit Theory
EEEN1002	Digital Electronics

Enter Subject Code to add marks: EEEN1002

No exam found for this subject.
Is this subject assessed by assignment only? (Y/N): n

Cannot proceed without an exam or assignment confirmation.
Press Enter to continue...

Note: If the answer is no, the faculty member will not be able to enter the result.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Bachelor of Psychology (C1000)

Enter marks for PSYC1001 - Introduction to Psychology (0-100) (or 'X' to cancel):

Next, faculty members can enter marks for the chosen subject.

Note: Pressing 'x' or 'X' will return the user to the main Faculty Member page.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Bachelor of Psychology (C1000)

Enter marks for PSYC1001 - Introduction to Psychology (0-100) (or 'X' to cancel):
90

Add another subject? (Y/N):

Once entered, the result will be successfully added under the selected student. To continue adding more results to other subjects of the same course, the faculty member can enter 'Y' or 'y' for yes; otherwise, enter 'N' or 'n' to stop.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Bachelor of Psychology (C1000)

Available Subjects (without existing results):

Code	Subject Name
PSYC1002	Cognitive Psychology

Enter Subject Code to add marks (or 'X' to cancel):

If a faculty member chose to continue, then the system will display the other subjects in the same course without any existing results and ask faculty members to enter marks.

Note: Pressing 'x' or 'X' will return a successful added result message for faculty members to see.

```
=====
RESULTS ADDED SUCCESSFULLY
=====

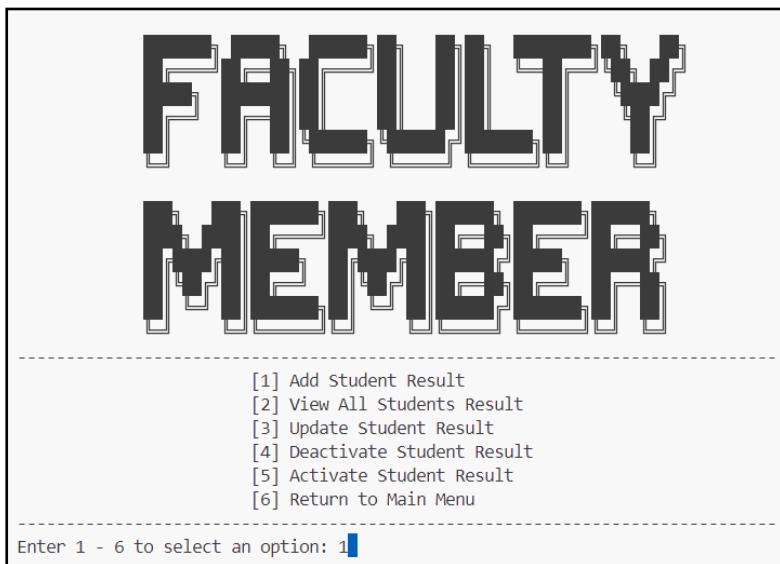
Student: Alice Tan (2023S10000)
Course: Bachelor of Psychology (C1000)

-----
Code      Subject          Marks   Grade
-----
PSYC1001  Introduction to Psychology    90.00    A+
-----
Course CGPA      : 4.00
=====

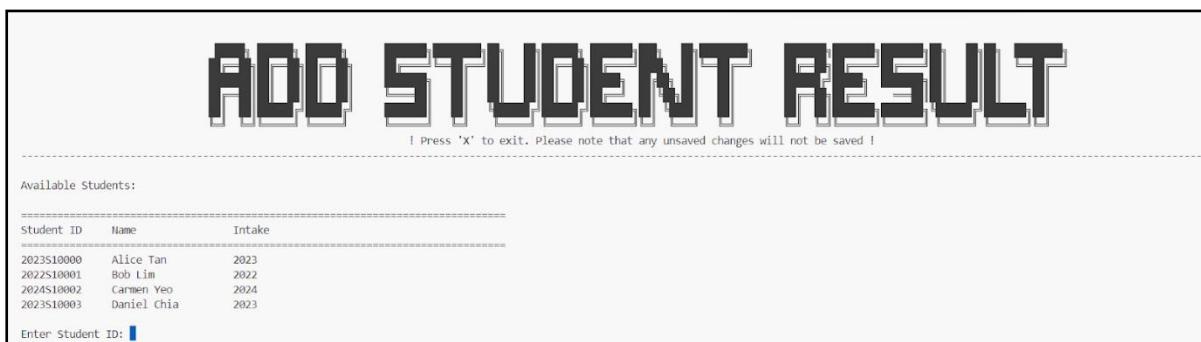
Press Enter to continue... █
```

If a faculty member chooses to stop, then a successful added result message will be displayed for faculty members to see what they have added.

Updated Version for 4.2.1 Add Student Result

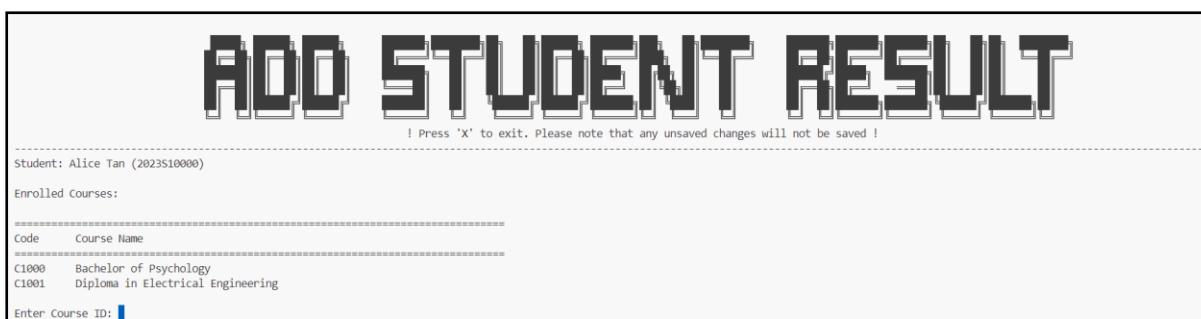


When the faculty member clicks [1] Add Student Result, the system displays all available students.



The faculty member can add new results to students they want by entering their corresponding student ID.

Note: Pressing 'x' or 'X' will return the user to the main Faculty Member page.



After the faculty member enters the student ID, the system displays the student details and the courses they take. Faculty members can enter the course ID to key in their result.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Bachelor of Psychology (C1000)

Available Subjects with Examination Status:

Code	Subject Name	Status	Exam Date/Time
ITPX03001	Introduction to Psychology	Available (Exam Passed)	2024-04-30 08:30
CPXX03002	Cognitive Psychology	Assignment-based	N/A

Enter Subject Code to add marks (or 'X' to cancel):

After the faculty member enters the course Id, the system displays the student details, course details and the subject code, subject name and informs the user of the status of the exam as well as the exam date and time. Then, the faculty member can enter subject code to add marks to the student's results.

Note: Pressing 'x' or 'X' will return the user to the main Faculty Member page.

Note: If the subject has an exam and the exam has not yet passed the current date and time, the faculty member will not be able to add the student result and it will not be displayed until after the exam has occurred.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Bachelor of Psychology (C1000)

Enter marks for PSYC1001 - Introduction to Psychology (0-100) (or 'X' to cancel):

Next, faculty members can enter marks for the chosen subject.

Note: Pressing 'x' or 'X' will return the user to the main Faculty Member page.

ADD STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Student: Alice Tan (2023S10000)
Course: Bachelor of Psychology (C1000)

Enter marks for PSYC1001 - Introduction to Psychology (0-100) (or 'X' to cancel): 90

Add another subject? (Y/N):

Once entered, the result will be successfully added under the selected student. To continue adding more results to other subjects of the same course, the faculty member can enter 'Y' or 'y' for yes; otherwise, enter 'N' or 'n' to stop.

Note: If the answer is no, the faculty member will not be able to enter the result.

ADD STUDENT RESULT			
! Press 'X' to exit. Please note that any unsaved changes will not be saved !			
Student: Alice Tan (2023S10000) Course: Bachelor of Psychology (C1000)			
Available Subjects with Examination Status:			
Code	Subject Name	Status	Exam Date/Time
CPXX03002	Cognitive Psychology	Assignment-based	N/A
Enter Subject Code to add marks (or 'X' to cancel):			

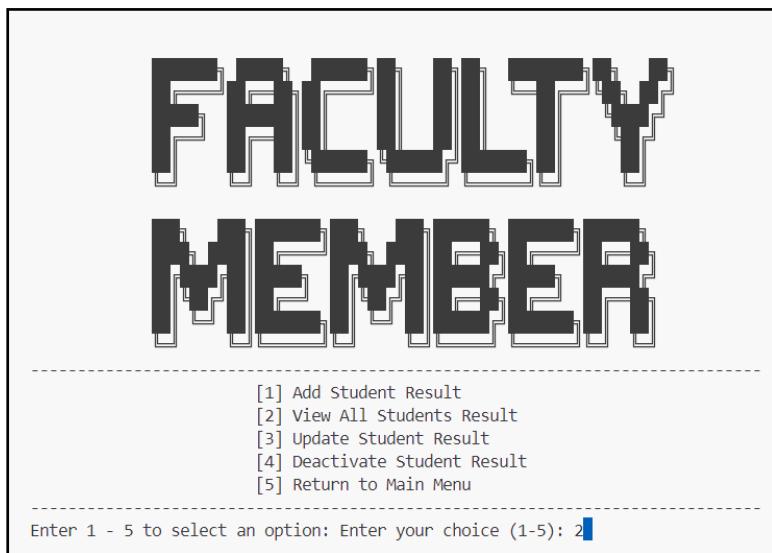
If a faculty member chose to continue, then the system will display the other subjects in the same course without any existing results and ask faculty members to enter marks.

Note: Pressing 'x' or 'X' will return a successful added result message for faculty members to see.

RESULTS ADDED SUCCESSFULLY			
Student: Alice Tan (2023S10000) Course: Bachelor of Psychology (C1000)			
Code	Subject	Marks	Grade
PSYC1001	Introduction to Psychology	90.00	A+
Course CGPA : 4.00			
Press Enter to continue...■			

If a faculty member chooses to stop, then a successful added result message will be displayed for faculty members to see what they have added.

4.2.2 Student Result Overview



If the faculty member selects [2] View All Student Result, they can view a list of all student result records.



The system will display a list of available students and their details for faculty members to see. Then, faculty members can enter student Id to view the result of the student that they want.

Note: Pressing 'x' or 'X' will return the user to the main Faculty Member page.

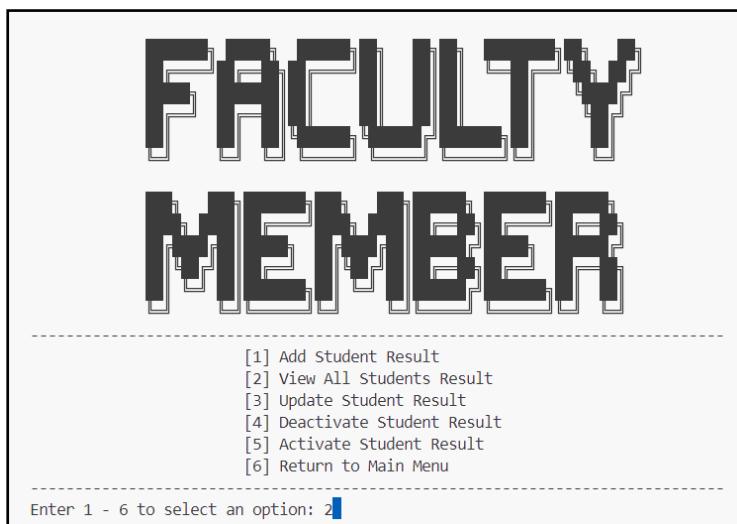
Student ID	Name	Course	Course Name	Student Results		Marks	Grade	CGPA
				Subject	Subject Name			
2023S10000	Alice Tan	C1000	Bachelor of Psychology	PSYC1001	Introduction to Psychology	90.00	A+	4.00

Press Enter to continue...[]

The system will display a table of students' results with student details, course details, subject details with their respective marks, grade and CGPA.

Note: Pressing enter will return the user to the main Faculty Member page.

Updated Version for 4.2.2 Student Result Overview



If the faculty member selects [2] View All Student Result, they can view a list of all student result records.



The system will display a list of available students and their details for faculty members to see. Then, faculty members can enter student Id to view the result of the student that they want.
Note: Pressing 'x' or 'X' will return the user to the main Faculty Member page.

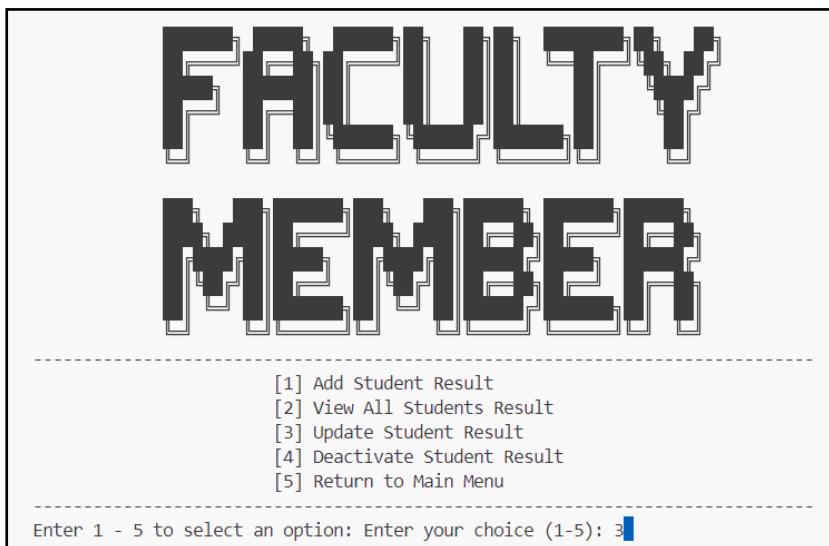
Student ID	Name	Course	Course Name	Student Results				Marks	Grade	GPA	CGPA
				Subject	Subject Name						
2023S10000	Alice Tan	C1000	Bachelor of Psychology	ITPX03001	Introduction to Psychology	90.00	A+	4.00	3.50		
				CPX03002	Cognitive Psychology	70.55	B	3.00	0.00		

Press Enter to return to student selection... ■

The system will display a table of students' results with student details, course details, subject details with their respective marks, grade, GPA and CGPA.

Note: Pressing enter will return the user to the main Faculty Member page.

4.2.3 Update Student Result



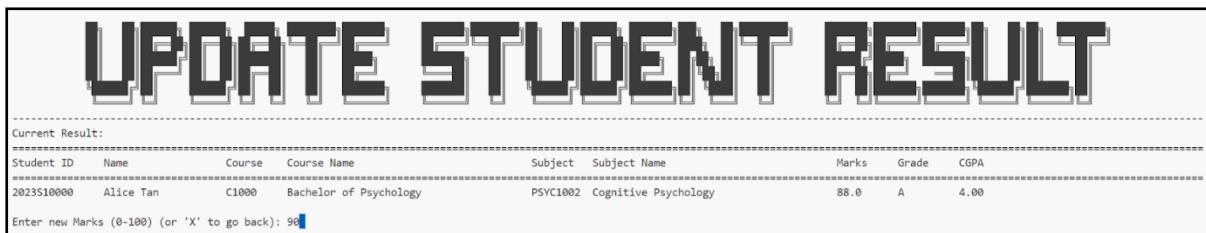
By selecting [3] Update Student Result, the faculty member can edit and update the details of an existing student result.



Then, the faculty member can enter a valid Student ID to proceed with editing the student's result.



Once the student ID is entered, the faculty member can then proceed by entering the course ID for which the result needs to be edited. Result count for one course is shown.



After that, the faculty member can enter the new marks.

UPDATE STUDENT RESULT

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Current Result:

Student ID	Name	Course	Course Name	Subject	Subject Name	Marks	Grade	GPA	CGPA
2023S10000	Alice Tan	C1000	Bachelor of Psychology	ITPX03001	Introduction to Psychology	90.00	A+	4.0	2.0

Enter new Marks (0-100) (or 'X' to go back):

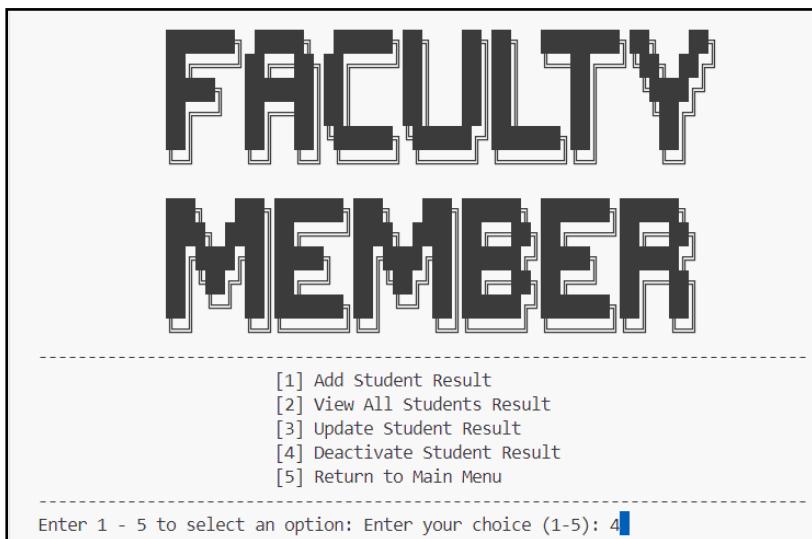
Updated Version: A column for GPA has been added.

```
=====
RESULTS UPDATED SUCCESSFULLY
=====
Student: Alice Tan (2023S10000)
Course : Bachelor of Psychology (C1000)
Subject: Cognitive Psychology (PSYC1002)
Marks  : 90.0
Grade   : A+
=====

Press Enter to continue... 
```

Once submitted, the system will update the student's result with the newly entered marks.

4.2.4 Deactivate Student Result



By selecting [4] Deactivate Student Result, the faculty member can deactivate an existing student result.



Next, the faculty member can enter the Student ID for which they wish to deactivate the result.



Next, faculty members can enter course ID.

DEACTIVATE STUDENT RESULT								
Result to be deactivated:								
Student ID	Name	Course	Course Name	Subject	Subject Name	Marks	Grade	GPA
2023S10000	Alice Tan	C1000	Bachelor of Psychology	PSYC1001	Introduction to Psychology	80.0	A	4.00
Are you sure you want to deactivate this result? (Y/N): <input type="text"/>								

If the entered Course ID is valid, the course will be found. The admin will then be prompted to confirm the deactivation by entering ‘Y’ or ‘y’ for yes, or ‘N’ or ‘n’ for no.

DEACTIVATE STUDENT RESULT								
! Press 'X' to exit. Please note that any unsaved changes will not be saved !								
Result to be deactivated:								
Student ID	Name	Course	Course Name	Subject	Subject Name	Marks	Grade	GPA
2023S10000	Alice Tan	C1000	Bachelor of Psychology	ITPX03001	Introduction to Psychology	60.00	C	2.0
Are you sure you want to deactivate this result? (Y/N): <input type="text"/>								

Updated version: A column for GPA has been added

=====	RESULT DEACTIVATED SUCCESSFULLY	=====
=====	Student: Alice Tan (2023S10000)	=====
=====	Course : Bachelor of Psychology (C1000)	=====
=====	Subject: Introduction to Psychology (PSYC1001)	=====
=====	Marks : 80.0	=====
=====	Grade : A	=====
=====	Note: This result has been deactivated and will no longer be visible to students.	=====
=====	Press Enter to continue... <input type="text"/>	=====

By entering ‘Y’ or ‘y’, the subject will be deactivated successfully.

=====	DEACTIVATION CANCELLED	=====
=====	No changes have been made to the result record.	=====
=====	Press Enter to continue... <input type="text"/>	=====

By entering ‘N’ or ‘n’, no changes have been made to the result record.

4.2.5 Updated Version: Activate Student Result



By selecting [5] Activate Student Result, the faculty member can activate an existing student result.



Next, the faculty member can enter the Student ID for which they wish to activate the result.



Next, faculty members can enter course ID.

**ACTIVATE STUDENT
RESULT**

! Press 'X' to exit. Please note that any unsaved changes will not be saved !

Result to be activated:

Student ID	Name	Course	Course Name	Subject	Subject Name	Marks	Grade	GPA	CGPA
2023S10000	Alice Tan	C1001	Diploma in Electrical Engineering	DEXX03004	Digital Electronics	90.00	A+	4.0	4.0

Are you sure you want to activate this result? (Y/N):

If the entered Course ID is valid, the course will be found. The admin will then be prompted to confirm the activation by entering ‘Y’ or ‘y’ for yes, or ‘N’ or ‘n’ for no.

```
=====
          RESULT ACTIVATED SUCCESSFULLY
=====

Student: Alice Tan (2023S10000)
Course : Diploma in Electrical Engineering (C1001)
Subject: Digital Electronics (DEXX03004)
Marks  : 90.0
Grade   : A+

Note: This result has been activated and will now be visible to students.

=====

Press Enter to continue...
```

By entering ‘Y’ or ‘y’, the result will be activated successfully.

```
=====
          ACTIVATION CANCELLED
=====

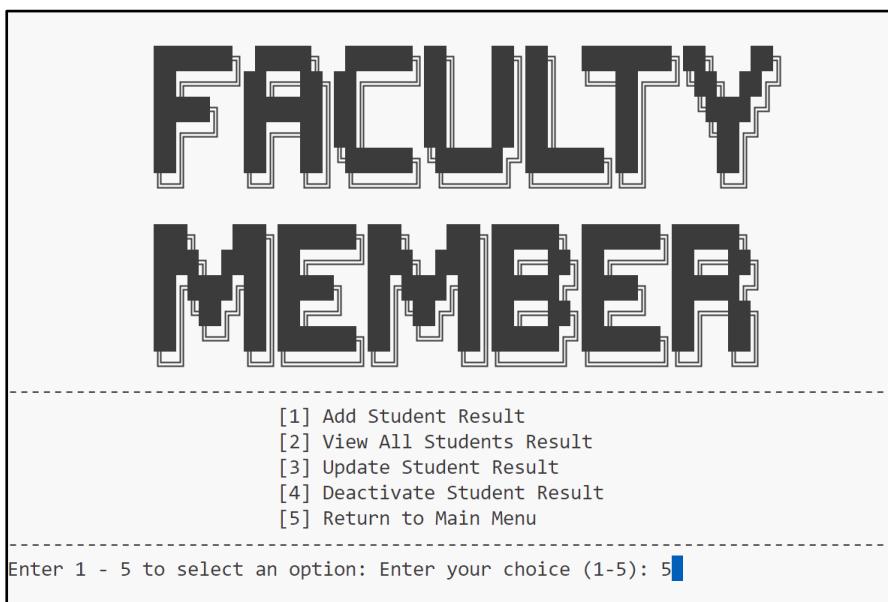
No changes have been made to the result record.

=====

Press Enter to continue...
```

By entering ‘N’ or ‘n’, no changes have been made to the result record.

4.2.6 Return to Main Menu



By selecting [5] Return to Main Menu, it will be redirected back to the main menu interface.

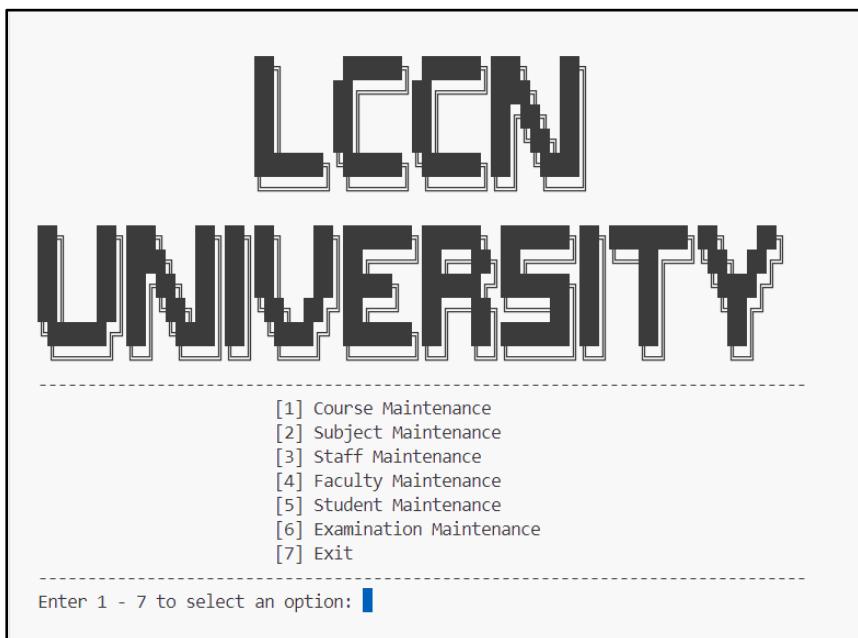
Note: Since the updated version activates the student function, the menu list will now be option [6].

4.3 Admin Login



Admins must enter their ID and password to log in to the system. If either the ID or password is invalid, an error message will be displayed, and the user will be prompted to enter their credentials again.

```
Enter 1 - 3 to select an option: 2
Enter Staff ID: adada
Faculty ID or Admin ID not found. Please try again. Press any key to continue...■
```

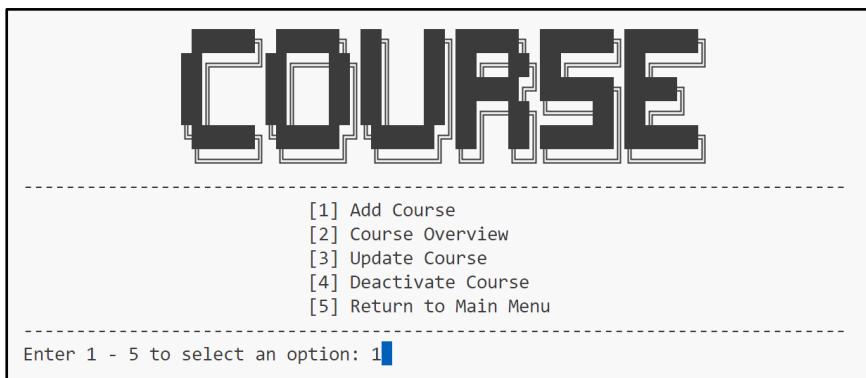


Once the ID and password are correct, admin will be directed to an interface where they can manage course, subject, staff, faculty, examination and student maintenance.

```
Enter 1 - 7 to select an option: s
Error! Please enter a numeric number to proceed
Press Enter to continue...
```

An invalid message will be prompted if a selection outside the range of 1–7 is entered.

4.3.1 Course Maintenance

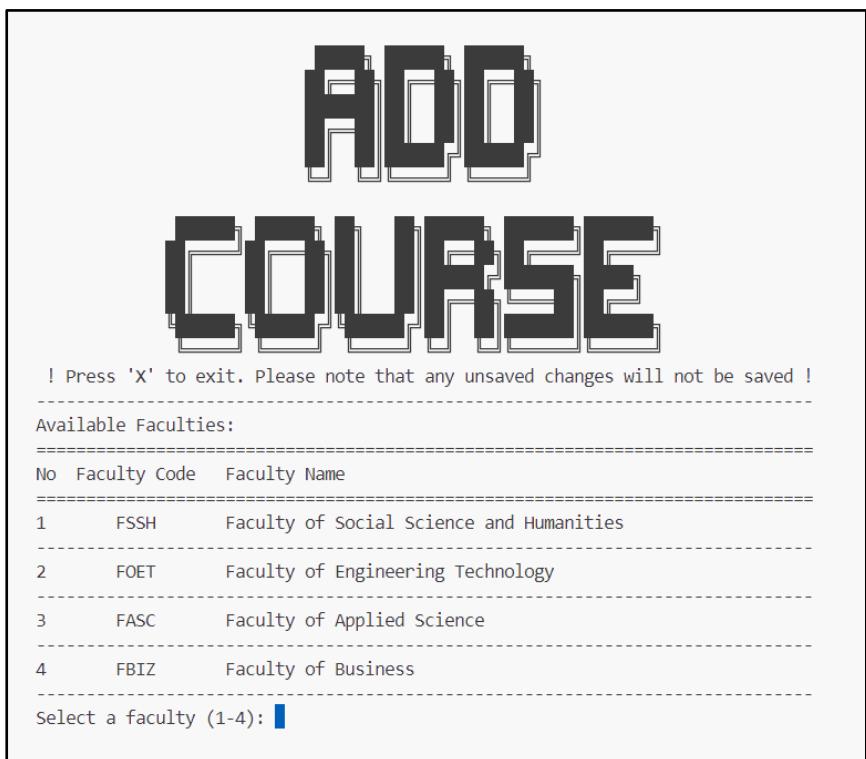


When the admin clicks [1] Course Maintenance, they can insert new courses, view all existing courses, deactivate courses, and update course information through this course interface.

Enter 1 - 5 to select an option: 7
Error! Please enter a number between 1 - 5 to proceed.
Press Enter to continue...

An invalid message will be prompted if a selection outside the range of 1–5 is entered.

4.3.1.1 Add Course



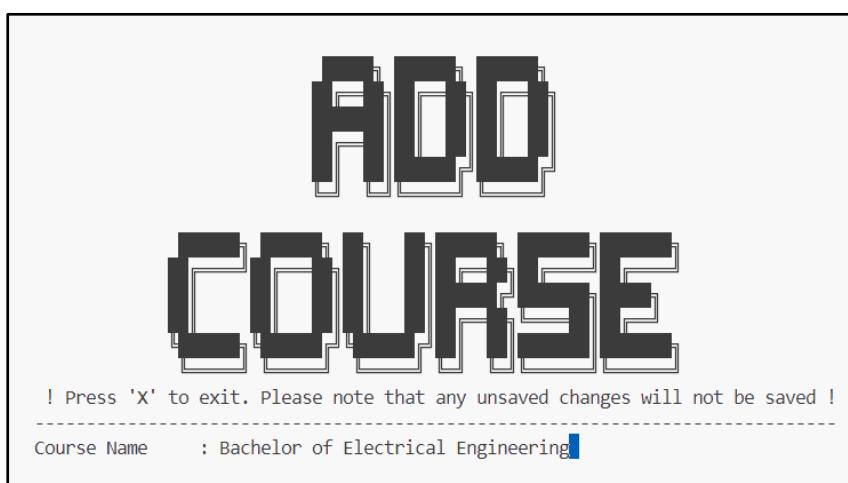
After admin selecting [1] Add Course, the system displays all available faculties, allowing the admin to select the appropriate one for the new course by entering the corresponding number.

Select a faculty (1-4): 5
Invalid input. Please enter a number between 1 and 4
Press Enter to try again...■

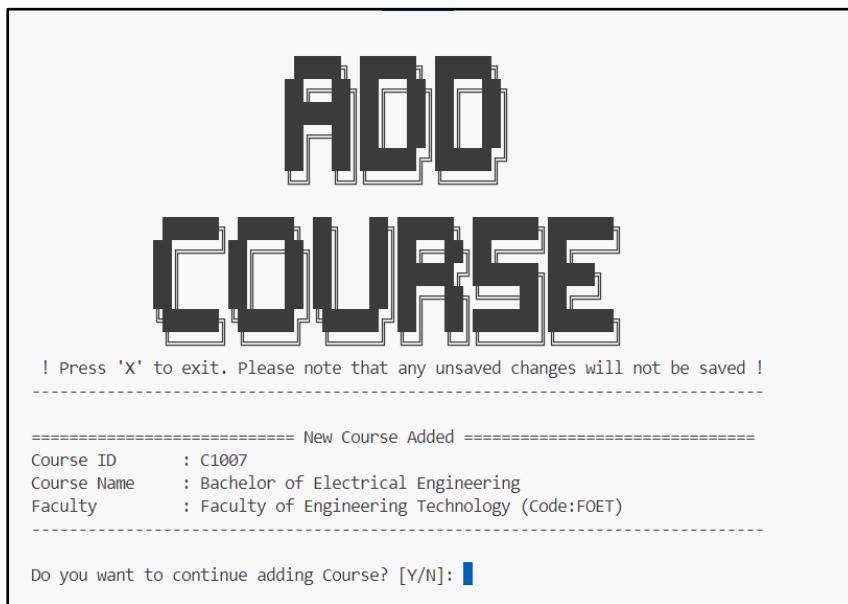
An invalid message will be prompted if a selection outside the range of 1–4 is entered.



Note: Pressing 'x' or 'X' will return the user to the main Course Maintenance page.

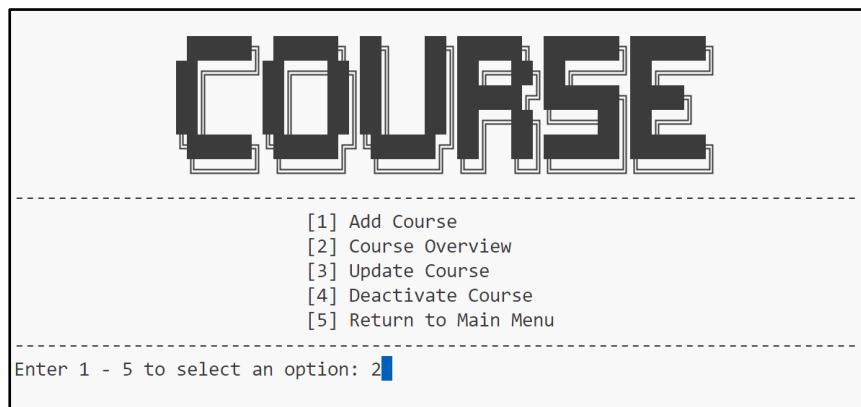


Next, the admin can enter the course name.



Once entered, the course will be successfully added under the selected faculty. To add more courses, the admin can enter 'Y' or 'y' to continue, or 'N' or 'n' to stop.

4.3.1.2 Course Overview



If the admin selects [2] Course Overview, they can view a list of all course records.

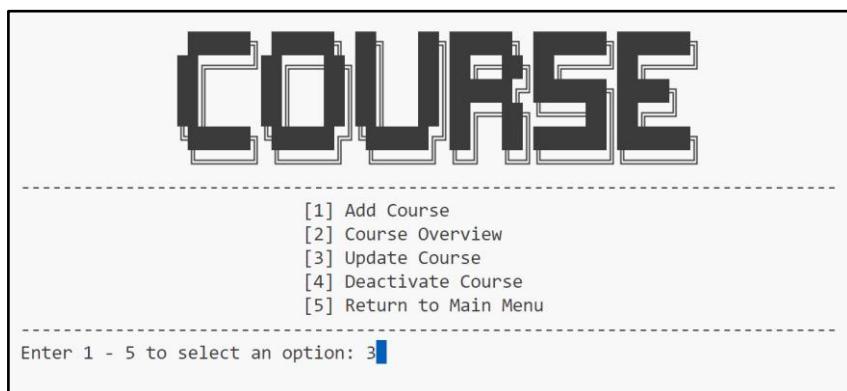
===== All Course Record =====		
Faculty: FSSH - Faculty of Social Science and Humanities		
Course ID	Course Name	Credit Hours
C1000	Bachelor of Psychology	6
Faculty: FOET - Faculty of Engineering Technology		
Course ID	Course Name	Credit Hours
C1001	Diploma in Electrical Engineering	7
C1002	Diploma in Software Engineering	6
C1007	Bachelor of Electrical Engineering	0
Faculty: FASC - Faculty of Applied Science		
Course ID	Course Name	Credit Hours
C1003	Bachelor of Environmental Science	7
C1004	Bachelor of Biotechnology	7
Faculty: FBIZ - Faculty of Business		
Course ID	Course Name	Credit Hours
C1005	Diploma in Accounting	6
C1006	Bachelor of Marketing	6

Press Enter to continue...

Which includes the course ID, course name, and credit hours, organized under each faculty.

Note: Pressing the Enter key will return the user to the main Course Maintenance page.

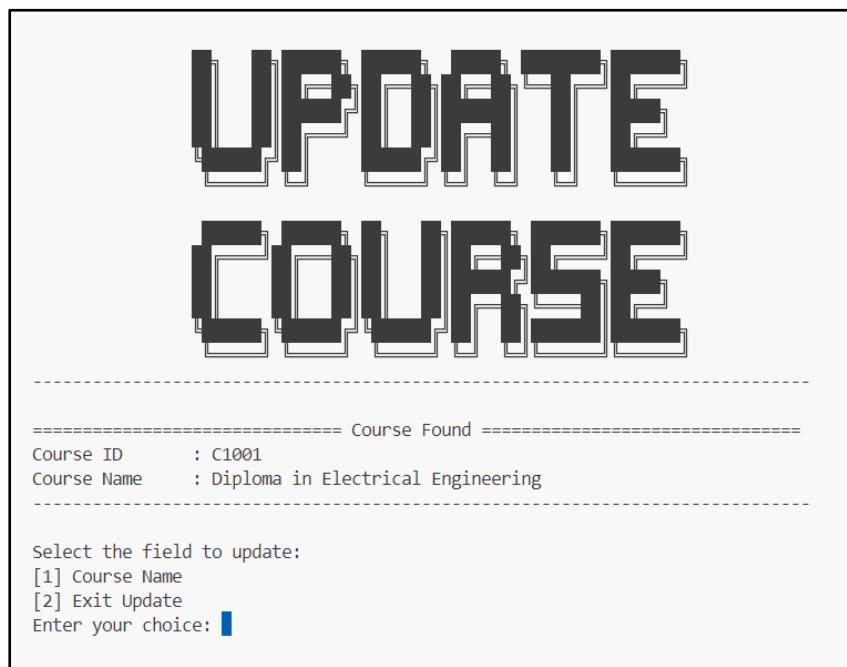
4.3.1.3 Update Course



By selecting [3] Update Course, the admin can edit and update the details of an existing course.



The admin can update a course by entering its Course ID.



If the course is found, the admin will be able to choose which field to update or select an option to exit the update process.

UPDATE COURSE

===== All Course Record =====

Faculty: FSSH - Faculty of Social Science and Humanities

Course ID	Course Name	Credit Hours
C1000	Bachelor of Psychology	10

Faculty: FOET - Faculty of Engineering Technology

Course ID	Course Name	Credit Hours
C1001	Diploma in Electrical Engineering	7
C1002	Diploma in Software Engineering	6

Faculty: FASC - Faculty of Applied Science

Course ID	Course Name	Credit Hours
C1003	Bachelor of Environmental Science	7
C1004	Bachelor of Biotechnology	7

Faculty: FBIZ - Faculty of Business

Course ID	Course Name	Credit Hours
C1005	Diploma in Accounting	6
C1006	Bachelor of Marketing	6

Enter Course ID to update: C1001

Updated Version: Display a list first so the admin doesn't need to go back to the menu to double-check the ID.

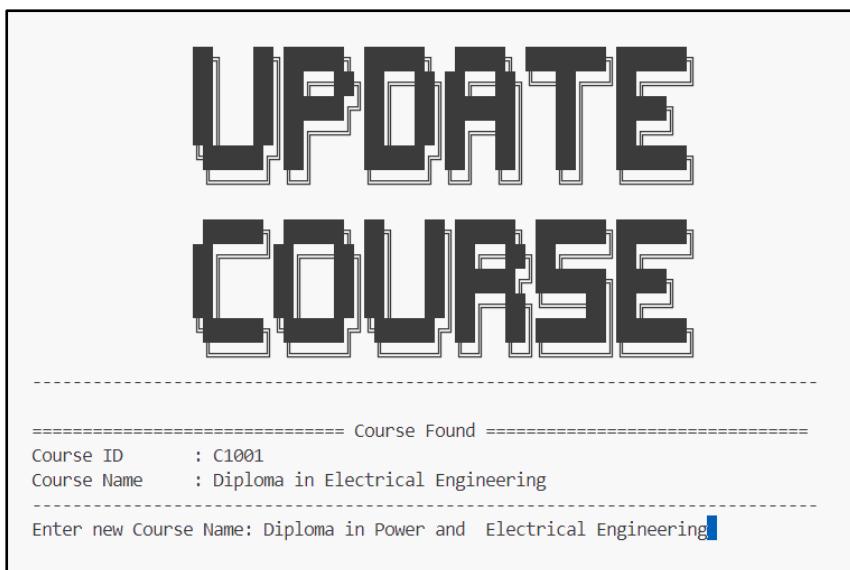
UPDATE COURSE

===== Course Found =====

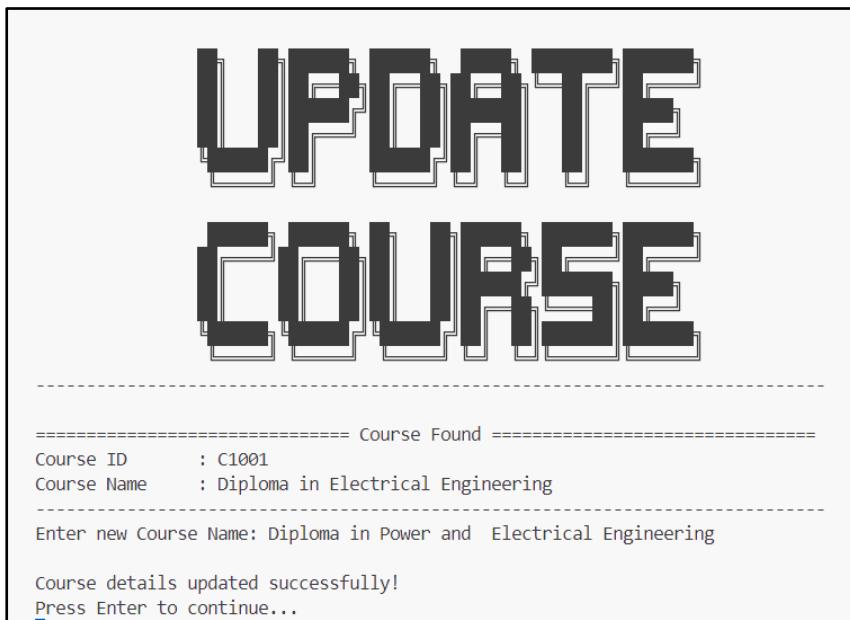
Course ID	:	C1001
Course Name	:	Diploma in Electrical Engineering

Select the field to update:
 [1] Course Name
 [2] Exit Update
 Enter your choice:

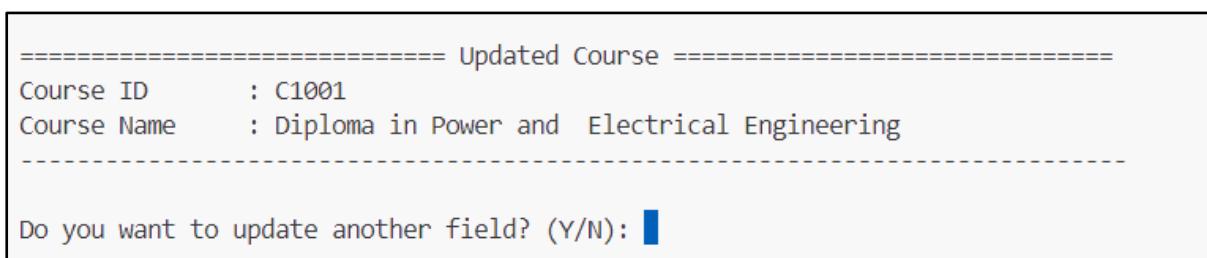
If the course is found, the admin will be able to choose which field to update or select an option to exit the update process.



The admin can then enter the new course name to update the record.

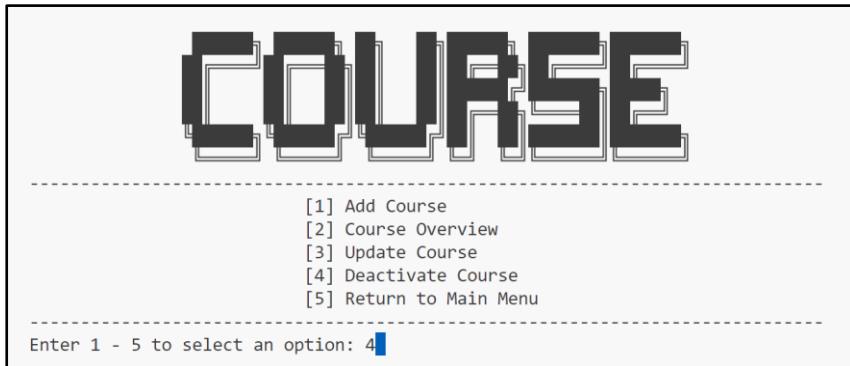


Once the course name is entered, a message will appear indicating the course has been successfully updated.

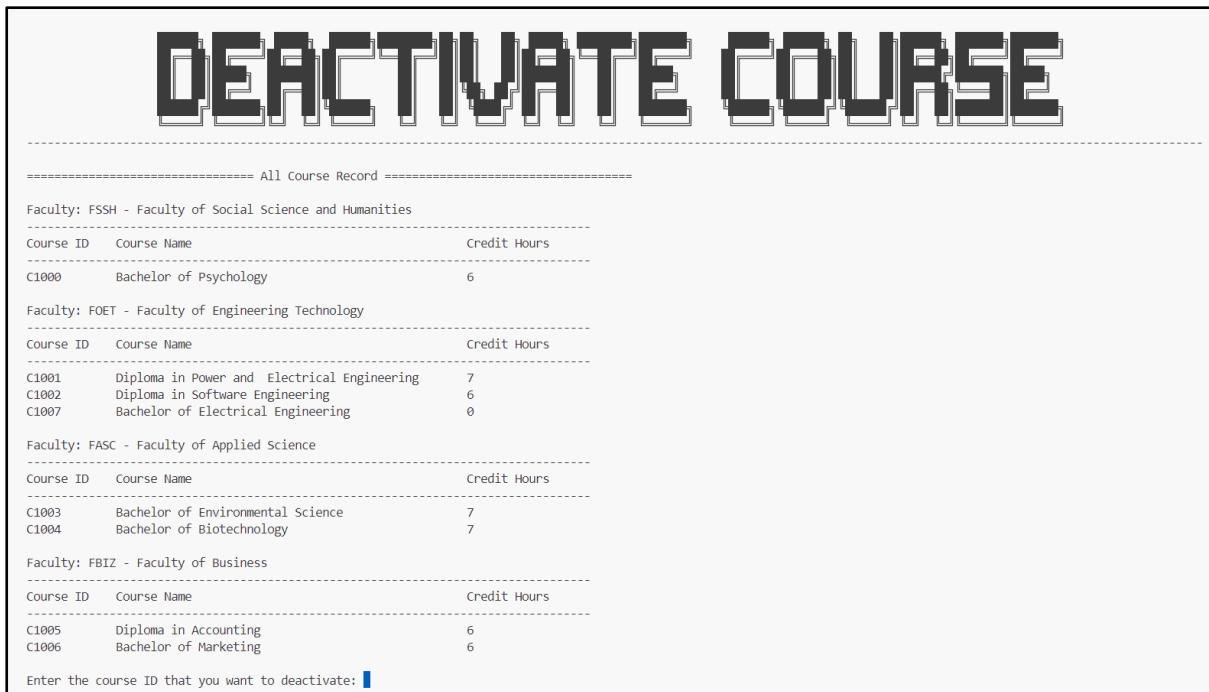


Note: When the Enter key is pressed, the system will ask if the user wants to update again. The admin can enter 'Y' or 'y' to continue, or 'N' or 'n' to stop.

4.3.1.4 Deactivate Course



When [4] Deactivate Course is selected, it allows the admin to deactivate courses that are no longer offered or needed.



It will show all the course records, and the admin can deactivate the course by entering the course ID.



If the entered Course ID is valid, the course will be found. The admin will then be prompted to confirm the deactivation by entering 'Y' or 'y' for yes, or 'N' or 'n' for no. Once 'Y' is selected, the course will be deactivated.

```
===== Course Found =====
```

Course ID : C1003
 Course Name : Bachelor of Environmental Science

 Are you sure you want to deactivate this faculty? [Y/N]: Y

Bachelor of Environmental Science course with C1003 has been deactivated.

Press Enter to continue...

Once the 'Yes' option is selected, a message will appear indicating that the course has already been deactivated. The admin can press the Enter key to continue.

DEACTIVATE COURSE

```
===== All Course Record =====
```

Faculty: FSSH - Faculty of Social Science and Humanities

Course ID	Course Name	Credit Hours
C1000	Bachelor of Psychology	6

Faculty: FOET - Faculty of Engineering Technology

Course ID	Course Name	Credit Hours
C1001	Diploma in Power and Electrical Engineering	7
C1002	Diploma in Software Engineering	6
C1007	Bachelor of Electrical Engineering	0

Faculty: FASC - Faculty of Applied Science

Course ID	Course Name	Credit Hours
C1004	Bachelor of Biotechnology	7

Faculty: FBIZ - Faculty of Business

Course ID	Course Name	Credit Hours
C1005	Diploma in Accounting	6
C1006	Bachelor of Marketing	6

Enter the course ID that you want to deactivate: sdsd

The course ID was not found. Please double-check the course ID.

Do you want to exit this page [Y/N]:

Note: If the course ID is not found, the system will ask the admin if they want to exit the page. The admin can select 'Y' or 'y' for yes, or 'N' or 'n' for no.

4.3.1.5 Update Version: Activate Course



When [5] Activate Course is selected, it allows the admin to reactivate courses that were previously deactivated.



Once done entering, the admin can enter the Course ID they wish to reactivate from the list of deactivated courses.



If there are no deactivated courses, it will display 'No deactivated courses found'.



If the entered Course ID is valid, the course will be found. The admin will then be prompted to confirm the activation by entering 'Y' or 'y' for yes, or 'N' or 'n' for no. Once 'Y' is selected, the course will be activated.

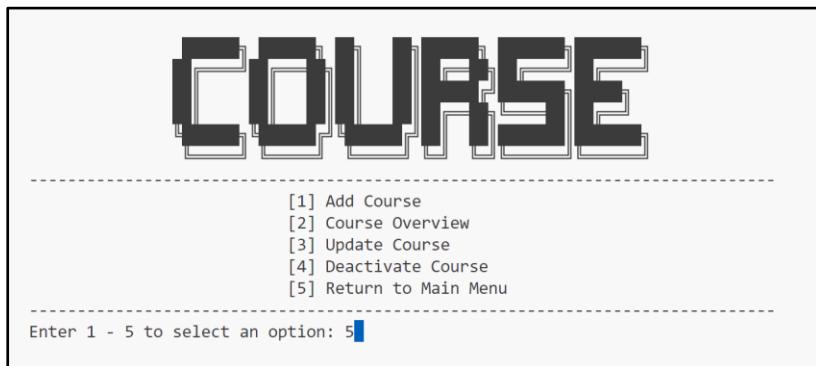
```
===== Course Found =====
Course ID      : C1006
Course Name    : Bachelor of Marketing
-----
Are you sure you want to activate this course? [Y/N]: y
Bachelor of Marketing has been activated.
Press Enter to continue...
█
```

Once the 'Yes' option is selected, a message will appear indicating that the course has already been activated. The admin can press the Enter key to continue.

```
=====
ACTIVATE COURSE
=====
===== Deactivated Courses =====
No Course ID Course Name          Faculty Code
1   C1002     Diploma in Software Engineering   FOET
-----
Enter the Course ID you want to activate: c1007
The Course ID was not found in the deactivated list.
Do you want to exit this page [Y/N]: █
```

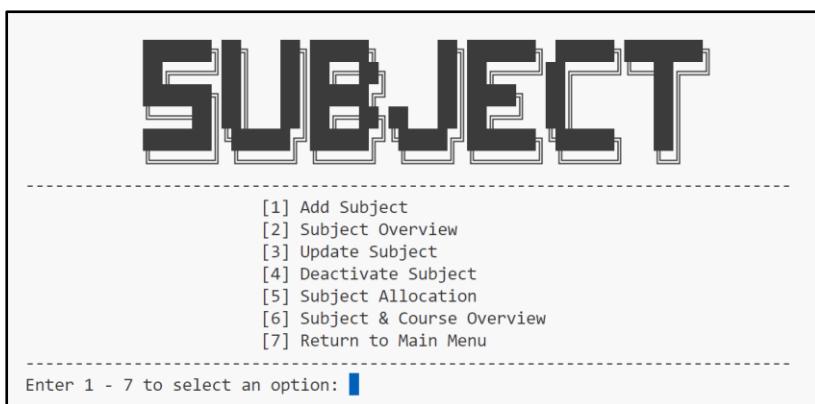
Note: If the course ID is not found, the system will ask the admin if they want to exit the page. The admin can select 'Y' or 'y' for yes, or 'N' or 'n' for no.

4.3.1.6 Return to Main Menu

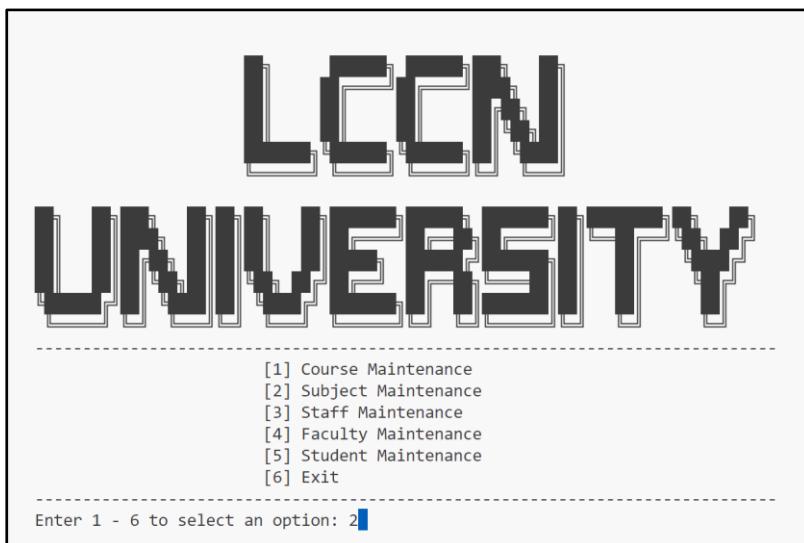


By selecting [5] Return to Main Menu, it will be redirected back to the main menu interface.

4.3.2 Subject Maintenance



If [2] is selected, the system will directly navigate to the Subject Maintenance interface.

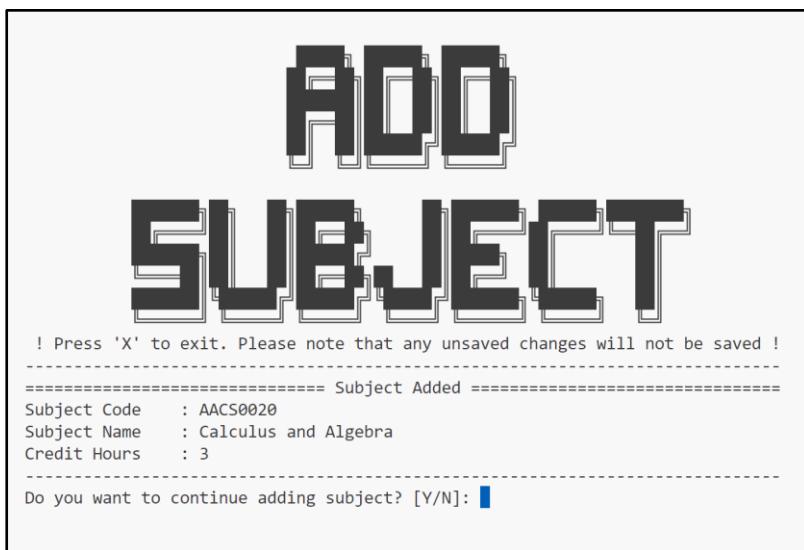


The admin can add, view, update, and deactivate subjects through this interface. It also allows subject allocation to courses and provides an overview of subjects and their associated courses.

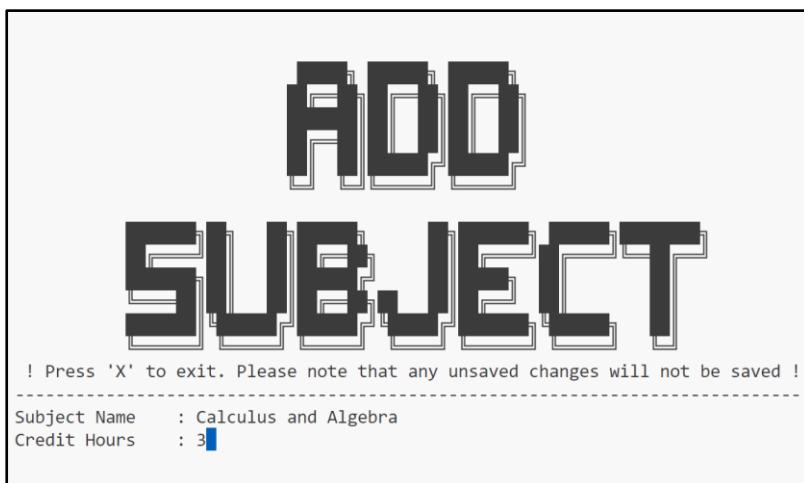
4.3.2.1 Add Subject

Admins can add a subject by entering the subject code, subject name, and credit hours.

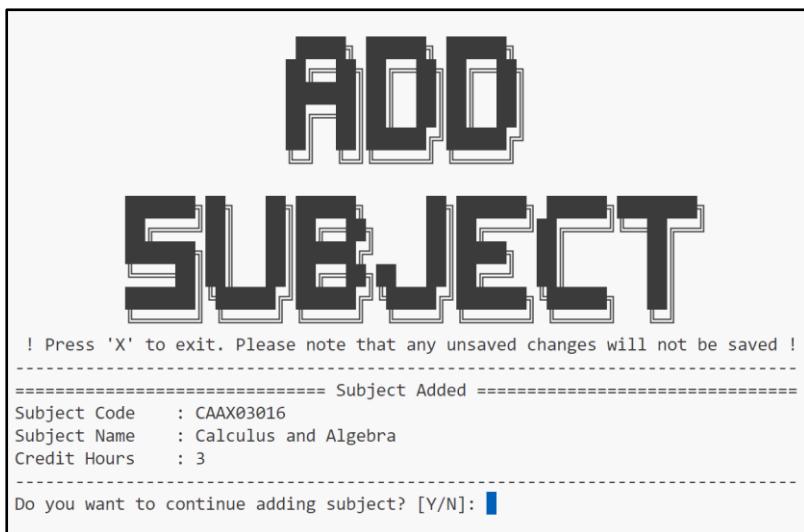
Note: The subject code must begin with four letters followed by four digits. The credit hours must be between 1 and 10.



Once done entering the subject, the subject will be added successfully. To continue adding more subjects, the admin can enter 'Y' or 'y' for yes, or 'N' or 'n' to stop.

Updated Version: 4.3.2.1 Add Subject

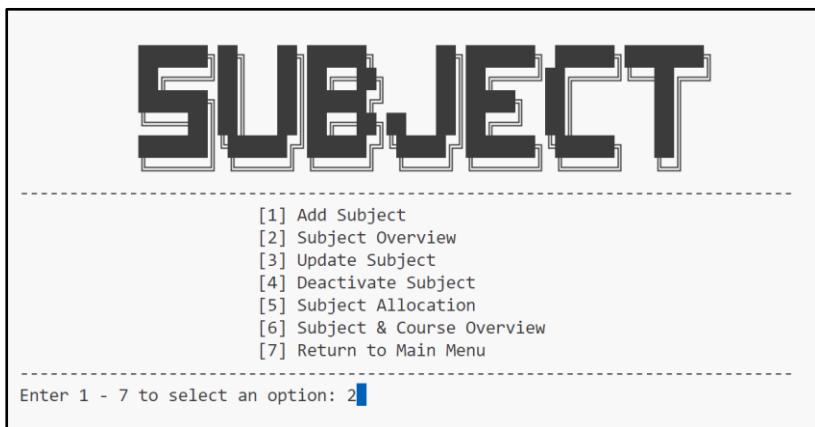
Admins can add a subject by entering the subject name, and credit hours.



Once done entering the subject, the subject will be added successfully. To continue adding more subjects, the admin can enter 'Y' or 'y' for yes, or 'N' or 'n' to stop.

Note: Subject code is auto-generated using the first character of the subject name followed by credit hour and numeric counter.

4.3.2.2 Subject Overview



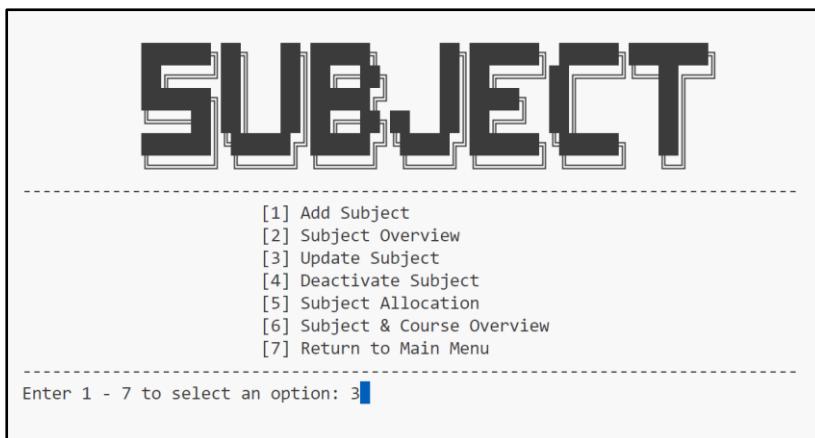
By entering [2] Subject Overview, admin can view all the subject records.

===== All Subject =====		
Subject Code	Subject Name	Credit Hours
PSYC1001	Introduction to Psychology	3
PSYC1002	Cognitive Psychology	3
EEEN1001	Circuit Theory	4
EEEN1002	Digital Electronics	3
SEEN1003	Object-Oriented Programming	3
SEEN1004	Software Project Management	3
ENSC1005	Environmental Chemistry	3
ENSC1006	Ecology and Biodiversity	4
BIOT1007	Molecular Biology	4
BIOT1008	Genetic Engineering	3
ACCT1009	Financial Accounting	3
ACCT1010	Cost Accounting	3
MKTG1011	Marketing Principles	3
MKTG1012	Consumer Behavior	3
AACS0020	Calculus and Algebra	3

Press Enter to continue...

The subjects are displayed in a list that includes detailed information such as the subject code, subject name, and credit hours.

4.3.2.3 Update Subject



Admin can update the subject by selecting [3] Update Subject.



Admin can then enter the subject code that they wish to update.

UPDATE SUBJECT

===== All Subject =====

Subject Code	Subject Name	Credit Hours
ITPX03001	Introduction to Psychology	3
CPXX03002	Cognitive Psychology	3
CTXX04003	Circuit Theory	4
DEXX03004	Digital Electronics	3
OPXX03005	Object-Oriented Programming	3
SPMX03006	Software Project Management	3
ECXX03007	Environmental Chemistry	3
EABX04008	Ecology and Biodiversity	4
MBXX04009	Molecular Biology	4
GEXX03010	Genetic Engineering	3
FAXX03011	Financial Accounting	3
CAXX03012	Cost Accounting	3
MPXX03013	Marketing Principles	3
CBXX03014	Consumer Behavior	3

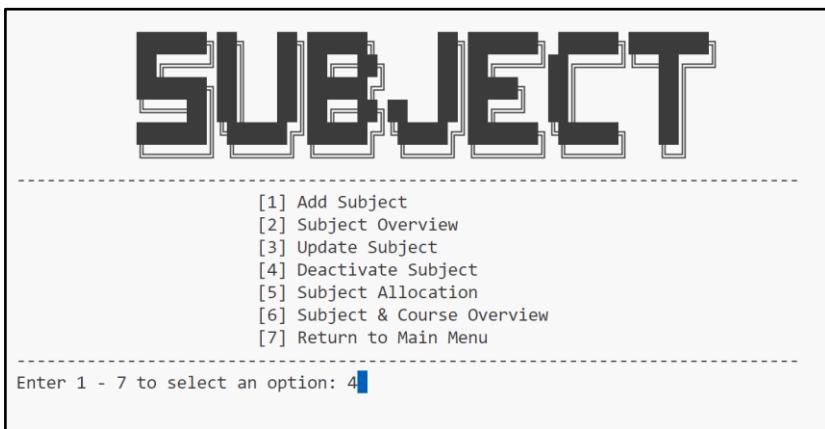
Enter Subject Code to update:

Updated Version: Display a list first so the admin doesn't need to go back to the menu to double-check the Subject Code.

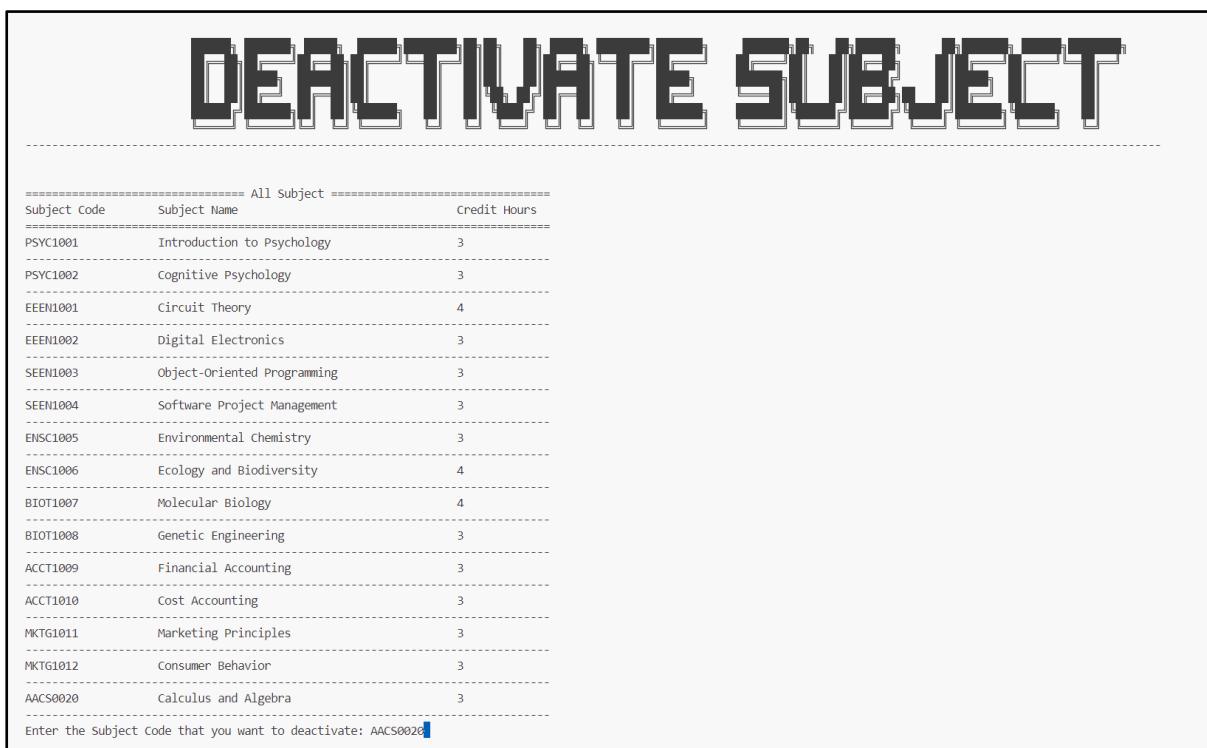


If the subject code is valid, the subject will be found. Once located, the admin can choose to update specific fields such as the subject code, subject name, or credit hours. They also have the option to exit the update process.

4.3.2.4 Deactivate Subject



By selecting [4] Deactivate Subject, the admin can deactivate subjects that are no longer needed.



When selecting the option to deactivate a subject, the admin can deactivate the subject by entering a valid subject code.

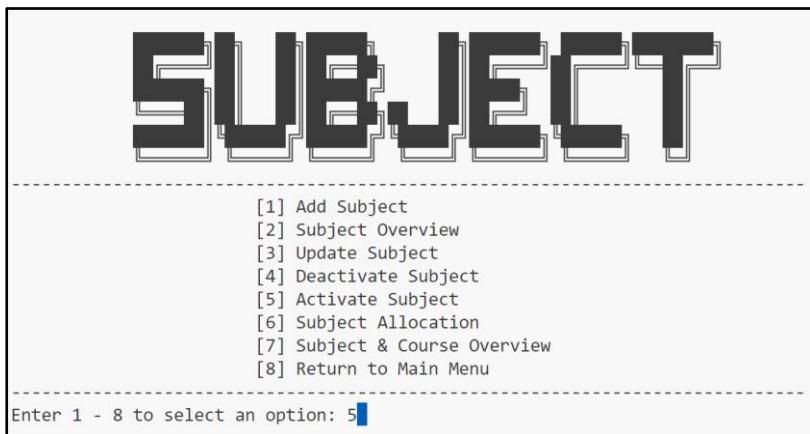


If the subject is found, the system will prompt for confirmation. Enter 'Y' or 'y' will proceed with deactivation, while 'N' or 'n' will cancel the deactivation.



By entering 'y', the subject will be deactivated successfully. Press the Enter key to continue.

4.3.2.5 Updated Version: Activate Subject



When [5] Activate Subject is selected, it allows the admin to reactivate subjects that were previously deactivated.



When selecting the option to activate a subject, the admin can activate the subject by entering a valid subject code.

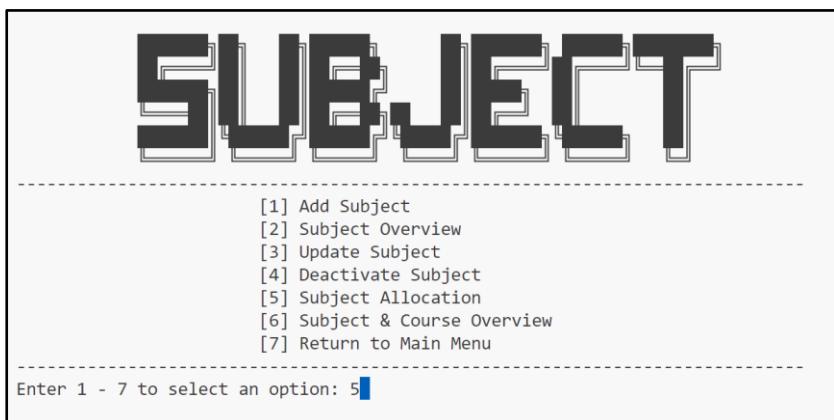


If the subject is found, the system will prompt for confirmation. Enter 'Y' or 'y' will proceed with activation, while 'N' or 'n' will cancel the activation.



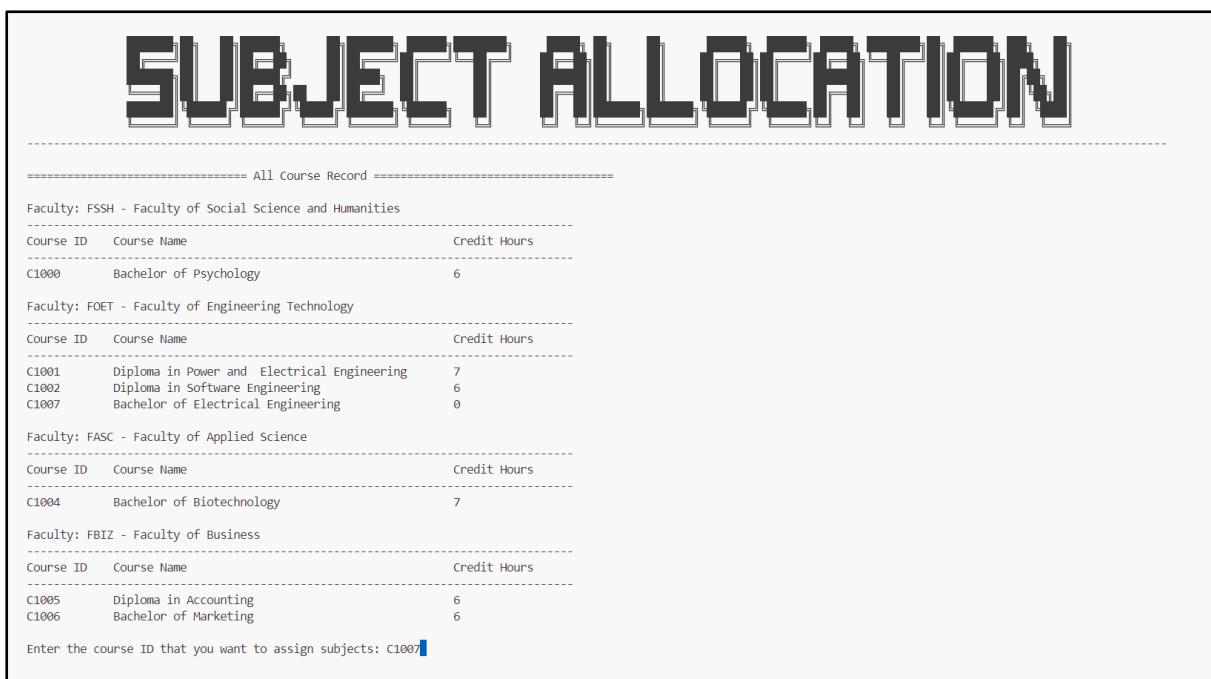
By entering 'y', the subject will be deactivated successfully. Press the Enter key to continue.

4.3.2.6 Subject Allocation



Admin can access the Subject Allocation section by selecting option [5] Subject Allocation.

Note: In the updated version, the subject allocation feature is accessible through menu option [6].



Admin can then enter the Course ID to proceed with assigning subjects to that course.



After entering a valid Course ID, the admin will be shown a list of available subjects.

SUBJECT ALLOCATION

Course: Bachelor of Electrical Engineering (C1007)

Available Subjects:

- [1] Introduction to Psychology (PSYC1001)
- [2] Cognitive Psychology (PSYC1002)
- [3] Circuit Theory (EEEN1001)
- [4] Digital Electronics (EEEN1002)
- [5] Object-Oriented Programming (SEEN1003)
- [6] Software Project Management (SEEN1004)
- [7] Environmental Chemistry (ENSC1005)
- [8] Ecology and Biodiversity (ENSC1006)
- [9] Molecular Biology (BIOT1007)
- [10] Genetic Engineering (BIOT1008)
- [11] Financial Accounting (ACCT1009)
- [12] Cost Accounting (ACCT1010)
- [13] Marketing Principles (MKTG1011)
- [14] Consumer Behavior (MKTG1012)

Enter the numbers of the subjects you want to assign (comma-separated): 6,7

The admin can assign subjects to the course by entering the corresponding numbers from the list.

Note: Use commas (,) between numbers to assign multiple subjects at once.

SUBJECT ALLOCATION

Course: Bachelor of Electrical Engineering (C1007)

Available Subjects:

- [1] Introduction to Psychology (PSYC1001)
- [2] Cognitive Psychology (PSYC1002)
- [3] Circuit Theory (EEEN1001)
- [4] Digital Electronics (EEEN1002)
- [5] Object-Oriented Programming (SEEN1003)
- [6] Software Project Management (SEEN1004)
- [7] Environmental Chemistry (ENSC1005)
- [8] Ecology and Biodiversity (ENSC1006)
- [9] Molecular Biology (BIOT1007)
- [10] Genetic Engineering (BIOT1008)
- [11] Financial Accounting (ACCT1009)
- [12] Cost Accounting (ACCT1010)
- [13] Marketing Principles (MKTG1011)
- [14] Consumer Behavior (MKTG1012)

Enter the numbers of the subjects you want to assign (comma-separated): 6,7

Do you want to assign subject again ? (Y/N): N

Once the subject numbers are entered, the selected subjects will be successfully assigned to the course. To continue assigning more subjects, the admin can enter 'Y' or 'y' for yes, or 'N' or 'n' to stop.

Subjects successfully assigned to course Bachelor of Electrical Engineering

===== Selected Course & Subjects =====

Faculty: Faculty of Engineering Technology (FOET)

Course: Bachelor of Electrical Engineering (C1007)

- Software Project Management (SEEN1004) [3 credit hours]
- Environmental Chemistry (ENSC1005) [3 credit hours]

=====
Press enter key to exit...

If the admin enters 'N' or 'n' to stop assigning, the system will confirm the successful assignment and display a summary list showing the selected faculty (with faculty code), course (with course ID), and assigned subjects (with subject codes and credit hours).

SUBJECT ALLOCATION

Course: Bachelor of Electrical Engineering (C1007)

Available Subjects:

- [1] Introduction to Psychology (PSYC1001)
- [2] Cognitive Psychology (PSYC1002)
- [3] Circuit Theory (EENI1001)
- [4] Digital Electronics (EENI1002)
- [5] Object-Oriented Programming (SEEN1003)
- [6] Software Project Management (SEEN1004)
- [7] Environmental Chemistry (ENSC1005)
- [8] Ecology and Biodiversity (ENSC1006)
- [9] Molecular Biology (BIOT1007)
- [10] Genetic Engineering (BIOT1008)
- [11] Financial Accounting (ACCT1009)
- [12] Cost Accounting (ACCT1010)
- [13] Marketing Principles (MKTG1011)
- [14] Consumer Behavior (MKTG1012)

Enter the numbers of the subjects you want to assign (comma-separated): 7,8,9

Subject already assigned: Environmental Chemistry

Note: If the subject has already been allocated, it will display: 'Subject already assigned: [subject name]'.

SUBJECT ALLOCATION

Course: Bachelor of Electrical Engineering (C1007)

Available Subjects:

- [1] Introduction to Psychology (PSYC1001)
- [2] Cognitive Psychology (PSYC1002)
- [3] Circuit Theory (EENI1001)
- [4] Digital Electronics (EENI1002)
- [5] Object-Oriented Programming (SEEN1003)
- [6] Software Project Management (SEEN1004)
- [7] Environmental Chemistry (ENSC1005)
- [8] Ecology and Biodiversity (ENSC1006)
- [9] Molecular Biology (BIOT1007)
- [10] Genetic Engineering (BIOT1008)
- [11] Financial Accounting (ACCT1009)
- [12] Cost Accounting (ACCT1010)
- [13] Marketing Principles (MKTG1011)
- [14] Consumer Behavior (MKTG1012)

Enter the numbers of the subjects you want to assign (comma-separated): 15

Invalid subject number: 15

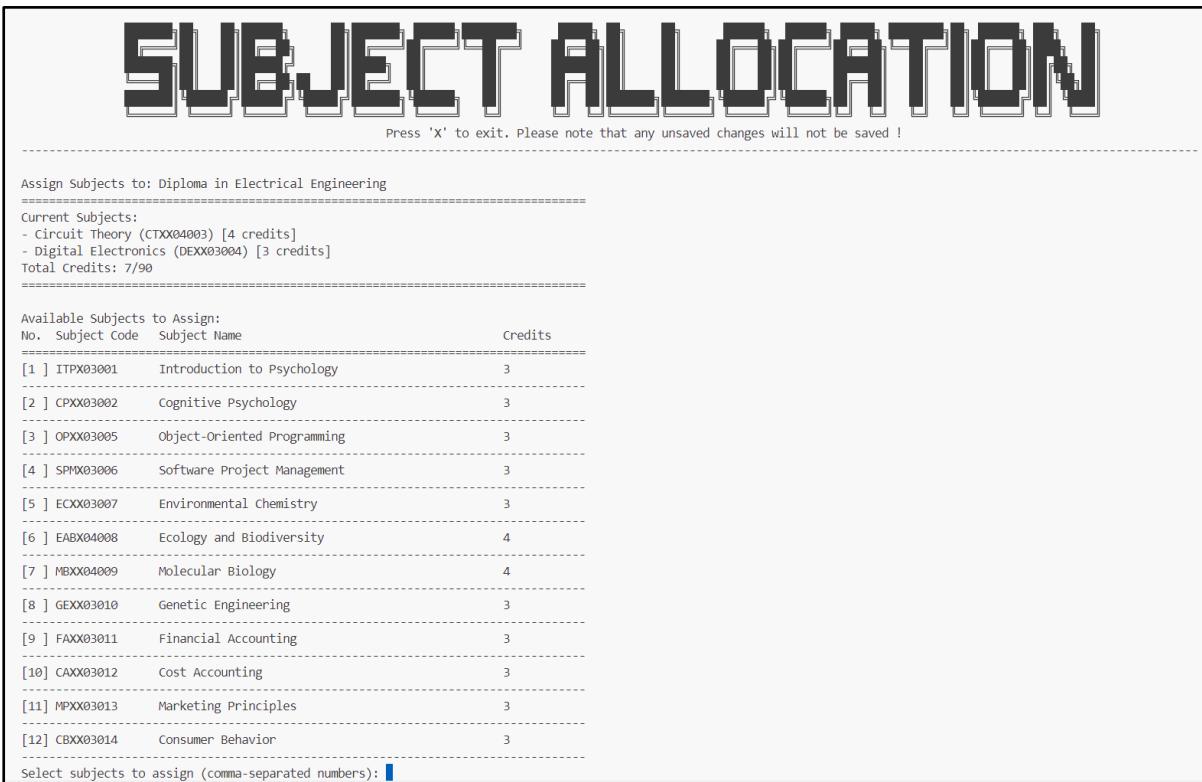
Note: If the number is out of range, it will also display an invalid message.

Updated Version for 4.3.2.6 Subject Allocation:

The admin can enter the number corresponding to the faculty they wish to select.



After selecting a faculty, the list of courses under that faculty will be displayed. The admin can then select a course to assign subjects.



Once a course is selected, the system will display the current subjects assigned to the course along with the total credit hours. It will also show a list of subjects that have not yet been assigned. The admin can select the subjects they wish to allocate to this course.

Note: Use commas (,) between numbers to assign multiple subjects at once.

Select subjects to assign (comma-separated numbers): 6,5

Added: Ecology and Biodiversity

Added: Environmental Chemistry

Successfully assigned subjects:

- Ecology and Biodiversity (EABX04008)
- Environmental Chemistry (ECXX03007)

Assign more subjects to this course? (Y/N):

Once the subject numbers are entered, the selected subjects will be successfully assigned to the course. To continue assigning more subjects, the admin can enter 'Y' or 'y' for yes, or 'N' or 'n' to stop.

SUBJECT ALLOCATION

Press 'X' to exit. Please note that any unsaved changes will not be saved !

===== Faculty : Faculty of Engineering Technology (FOET) =====

Course : Diploma in Electrical Engineering (C1001)

Subjects in this course:

- Circuit Theory (CTXX04003) [4 credits]
- Digital Electronics (DEXX03004) [3 credits]
- Ecology and Biodiversity (EABX04008) [4 credits]
- Environmental Chemistry (ECXX03007) [3 credits]

Total Credit Hours: 14/90

=====

Press Enter to return to menu...

If the admin enters 'N' or 'n' to stop assigning, the system will confirm the successful assignment and display a summary showing the selected faculty (with faculty code), the course (with course ID), and the assigned subjects (with subject codes and credit hours), along with the total credit hours.

Select subjects to assign (comma-separated numbers): 1,215

Added: Circuit Theory

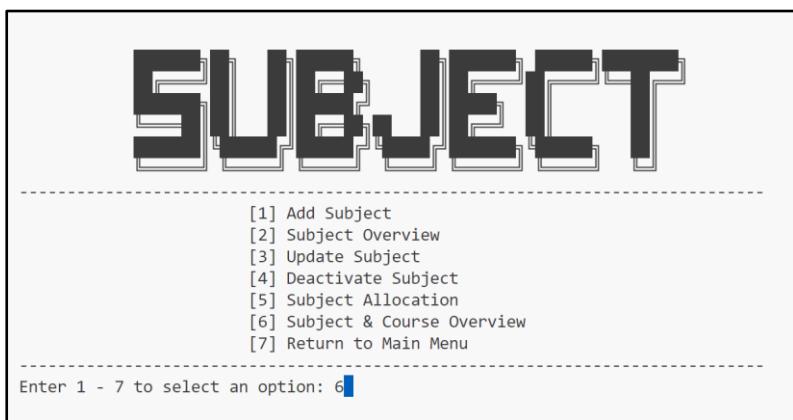
Invalid selection: 215

Successfully assigned subjects:

- Circuit Theory (CTXX04003)

Note: If the number is out of range, it will also display an invalid message.

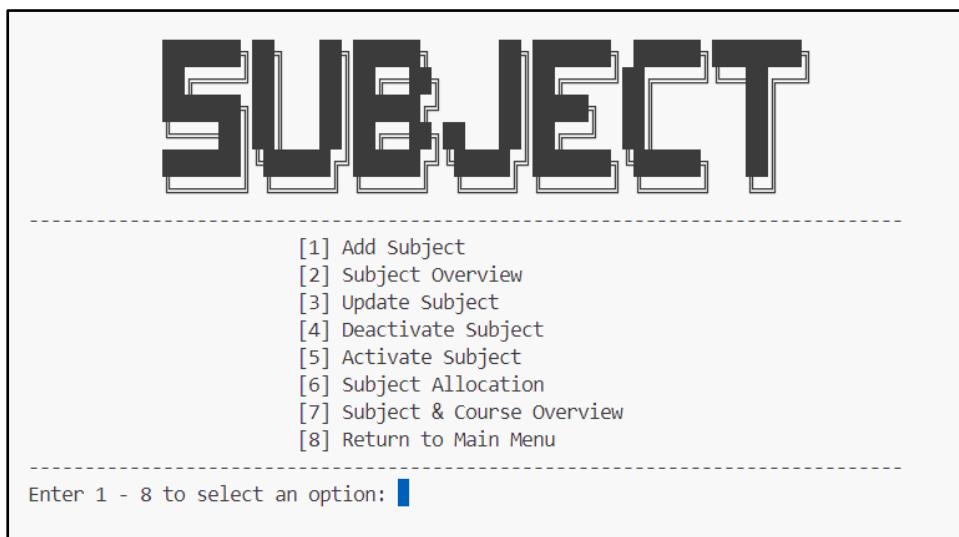
4.3.2.7 Subject and Course Overview



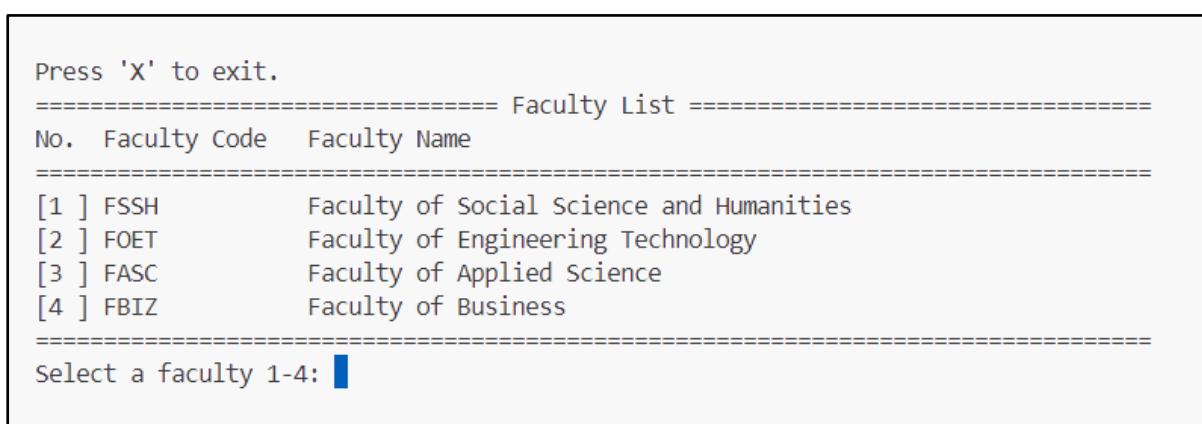
By selecting [6] Subject & Course Overview, the admin can view a detailed list of subjects and their corresponding courses.

===== Course & Subject List =====		
<hr/>		
Faculty: Faculty of Social Science and Humanities (FSSH)		
<hr/>		
Course: Bachelor of Psychology (C1000)		
<hr/>		
Subject Name	Subject Code	Credit Hours
<hr/>	<hr/>	<hr/>
Introduction to Psychology	PSYC1001	3
Cognitive Psychology	PSYC1002	3
<hr/>	<hr/>	<hr/>
<hr/>		
Faculty: Faculty of Engineering Technology (FOET)		
<hr/>		
Course: Diploma in Electrical Engineering (C1001)		
<hr/>		
Subject Name	Subject Code	Credit Hours
<hr/>	<hr/>	<hr/>
Circuit Theory	EEEN1001	4
Digital Electronics	EEEN1002	3
<hr/>	<hr/>	<hr/>
<hr/>		
Course: Diploma in Software Engineering (C1002)		
<hr/>		
Subject Name	Subject Code	Credit Hours
<hr/>	<hr/>	<hr/>
Object-Oriented Programming	SEEN1003	3
Software Project Management	SEEN1004	3
<hr/>	<hr/>	<hr/>
<hr/>		
Course: Bachelor of Electrical Engineering (C1007)		
<hr/>		
Subject Name	Subject Code	Credit Hours
<hr/>	<hr/>	<hr/>
Software Project Management	SEEN1004	3
Environmental Chemistry	ENSC1005	3
<hr/>	<hr/>	<hr/>

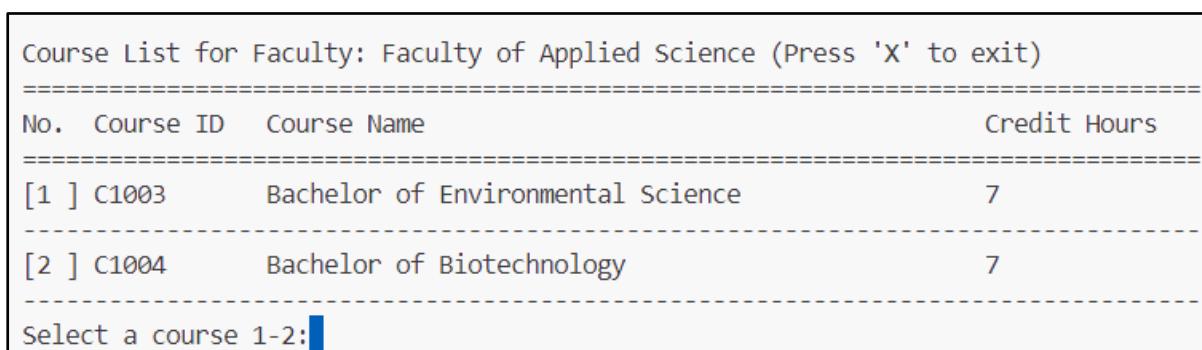
The system also displays the respective faculties under which each course and subject are organized.

Updated Version for 4.3.2.7 Subject and Course Overview

By selecting [7] Subject & Course Overview, the admin can view a detailed list of subjects and their corresponding courses



The admin can enter the number corresponding to the faculty they wish to select.



After selecting a faculty, the system will display the list of courses under that faculty. The admin can then select a course to view the subjects currently assigned to it.

Subjects under Course: Bachelor of Environmental Science (Press 'X' to exit)

Subject Code	Subject Name	Credit Hours
--------------	--------------	--------------

ECXX03007	Environmental Chemistry	3
-----------	-------------------------	---

EABX04008	Ecology and Biodiversity	4
-----------	--------------------------	---

Would you like to select another faculty? (Y/N):

After selecting a course, the admin can view its assigned subjects. The system will then ask whether the admin wants to view another faculty. Pressing 'Y' or 'y' will return to the faculty selection screen, while pressing 'N' or 'n' will return to the main menu.

Note: Pressing 'x' or 'X' will return the user to the main Subject Maintenance page.

4.3.2.8 Return to Main Menu

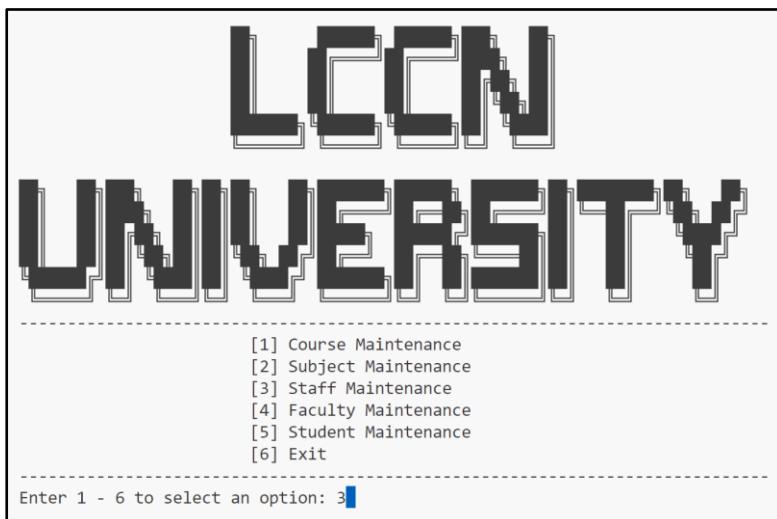
SUBJECT

- [1] Add Subject
- [2] Subject Overview
- [3] Update Subject
- [4] Deactivate Subject
- [5] Activate Subject
- [6] Subject Allocation
- [7] Subject & Course Overview
- [8] Return to Main Menu

Enter 1 - 8 to select an option:

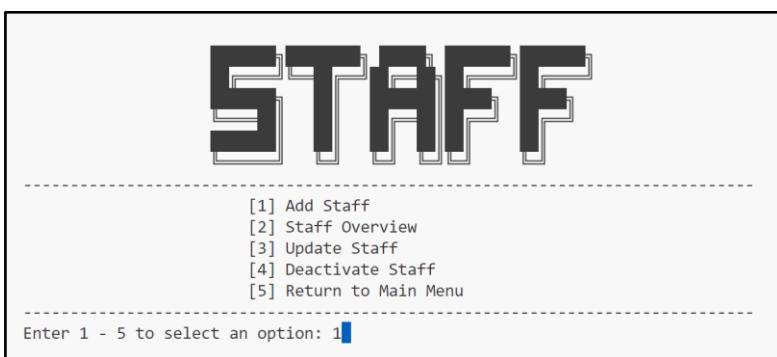
By selecting [8] Return to Main Menu, it will be redirected back to the main menu interface.

4.3.3 Staff Maintenance



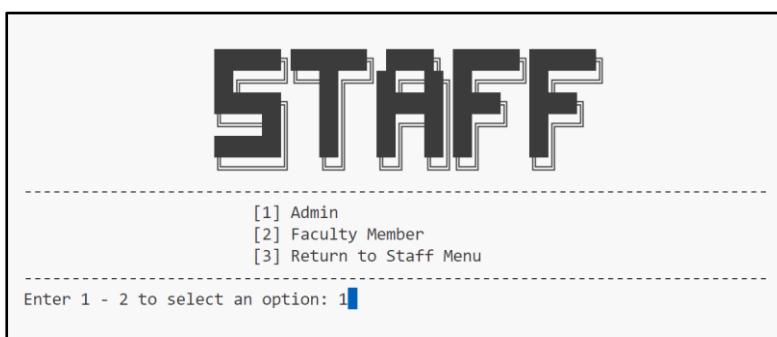
When the admin enters [3] Staff Maintenance, the system will navigate to the Staff Maintenance Interface. This section allows management of both admin and faculty member records.

4.3.3.1 Add Staff

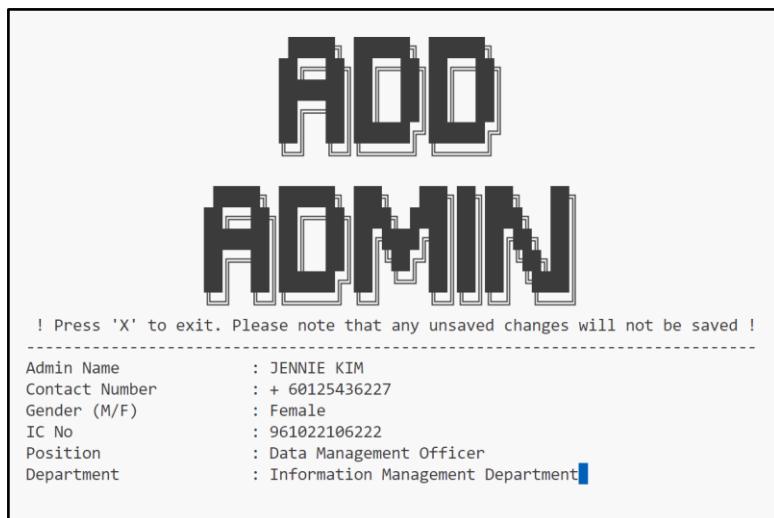


By selecting [1] Add Staff, the admin can add new staff members, including both admin users and faculty members.

4.3.3.1.1 Add Admin

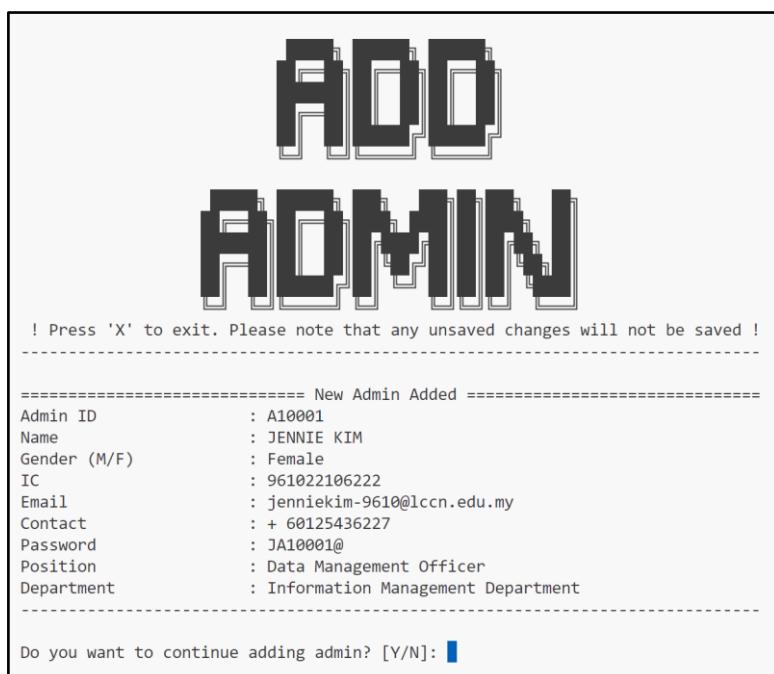


By entering [1], the admin can proceed to add a new admin user to the system.



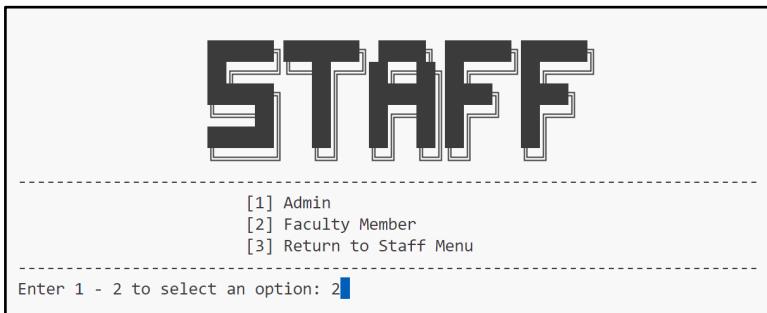
By entering all the required details including admin name, contact number, gender, IC number, position, and department in the correct format, the admin will be successfully added to the system.

Note: Pressing ‘x’ or ‘X’ will return the user to the main Staff Maintenance page.

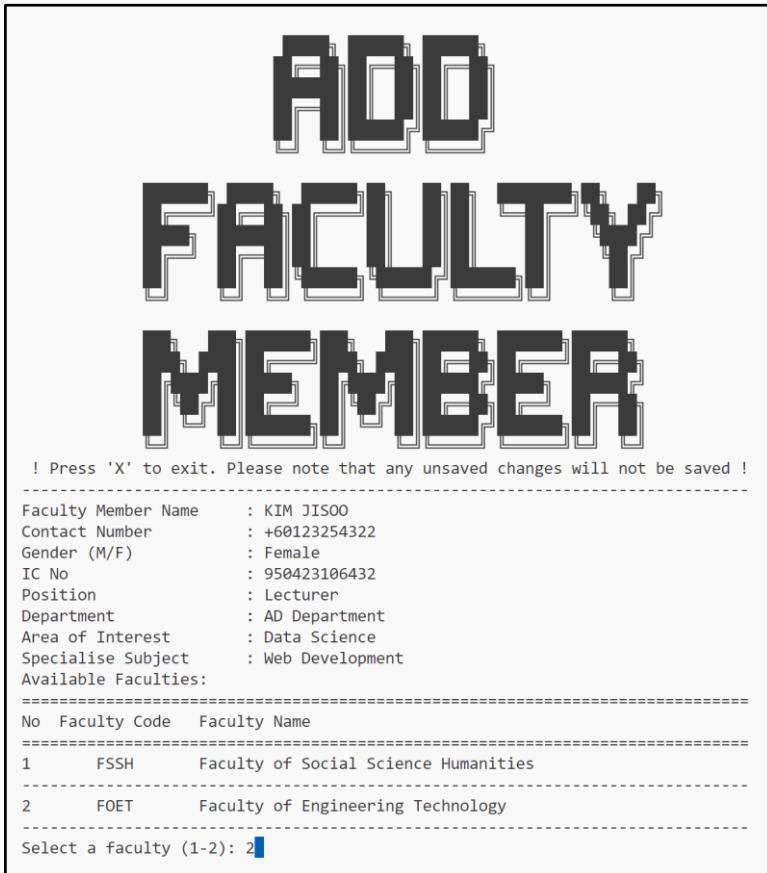


The email and password for the admin will be auto-generated based on their name, IC number and ID. To continue adding more admin, the admin can enter ‘Y’ or ‘y’ for yes, or ‘N’ or ‘n’ to stop.

4.3.3.1.2 Add Faculty Member

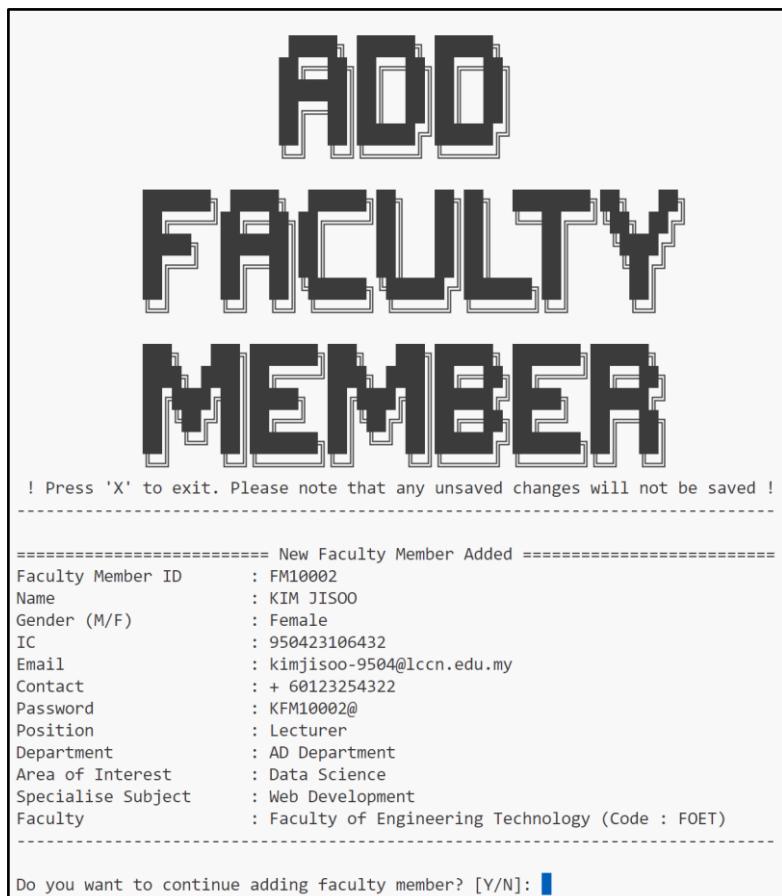


By entering [2], the admin can proceed to add a new faculty member into the system.



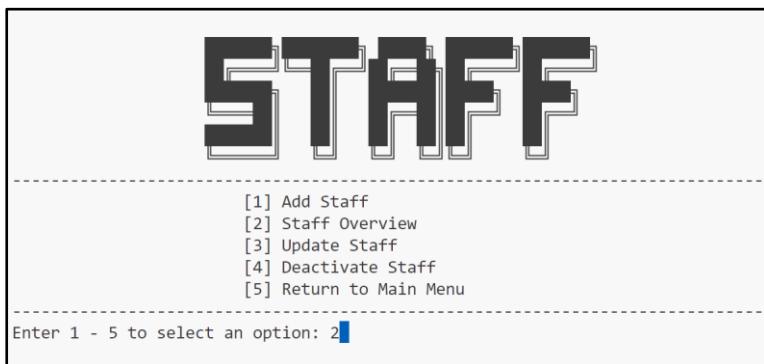
By entering all the required details including the faculty member's name, contact number, gender, IC number, position, department, area of interest, and specialised subject in the correct format, and selecting the appropriate faculty, the faculty member will be successfully added to the system.

Note: Pressing 'x' or 'X' will return the user to the main Staff Maintenance page.



Similar to the admin, the email and password for the faculty member will be automatically generated using their name, IC number, and ID. To continue adding more faculty members, the admin can enter 'Y' or 'y' for yes, or 'N' or 'n' to stop.

4.3.3.2 Staff Overview



By selecting [2] Staff Overview, the admin can view all staff members, including both admin users and faculty members.

4.3.3.2.1 Admin Overview

ID	Name	Gender	IC No	Email	Contact	Password	Position	Department
A10000	Admin Tan	Female	888888-88-8888	admintan-8888@lccn.edu.my	012-8888888	AA10000@	Manager	Admin Department
A10001	JENNIE KIM	Female	961022106222	jenniekim-9610@lccn.edu.my	125436227	JA10001@	Data Management	Information Management Dept

Press Enter to continue...

When selecting [1] Admin, the system will display a list of all admin records with their details.

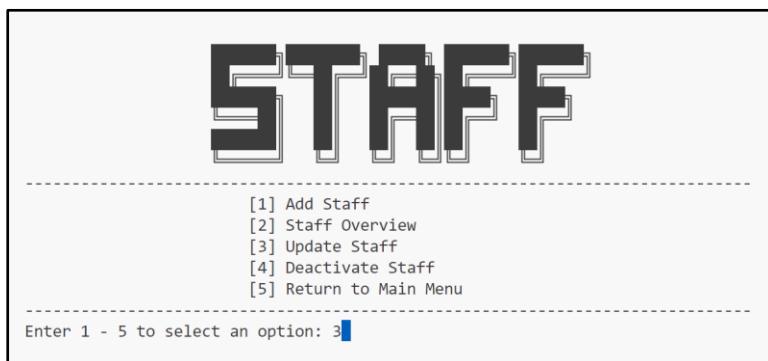
4.3.3.2.2 Faculty Member Overview

ID	Name	Gender	IC No	Email	Contact	Password	Position	Department	Area of Interest	Specialise Subject	Faculty
FM10000	John Doe	Male	123456-78-9012	johndoe-1234@lccn.edu.my	0123456789	JFM10000@	Lecturer	Psychology Dept	Behavioral Science	Cognitive Research	FSSH
FM10001	Jane Smith	Female	987654-32-1098	janesmith-9876@lccn.edu.my	0198765432	JFM10001@	Professor	Engineering Dept	Robotics	Embedded Systems	FOET
FM10002	Aisyah Rahim	Female	901010-10-1010	aisyarahim-9010@lccn.edu.my	0145558888	AFM10002@	Senior Lecturer	Bio Dept	Genetics	Biotechnology	FASC
FM10003	Kelvin Goh	Male	880505-11-2323	kelvingoh-8805@lccn.edu.my	0177773333	KFM10003@	Lecturer	Business Dept	Marketing	Consumer Behavior	FBIZ
FM10004	KIM JISOO	Female	950423106432	kimjisoo-9504@lccn.edu.my	123254322	KFM10004@	Lecturer	AD Department	Data Science	Web Development	FOET

Press Enter to continue...

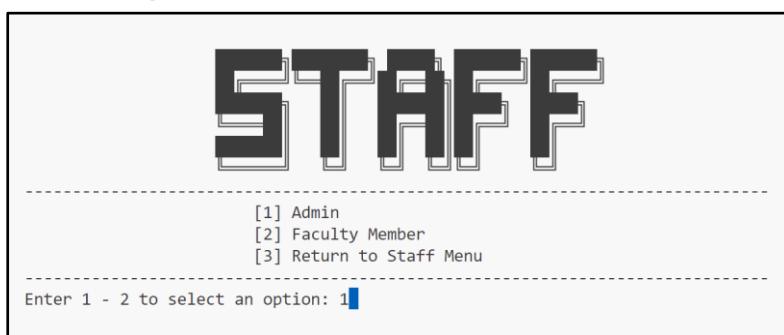
When selecting [2] Faculty Member, the system will display a list of all faculty member records with their details.

4.3.3.3 Update Staff



By selecting [3] Update Staff, the admin can update staff members, including both admin users and faculty members, if any changes occur.

4.3.3.3.1 Update Admin



By selecting [1], the admin can proceed to update an admin user's details.



First, the admin needs to enter a valid admin ID to proceed with updating the admin user's details.

UPDATE ADMIN

ID	Name	Gender	IC No	Email	Contact	Password	Position	Department
A10000	Admin Tan	Female	888888-88-8888	admintan-8888@lccn.edu.my	012-8888888	AA10000@	Manager	Admin Department
A10001	HAHAHA	Female	909090890987	hahaha-9090@lccn.edu.my	109090987	HA10001@	Student Affairs Coordinator	Business Administration

Enter Admin ID to update:

Updated Version: Display a list first so the admin doesn't need to go back to the menu to double-check the Admin ID.

Enter Admin ID:sdsd
 The admin record was not found. Please double-check the Admin ID.
 Do you want to exit this page [Y/N]:

Note: If the admin ID is not found, the system will ask the user whether they want to exit.

UPDATE ADMIN

Admin Details	
Admin ID	: A10000
Name	: Admin Tan
Gender (M/F)	: Female
IC	: 888888-88-8888
Email	: admintan-8888@lccn.edu.my
Contact	: + 60012-8888888
Password	: AA10000@
Position	: Manager
Department	: Admin Department

Select the field to update:
 [1] Name [6] Password
 [2] Gender [7] Position
 [3] IC No [8] Department
 [4] Email [9] Exit
 Enter your choice:

If the admin ID is found, the admin's details will be displayed. The admin can then select the fields to update, including name, gender, IC number, email, contact, password, position, and department, by entering the corresponding number for each field.

Note: Entering [9] will exit the update process.

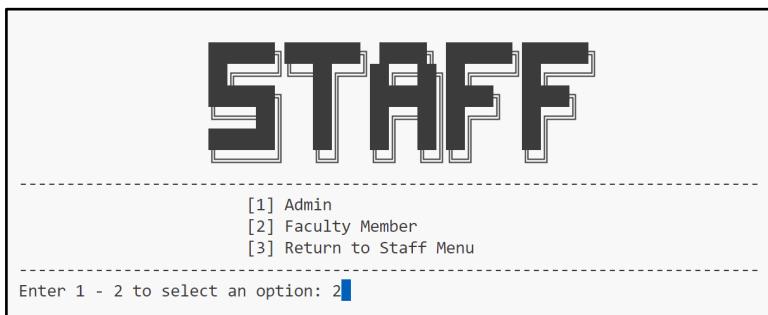
```
===== Admin Details =====
Admin ID      : A1000
Name         : Admin Tan
Gender (M/F)  : Female
IC           : 888888-88-8888
Email        : admintan-8888@lccn.edu.my
Contact      : + 60012-8888888
Password     : AA10000@
Position     : Manager
Department   : Admin Department
-----
Enter new Name: Alice Tan
Admin details updated successfully!
Press Enter to continue...  
█
```

After selecting the field and entering the new details, the changes will be successfully updated.

```
===== Updated Admin Details =====
Admin ID      : A1000
Name         : ALICE TAN
Gender (M/F)  : Female
IC           : 888888-88-8888
Email        : admintan-8888@lccn.edu.my
Contact      : + 60012-8888888
Password     : AA10000@
Position     : Manager
Department   : Admin Department
-----
Do you want to update another field? (Y/N): █
```

To continue updating the details, the admin can enter 'Y' or 'y' for yes, or enter 'N' or 'n' to stop.

4.3.3.3.2 Update Faculty Member



By entering [2], the admin can proceed to update the faculty member's details.



Admin can then enter a valid faculty member ID to proceed with updating the faculty member's details.

ID	Name	Gender	IC No	Email	Contact	Password	Position	Department	Area of Interest	Specialise Subject	Faculty
FM10000	John Doe	Male	123456-78-9012	john.doe@lccn.edu.my	0123456789	JFM10000@	Lecturer	Psychology Dept	Behavioral Science	Cognitive Research	FSFH
FM10001	Jane Smith	Female	987654-32-1098	jane.smith@lccn.edu.my	0198765432	JFM10001@	Professor	Engineering Dept	Robotics	Embedded Systems	FOET
FM10002	Aisyah Rahim	Female	901010-10-1010	aisyahrahim-9010@lccn.edu.my	0145558888	AFM10002@	Senior Lecturer	Bio Dept	Genetics	Biotechnology	FASC
FM10003	Kelvin Goh	Male	880505-11-2323	kelvingoh-8805@lccn.edu.my	0177773333	KFM10003@	Lecturer	Business Dept	Marketing	Consumer Behavior	FBIZ
FM10004	GAHAGA	Female	090909198909	gahaha-0909@lccn.edu.my	190909987	GFM10004@	Assistant Professor	Business Administration	hahah	blabla	FOET

Enter Faculty Member ID to update:

Updated Version: Display a list first so the admin doesn't need to go back to the menu to double-check the Faculty Member ID.

Enter Faculty Member ID:23223

The faculty member record was not found. Please double-check the Faculty Member ID.

Do you want to exit this page [Y/N]:

Note: If the faculty member ID is not found, the system will ask the user whether they want to exit.

**UPDATE
FACULTY
MEMBER**

===== Faculty Member Details =====

Faculty Member ID	:	FM10002
Name	:	KIM JISOO
Gender (M/F)	:	Female
IC	:	950423106432
Email	:	kimjisoo-9504@lccn.edu.my
Contact	:	+ 60123254322
Password	:	KFM10002@
Position	:	Lecturer
Department	:	AD Department
Area of Interest	:	Data Science
Specialise Subject	:	Web Development
Faculty	:	Faculty of Engineering Technology (Code : FOET)

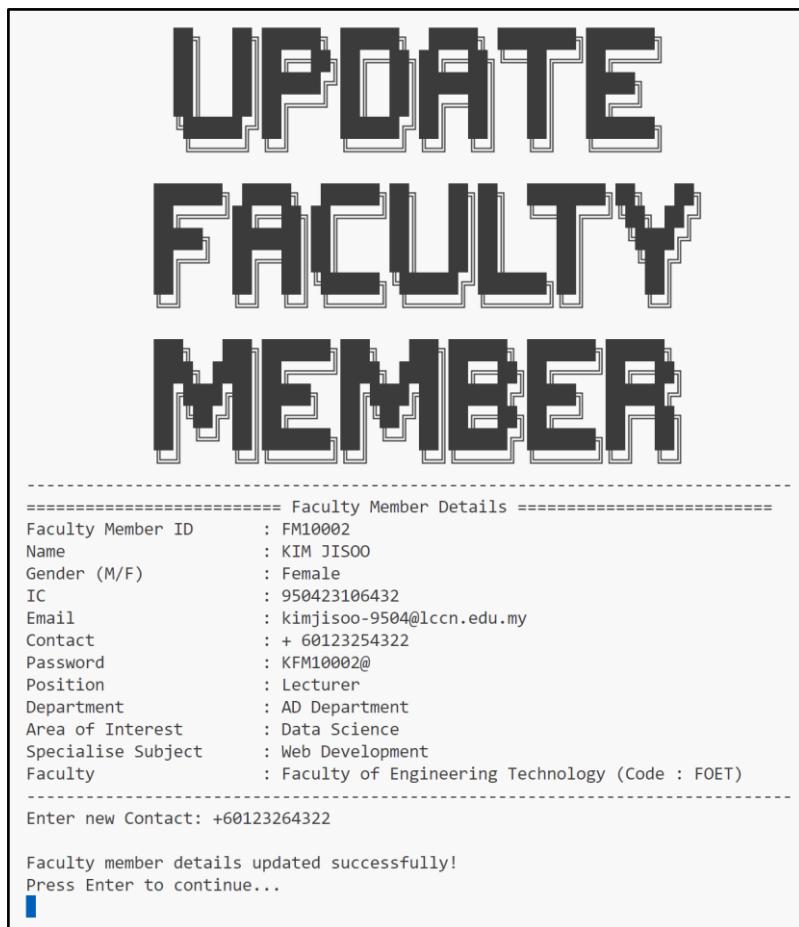
Select the field to update:

[1] Name	[7] Position
[2] Gender	[8] Department
[3] IC No	[9] Area of Interest
[4] Email	[10] Specialise subject
[5] Contact	[11] Faculty
[6] Password	[12] Exit Update

Enter your choice:

If the faculty member ID is found, the faculty member's details will be displayed. The admin can then select the fields to update, including name, gender, IC number, email, contact, password, position, department, area of interest, specialise subject and faculty by entering the corresponding number for each field.

Note: Entering [12] will exit the update process.

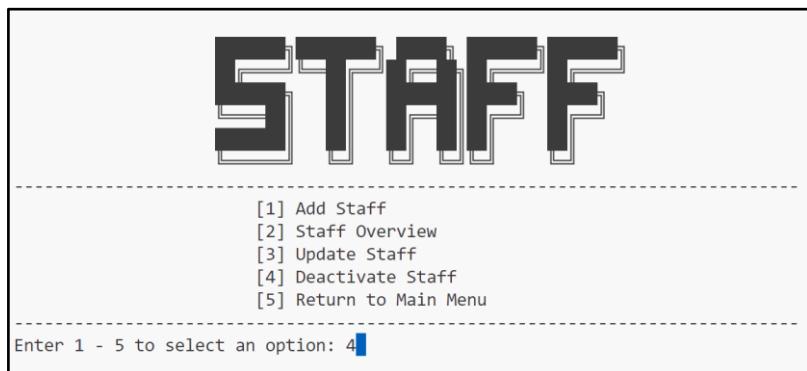


After selecting the field and entering the new details, the changes will be successfully updated.



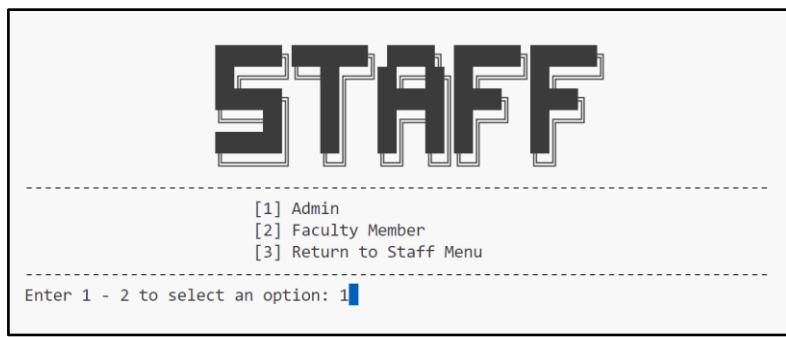
To continue updating the details, the admin can enter 'Y' or 'y' for yes, or enter 'N' or 'n' to stop.

4.3.3.4 Deactivate Staff



By selecting [4] Deactivate Staff, the admin can deactivate staff members, including both admin users and faculty members, who are no longer needed.

4.3.3.4.1 Deactivate Admin



The admin can proceed to deactivate an admin user by selecting [1] Admin.



The admin can enter the admin ID from the list of all admin records to deactivate a specific admin.



Once the admin ID is entered, the system will display the admin's details and prompt for confirmation to deactivate. Enter 'Y' or 'y' will proceed with deactivation, while 'N' or 'n' will cancel the deactivation.

DEACTIVATE ADMIN

```
===== Admin Found =====
Admin ID      : A10000
Name          : Admin Tan
Gender (M/F)  : Female
IC            : 888888-88-8888
Email         : admintan-8888@lccn.edu.my
Contact       : + 60012-888888
Password      : AA10000@
Position      : Manager
Department    : Admin Department
```

Are you sure you want to deactivate this admin? [Y/N]:

Faculty Member with ID A10000 has been deactivated.

Press Enter to continue...

By entering ‘y’, the admin will be deactivated successfully.

4.3.3.4.2 Deactivate Faculty Member

STAFF

```
[1] Admin
[2] Faculty Member
[3] Return to Staff Menu
```

Enter 1 - 2 to select an option: 2

By entering [2], the admin can proceed to deactivate a faculty member.

DEACTIVATE FACULTY MEMBER

```
===== Faculty Member Found =====
Faculty Member ID   : FM10002
Name                : Aisyah Rahim
Gender (M/F)        : Female
IC                  : 901010-10-1010
Email               : aisyahrahim-9010@lccn.edu.my
Contact             : + 60014558888
Password            : AFM10002@
Position            : Senior Lecturer
Department          : Bio Dept
Area of Interest    : Genetics
Specialise Subject  : Biotechnology
Faculty             : Faculty of Applied Science (Code : FASC)
```

Are you sure you want to deactivate this faculty member? [Y/N]:

Once the faculty member ID is entered, the system will display the faculty member’s details and prompt for confirmation to deactivate. Enter ‘Y’ or ‘y’ will proceed with deactivation, while ‘N’ or ‘n’ will cancel the deactivation.

DEACTIVATE FACULTY MEMBER

===== Faculty Member Found =====

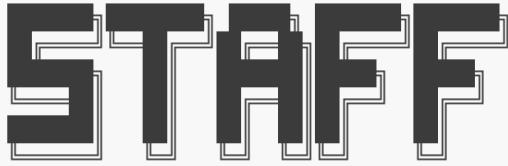
Faculty Member ID : FM10002
Name : Aisyah Rahim
Gender (M/F) : Female
IC : 901010-10-1010
Email : aisyahrahim-9010@lccn.edu.my
Contact : + 600145558888
Password : AFM10002@
Position : Senior Lecturer
Department : Bio Dept
Area of Interest : Genetics
Specialise Subject : Biotechnology
Faculty : Faculty of Applied Science (Code : FASC)

Are you sure you want to deactivate this faculty member? [Y/N]: Y

Faculty Member with ID FM10002 has been deactivated.
Press Enter to continue...

By entering 'y', the faculty member will be deactivated successfully.

4.3.3.5 Update Version: Activate Staff



[1] Add Staff
 [2] Staff Overview
 [3] Update Staff
 [4] Deactivate Staff
[5] Activate Staff
 [6] Return to Main Menu

Enter 1 - 6 to select an option: 5

By selecting [5] Activate Staff, the admin can reactivate staff members, including both admin users and faculty members, who were previously deactivated.

4.3.3.5.1 Activate Admin



===== Deactivated Admins =====

No	Admin ID	Admin Name
1	A10000	Admin Tan

Enter the Admin ID you want to activate: A10000

The admin can enter the admin ID from the list of all admin records to activate a admin.



===== Admin Found =====

Admin ID	: A10000
Name	: Admin Tan
Gender (M/F)	: Female
IC	: 888888-88-8888
Email	: admintan-8888@lccn.edu.my
Contact	: +60012-8888888
Password	: AA10000@
Position	: Manager
Department	: Admin Department

Are you sure you want to activate this admin? [Y/N]:

Once the admin ID is entered, the system will display the admin's details and prompt for confirmation to activate. Enter 'Y' or 'y' will proceed with activation, while 'N' or 'n' will cancel the activation.

```
ACTIVATE ADMIN

=====
===== Admin Found =====
Admin ID : A10000
Name : Admin Tan
Gender (M/F) : Female
IC : 888888-88-8888
Email : admintan-8888@lccn.edu.my
Contact : + 6012-8888888
Password : AA10000@#
Position : Manager
Department : Admin Department
-----
Are you sure you want to activate this admin? [Y/N]: y
Admin with ID A10000 has been activated.
Press Enter to continue...
```

By entering ‘y’, the admin will be activated successfully.

4.3.3.5.2 Activate Faculty Member

```
ACTIVATE
FACULTY MEMBER

=====
===== Deactivated Faculty Members =====
No Faculty Member IDFaculty Member Name
-----
1 FM10002 Aisyah Rahim
-----
Enter the Faculty Member ID you want to activate: FM10002
```

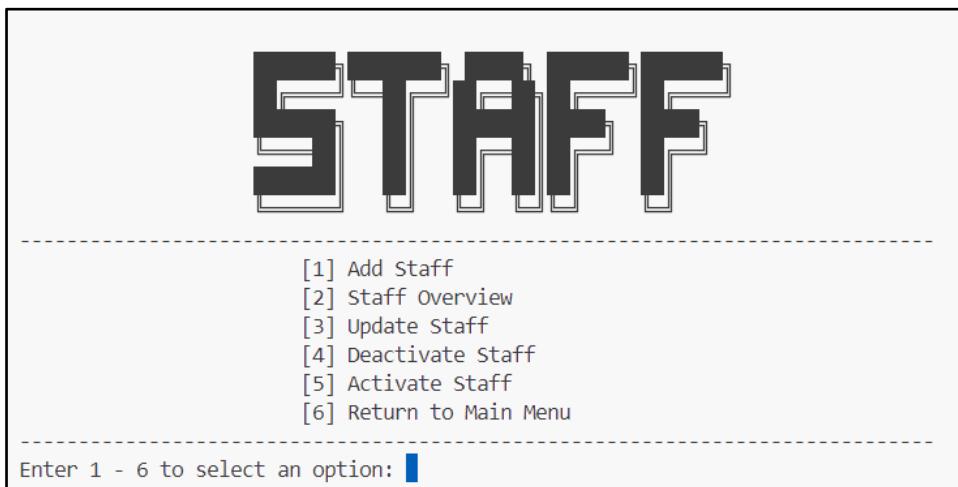
Once the faculty member ID is entered, the system will display the faculty member’s details and prompt for confirmation to deactivate. Enter ‘Y’ or ‘y’ will proceed with activation, while ‘N’ or ‘n’ will cancel the activation.

```
ACTIVATE
FACULTY MEMBER

=====
===== Faculty Member Found =====
Faculty Member ID : FM10002
Name : Aisyah Rahim
Gender (M/F) : Female
IC : 901010-10-1010
Email : aisyahrahim-9010@lccn.edu.my
Contact : + 6014558888
Password : AFM10002@#
Position : Senior Lecturer
Department : Bio Dept
Area of Interest : Genetics
Specialise Subject : Biotechnology
Faculty : Faculty of Applied Science (Code : FASC)
-----
Are you sure you want to activate this faculty member? [Y/N]: y
Faculty Member with ID FM10002 has been activated.
Press Enter to continue...
```

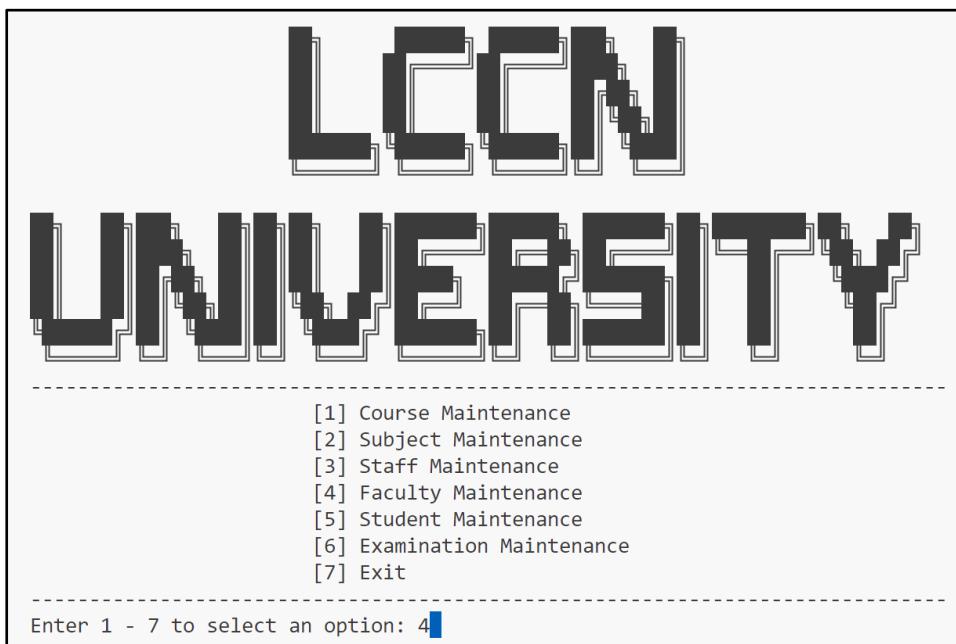
By entering ‘y’, the faculty member will be activated successfully.

4.3.3.6 Return to Main Menu



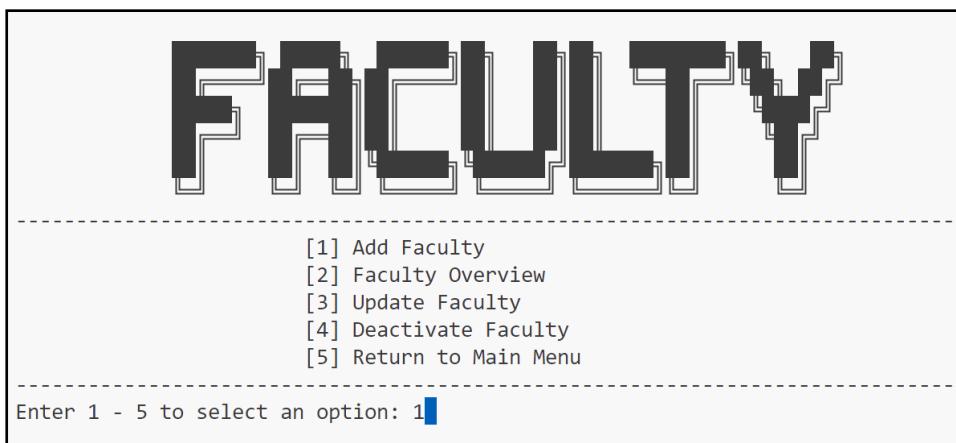
By selecting [6] Return to Main Menu, it will be redirected back to the main menu interface.

4.3.4 Faculty Maintenance

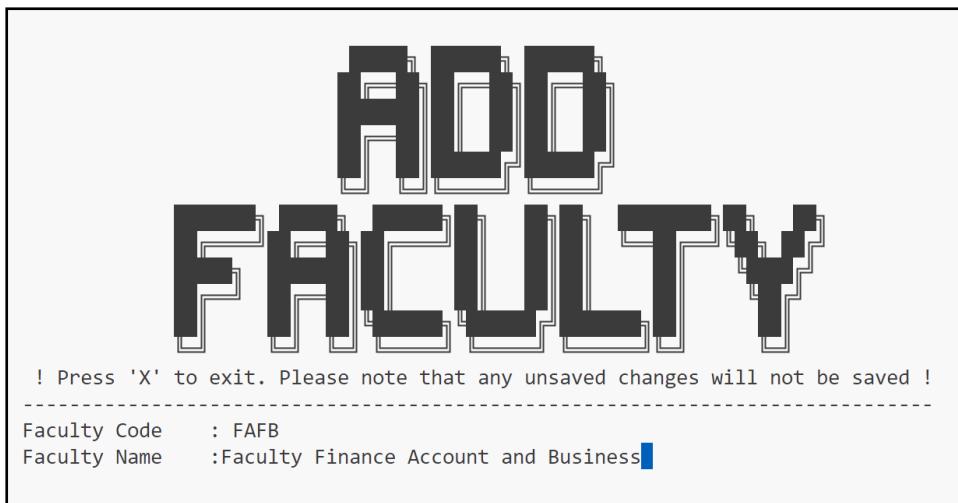


Selecting [4] Faculty Maintenance will navigate the admin to the Faculty Maintenance Interface, where faculty records can be managed.

4.3.4.1 Add Faculty

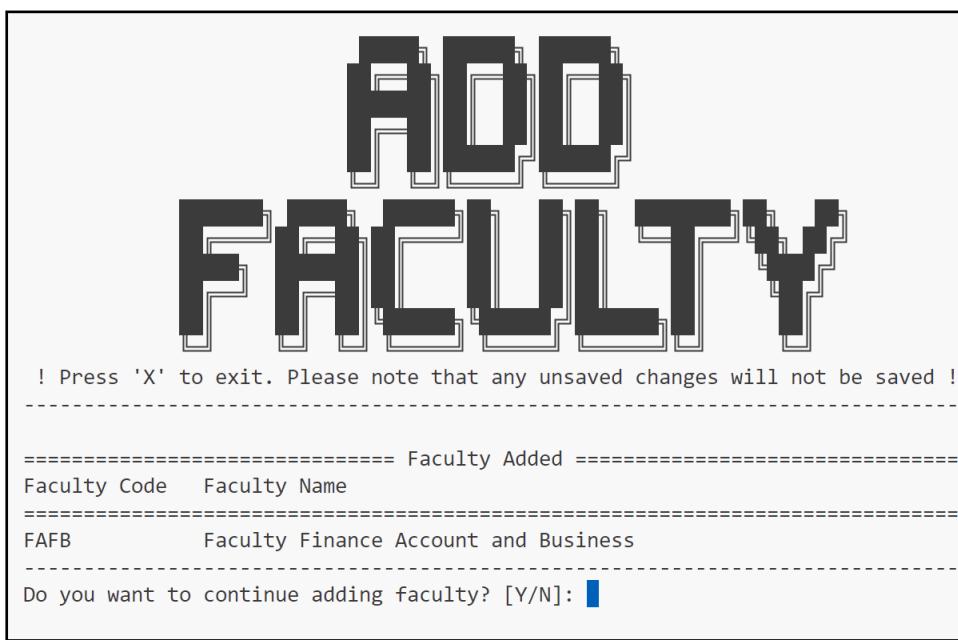


The admin can enter [1] Add Faculty to add a new faculty to the system.

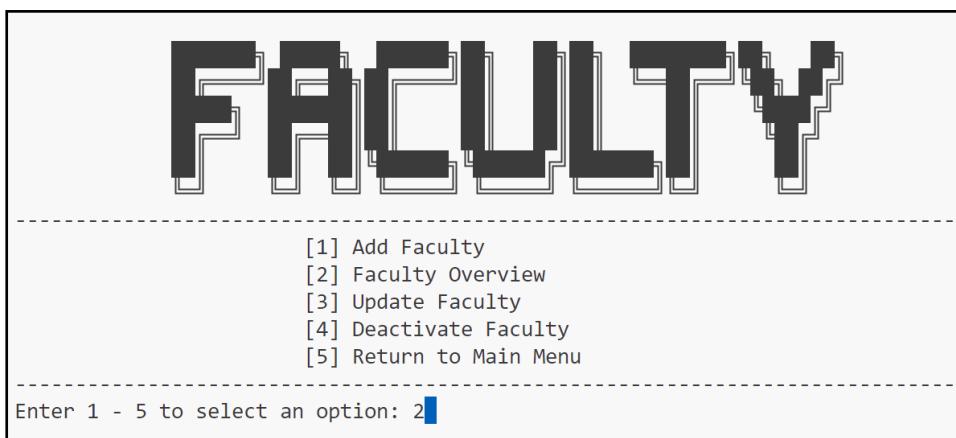


Admin enters the faculty code and faculty name to add a new faculty.

Note: Pressing 'x' or 'X' will return the user to the main Faculty Maintenance page.



Once the faculty code and faculty name are entered, the faculty will be successfully added into the system. To continue adding more faculties, the admin can enter 'Y' or 'y' for yes, or 'N' or 'n' to stop.

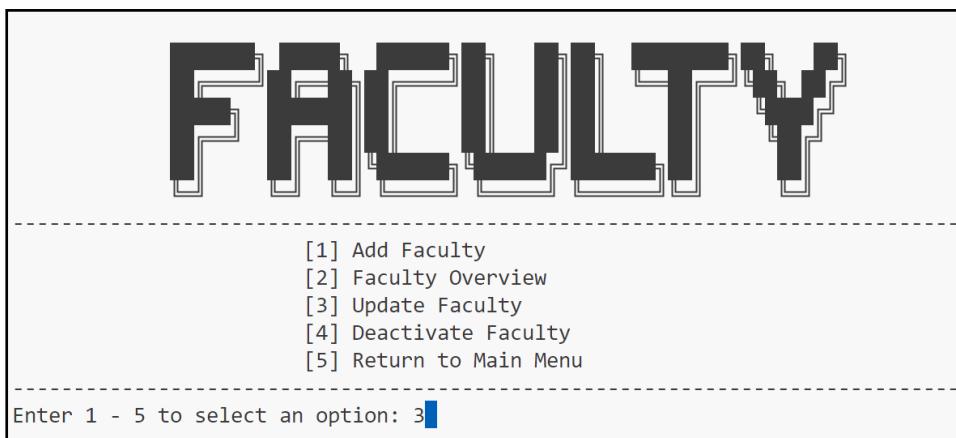
4.3.4.2 Faculty Overview

The admin can view all faculties in a list by selecting [2] Faculty Overview.

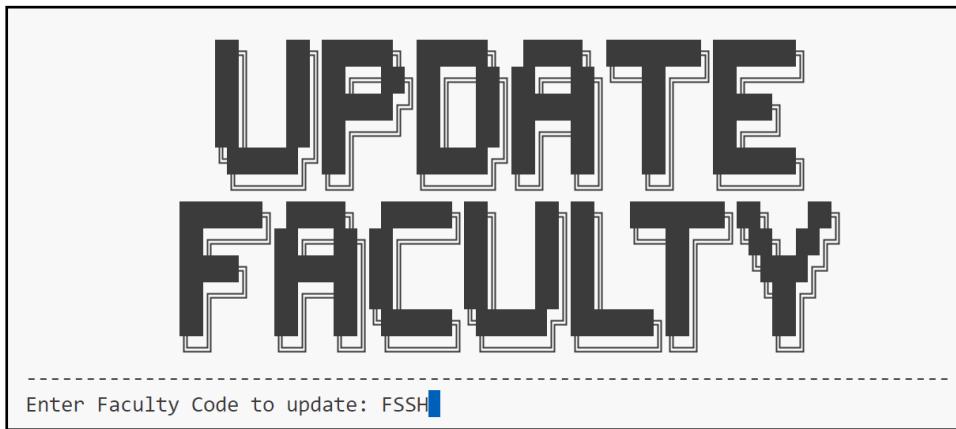
```
===== All Faculty =====
Faculty Code    Faculty Name
=====
FSSH          Faculty of Social Science and Humanities
-----
FOET          Faculty of Engineering Technology
-----
FASC          Faculty of Applied Science
-----
FBIZ          Faculty of Business
-----
FAFB          Faculty Finance Account and Business
-----
Press Enter to continue...
```

After done entering, all faculties record will be displayed.

4.3.4.3 Update Faculty

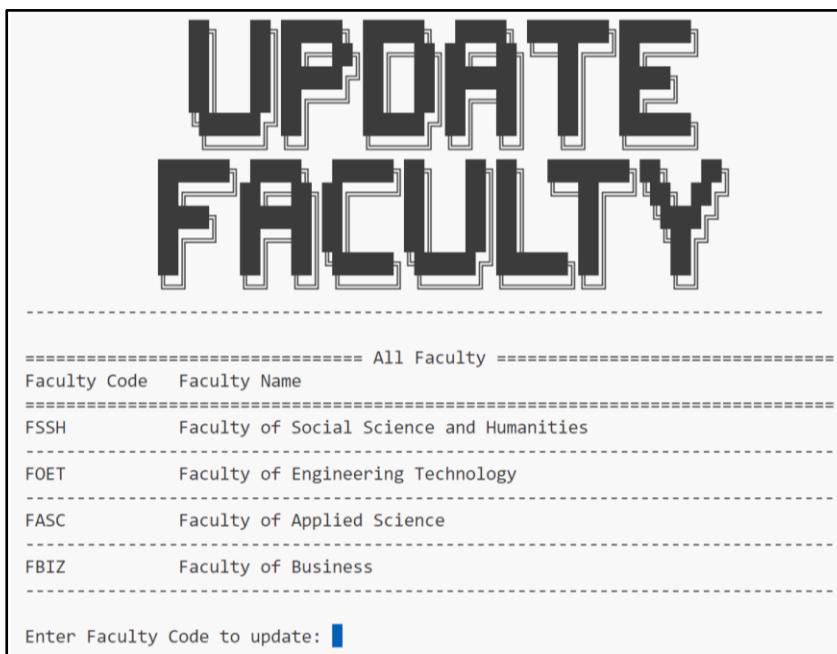


The admin can then update the faculty details if any changes occur by selecting [3] Update Faculty.



Faculty can be updated by entering the faculty code.

Note: If the faculty code is not found, the system will display an error message and prompt the user to try again or exit.



Updated Version: Display a list first so the admin doesn't need to go back to the menu to double-check the Faculty Code.

**UPDATE
FACULTY**

```
===== Faculty Found =====
Faculty Code   Faculty Name
=====
FSSH           Faculty of Social Science and Humanities
=====
```

Select the field to update:
[1] Faculty Code
[2] Faculty Name
[3] Exit Update
Enter your choice:

The faculty details will be displayed if the entered faculty code is valid and found. The admin can then select the fields to update, including faculty code and faculty name, by entering the corresponding number for each field.

Note: Entering [3] will exit the update process.

**UPDATE
FACULTY**

```
===== Faculty Found =====
Faculty Code   Faculty Name
=====
FSSH           Faculty of Social Science and Humanities
=====
```

Enter new Faculty Name: Faculty of Social Science and Humanity

Faculty details updated successfully!
Press Enter to continue...

After selecting the field and entering the new details, the changes will be successfully updated.

===== Updated Faculty =====

Faculty Code	Faculty Name
FSSH	Faculty of Social Science and Humanity

Do you want to update another field? (Y/N):

To continue updating the details, the admin can enter 'Y' or 'y' for yes or enter 'N' or 'n' to stop.

4.3.4.4 Deactivate Faculty

[1] Add Faculty
[2] Faculty Overview
[3] Update Faculty
[4] Deactivate Faculty
[5] Return to Main Menu

Enter 1 - 5 to select an option:

By entering [4] Deactivate Faculty, the admin can deactivate faculties that are no longer needed.

All Faculty	
Faculty Code	Faculty Name
FSSH	Faculty of Social Science and Humanities
FOET	Faculty of Engineering Technology
FASC	Faculty of Applied Science
FBIZ	Faculty of Business

Enter the Faculty Code that you want to deactivate:

The admin can enter the faculty code from the list of all faculty records to deactivate a specific faculty.

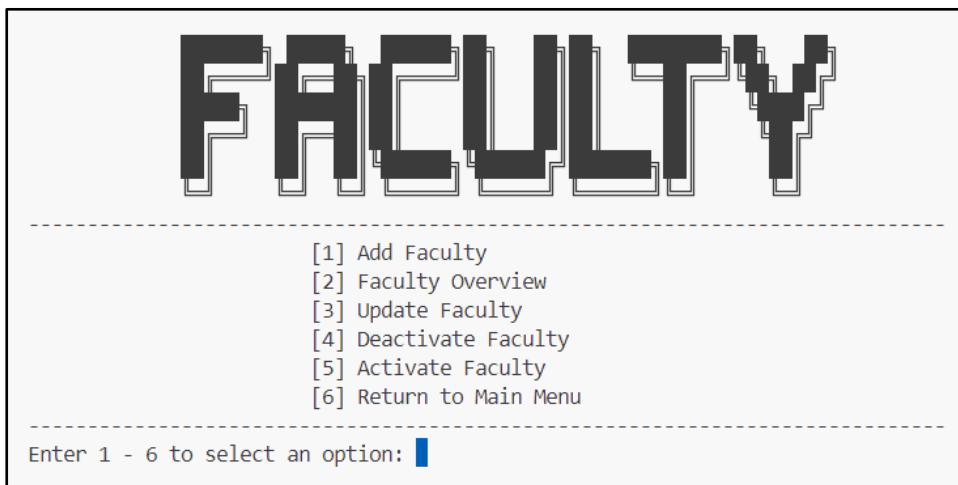


Once the faculty code is entered, the system will display the faculty's details and prompt for confirmation to deactivate. Enter 'Y' or 'y' will proceed with deactivation, while 'N' or 'n' will cancel the deactivation.



By entering 'y', the faculty will be deactivated successfully.

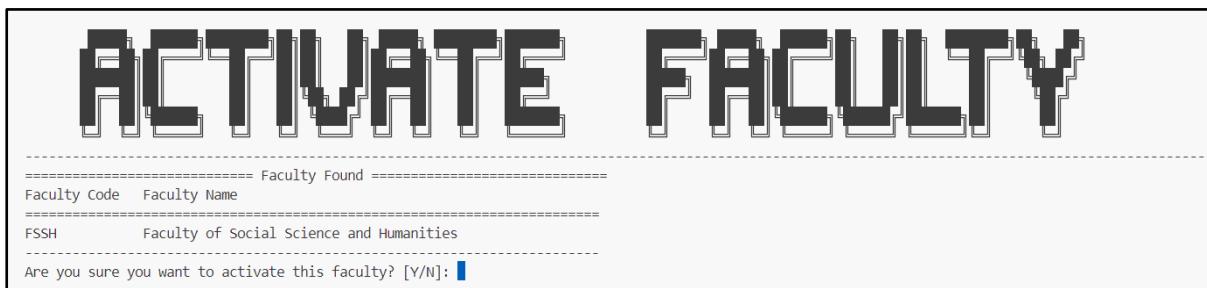
4.3.4.5 Activate Faculty



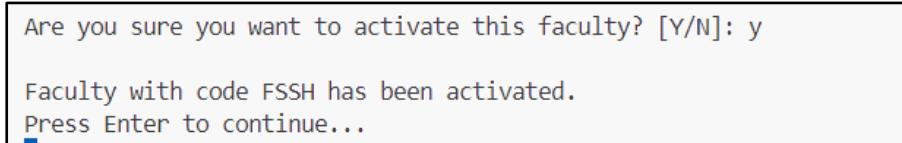
When [5] Activate Faculty is selected, it allows the admin to reactivate faculty that were previously deactivated.



Once done entering, the admin can enter the Faculty Code they wish to reactivate from the list of deactivated faculties.

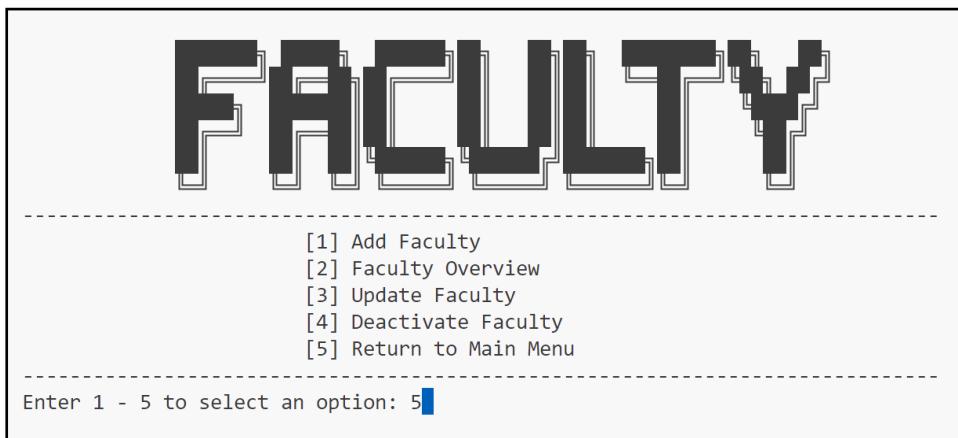


If the entered Faculty Code is valid, the faculty will be found. The admin will then be prompted to confirm the activation by entering 'Y' or 'y' for yes, or 'N' or 'n' for no. Once 'Y' is selected, the faculty will be activated.



Once the 'Yes' option is selected, a message will appear indicating that the course has already been activated. The admin can press the Enter key to continue.

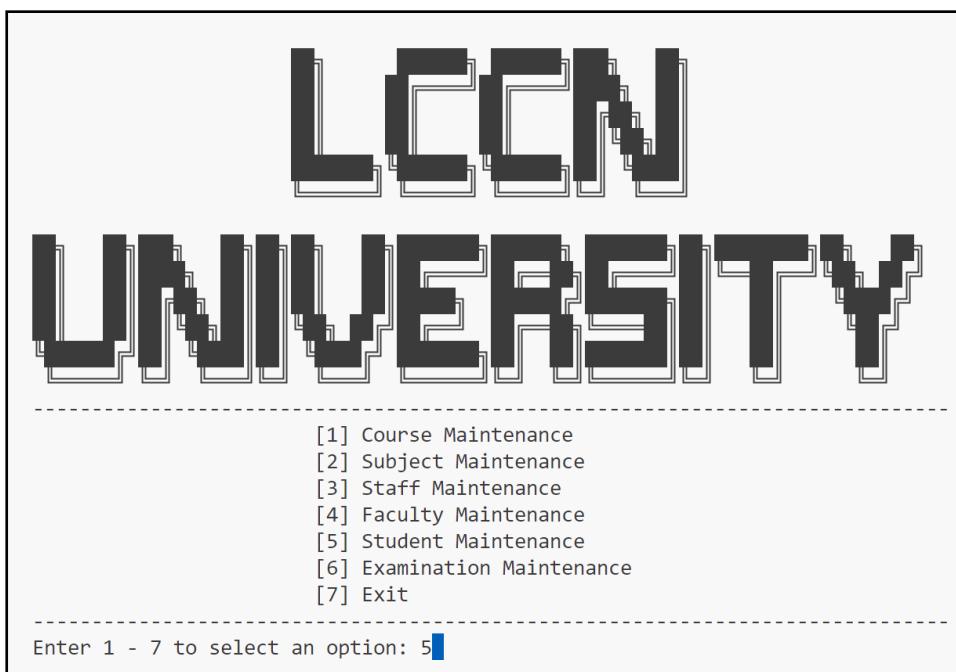
4.3.4.6 Return to Main Menu



By selecting [5] Return to Main Menu, it will be redirected back to the main menu interface.

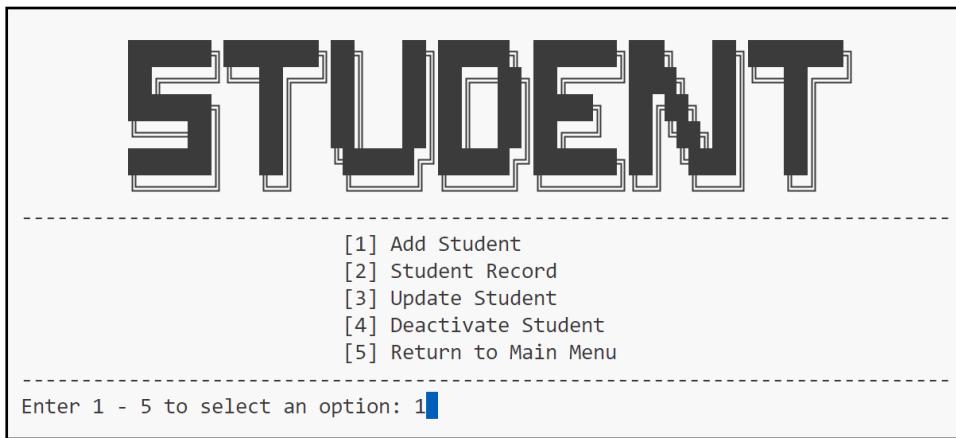
Note: Since the updated version activates the faculty function, the menu list will now be option [6].

4.3.5 Student Maintenance

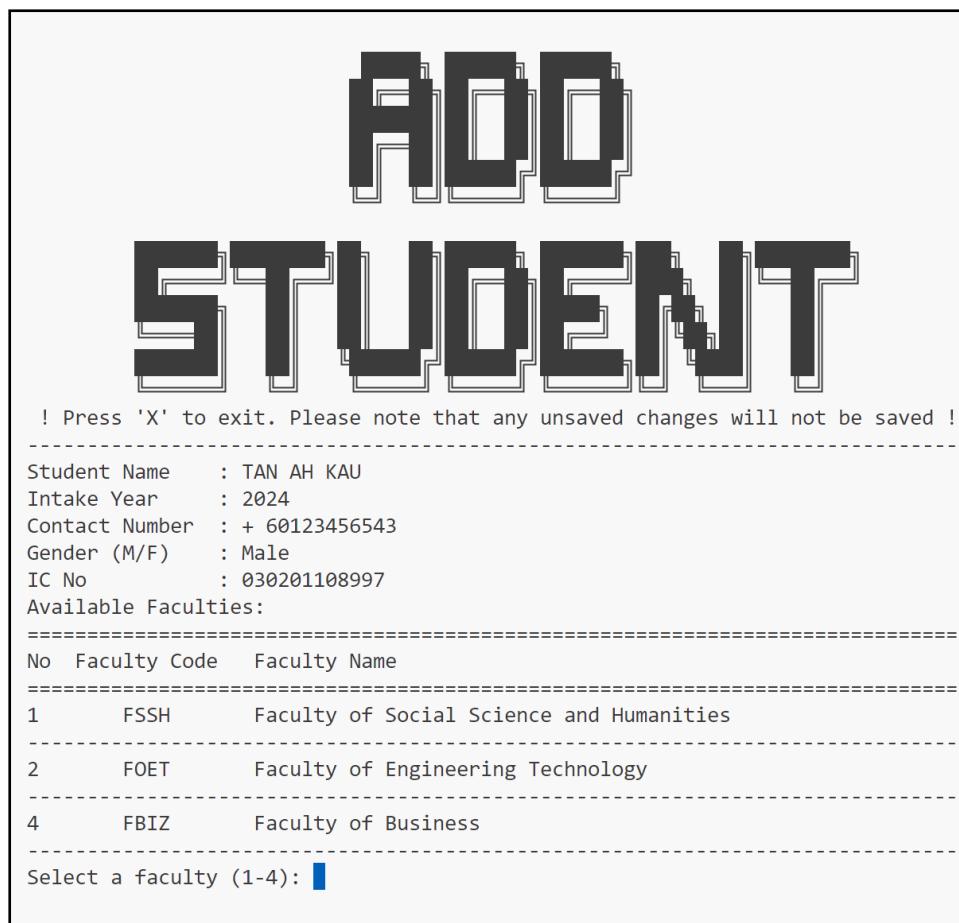


Selecting [5] Student Maintenance will navigate the admin to the Student Maintenance Interface, where they can manage student records.

4.3.5.1 Add Student

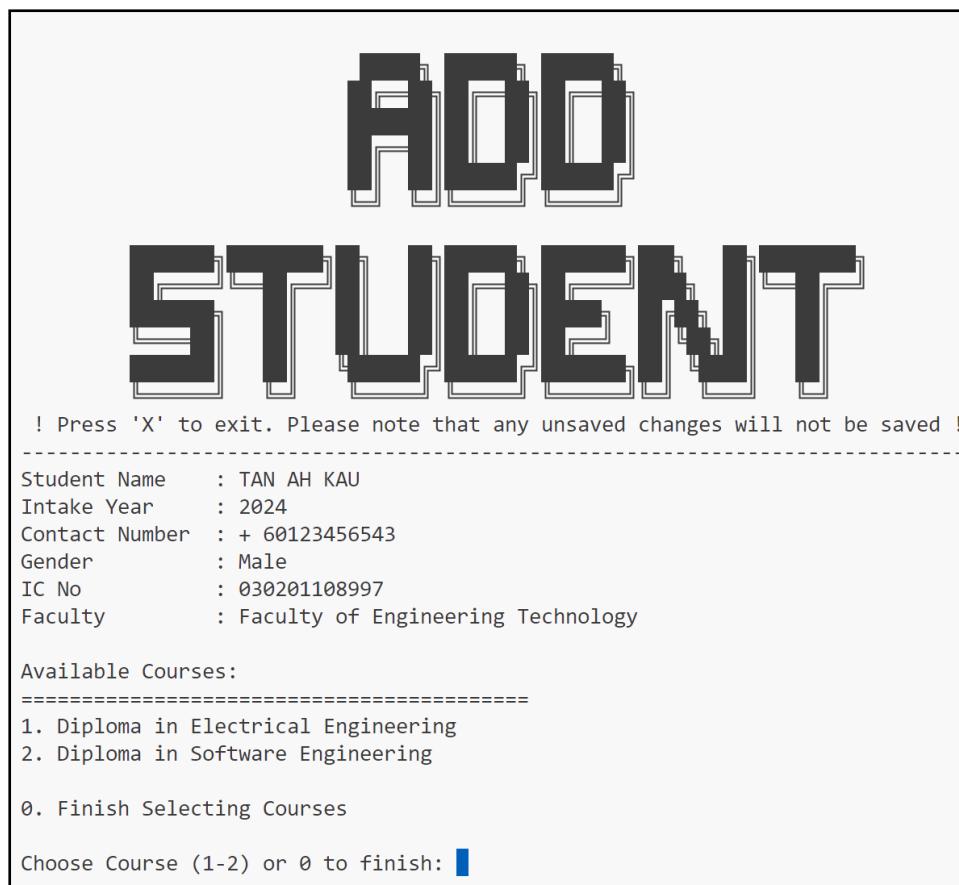


The admin can enter [1] Add Student to add a new student to the system.

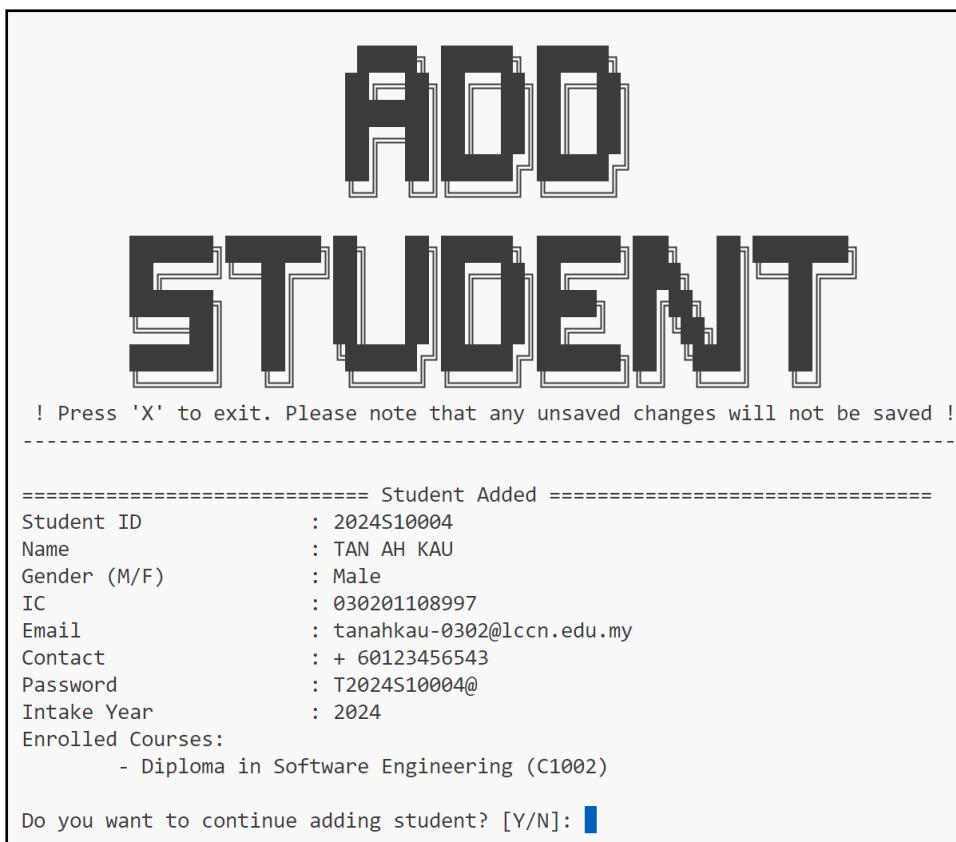


By entering all the required details including student name, intake year, contact number, gender, IC number and selecting a faculty by its corresponding number, the admin can successfully add a new student to the system.

Note: Pressing 'x' or 'X' will return the user to the main Student Maintenance page.

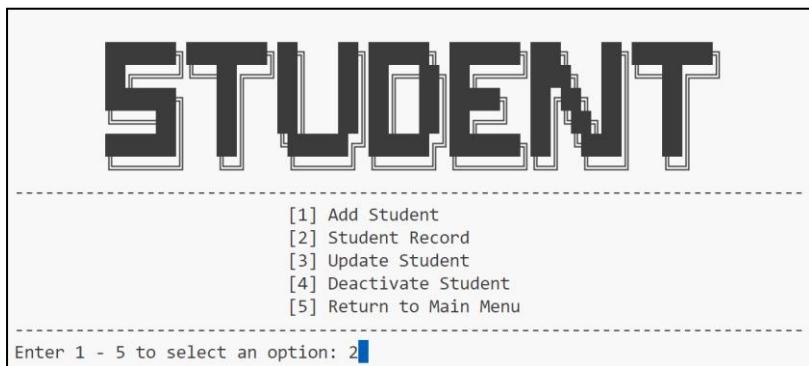


It will display a list of available courses under the selected faculty. The admin can enrol a course to the student by entering the corresponding number or enter 0 to finish the course assignment process.



Once all the details are entered, the student will be successfully added into the system. The ID, email and password for the student will be automatically generated using their name, IC number and intake year. To continue adding more faculties, the admin can enter 'Y' or 'y' for yes, or 'N' or 'n' to stop.

4.3.5.2 Student Record



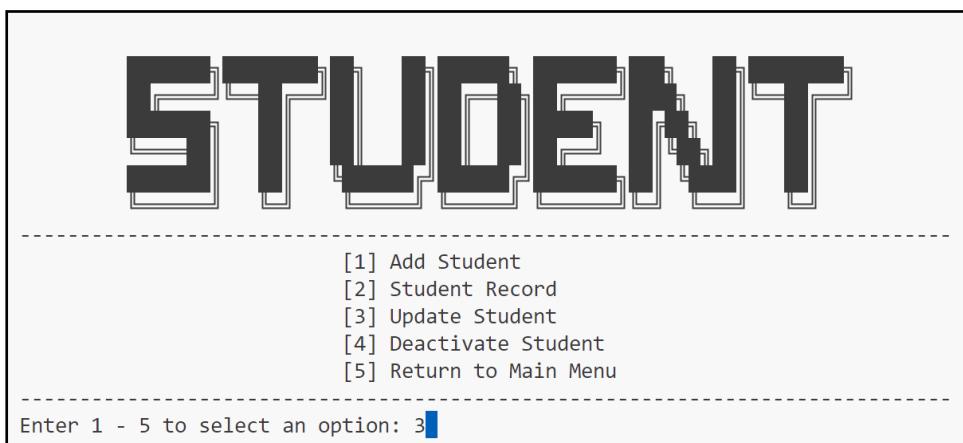
By entering [2] Student Record, the admin can view the overall list of students in the system.

All Student Records								
Student ID	Name	Gender	Intake Year	IC No	Email	Contact	Password	Enrolled Course
2023S10000	Alice Tan	Female	2023	001122-05-6789	alicetan-0011@lccn.edu.my	012-3456789	A2023S10000@	Bachelor of Psychology
2022S10001	Bob Lim	Male	2022	990101-10-2345	boblim-9901@lccn.edu.my	011-9876543	B2022S10001@	Diploma in Electrical Engineering
2024S10002	Carmen Yeo	Female	2024	010203-04-5678	carmenyeo-0102@lccn.edu.my	013-2223344	C2024S10002@	Bachelor of Environmental Science
2023S10003	Daniel Chia	Male	2023	981212-06-3456	danielchia-9812@lccn.edu.my	016-9988776	D2023S10003@	Diploma in Accounting

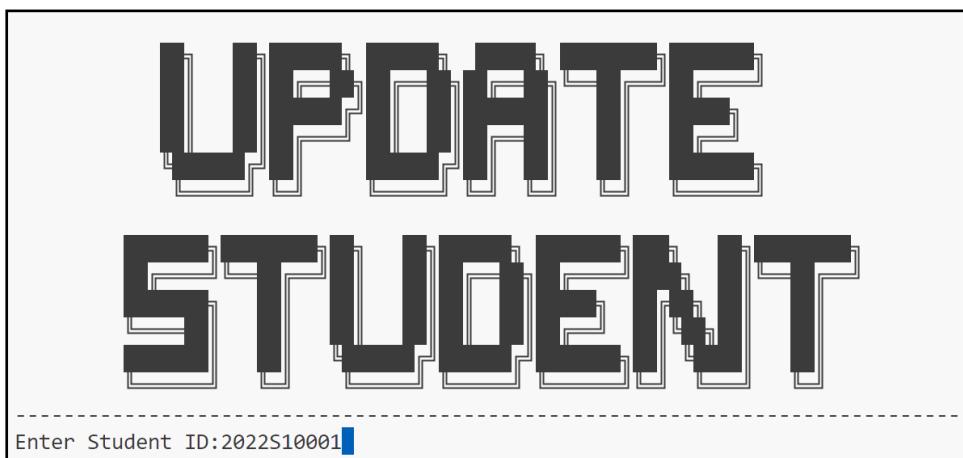
Press Enter to continue...

After done entering, all students record will be displayed.

4.3.5.3 Update Student



The admin can then update the student details if any changes occur by selecting [3] Update Student.



Student can be updated by entering the Student ID.

UPDATE STUDENT

All Student Records							
Student ID	Name	Gender	Intake Year	IC No	Email	Contact	Password
2023S10000	Alice Tan	Female	2023	001122-05-6789	alicetan-0011@lccn.edu.my	012-3456789	A2023S10000@
2022S10001	Bob Lim	Male	2022	990101-10-2345	boblim-9901@lccn.edu.my	011-9876543	B2022S10001@
2024S10002	Carmen Yeo	Female	2024	010203-04-5678	carmenyeo-0102@lccn.edu.my	013-2223344	C2024S10002@
2023S10003	Daniel Chia	Male	2023	981212-06-3456	danielchia-9812@lccn.edu.my	016-9988776	D2023S10003@

Enter Student ID to update:

Updated Version: Display a list first so the admin doesn't need to go back to the menu to double-check the Student ID.

UPDATE
STUDENT

===== Student Details =====
Student ID : 2022S10001
Name : Bob Lim
Gender (M/F) : Male
IC : 990101-10-2345
Email : boblim-9901@lccn.edu.my
Contact : + 60011-9876543
Password : B2022S10001@
Intake Year : 2022
Enrolled Courses:
- Diploma in Electrical Engineering (C1001)

Select the field to update:
[1] Name
[2] Gender
[3] IC No
[4] Email
[5] Contact
[6] Password
[7] Exit Update
Enter your choice: <input type="text"/>

The student details will be displayed if the entered student ID is valid and found. The admin can then select the fields to update, including name, gender, IC number, email, contact and password, by entering the corresponding number for each field.

Note: Entering [7] will exit the update process.

```


    UPDATE
    STUDENT
===== Student Details =====
Student ID      : 2022S1001
Name           : Bob Lim
Gender (M/F)    : Male
IC             : 990101-10-2345
Email          : boblim-9901@lccn.edu.my
Contact         : + 60011-9876543
Password        : B2022S1001@
Intake Year    : 2022
Enrolled Courses:
    - Diploma in Electrical Engineering (C1001)
-----
Enter new Name: Boby
Student details updated successfully!
Press Enter to continue...


```

After selecting the field and entering the new details, the changes will be successfully updated.

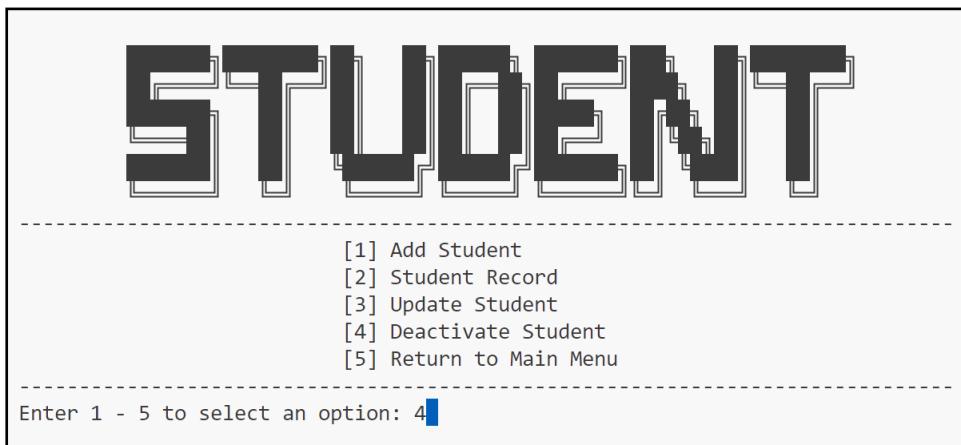
```


    UPDATE
    STUDENT
===== Updated Student Details =====
Student ID      : 2022S1001
Name           : BOBY
Gender (M/F)    : Male
IC             : 990101-10-2345
Email          : boblim-9901@lccn.edu.my
Contact         : + 60011-9876543
Password        : B2022S1001@
Intake Year    : 2022
Enrolled Courses:
    - Diploma in Electrical Engineering (C1001)
-----
Do you want to update another field? (Y/N): 

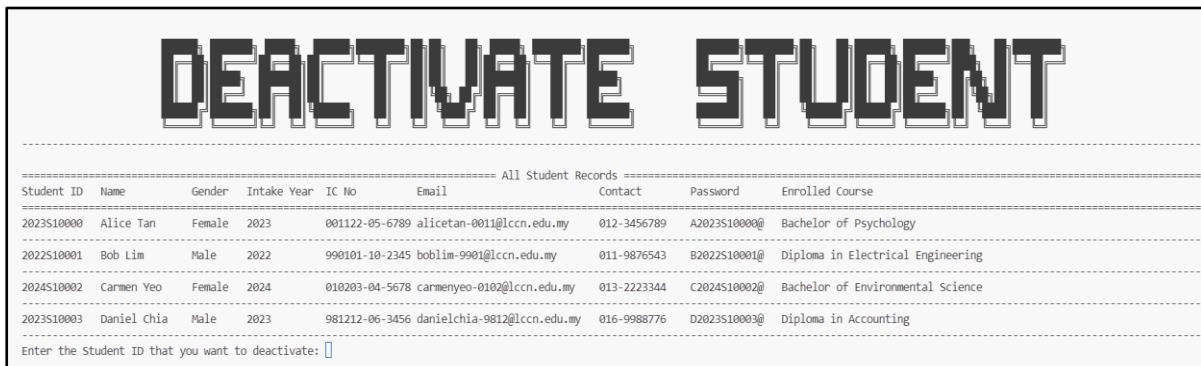

```

To continue updating the details, the admin can enter 'Y' or 'y' for yes or enter 'N' or 'n' to stop.

4.3.5.4 Deactivate Student



By entering [4] Deactivate Student, the admin can deactivate students who are no longer active or needed in the system.



The admin can enter the student ID from the list of all student records to deactivate a specific student.

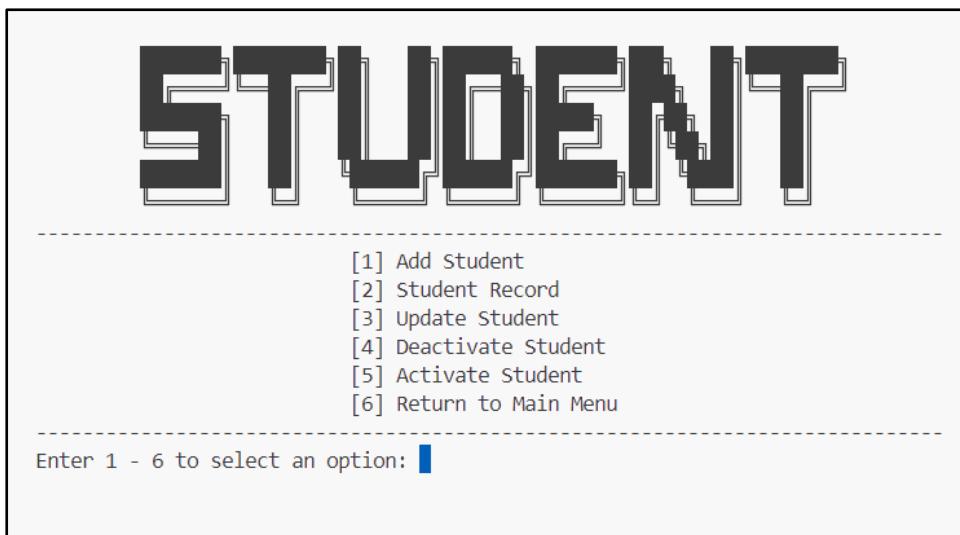


Once the student ID is entered, the system will display the student's details and prompt for confirmation to deactivate. Enter 'Y' or 'y' will proceed with deactivation, while 'N' or 'n' will cancel the deactivation.



By entering 'y', the student will be deactivated successfully.

4.3.5.5 Activate Student



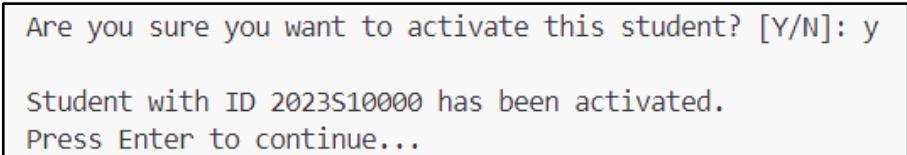
When [5] Activate Student is selected, it allows the admin to reactivate student that were previously deactivated.



Once done entering, the admin can enter the Student ID they wish to reactivate from the list of deactivated students.

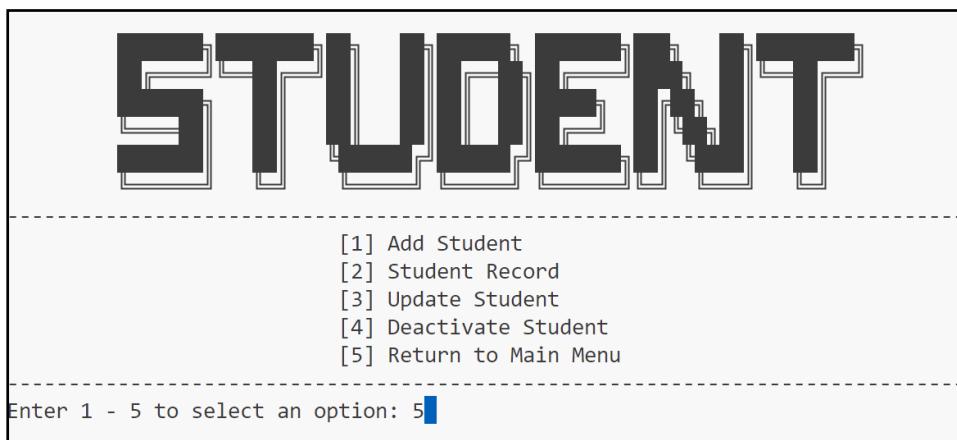


If the entered Student ID is valid, the student will be found. The admin will then be prompted to confirm the activation by entering 'Y' or 'y' for yes, or 'N' or 'n' for no. Once 'Y' is selected, the course will be activated.



Once the 'Yes' option is selected, a message will appear indicating that the student has already been activated. The admin can press the Enter key to continue.

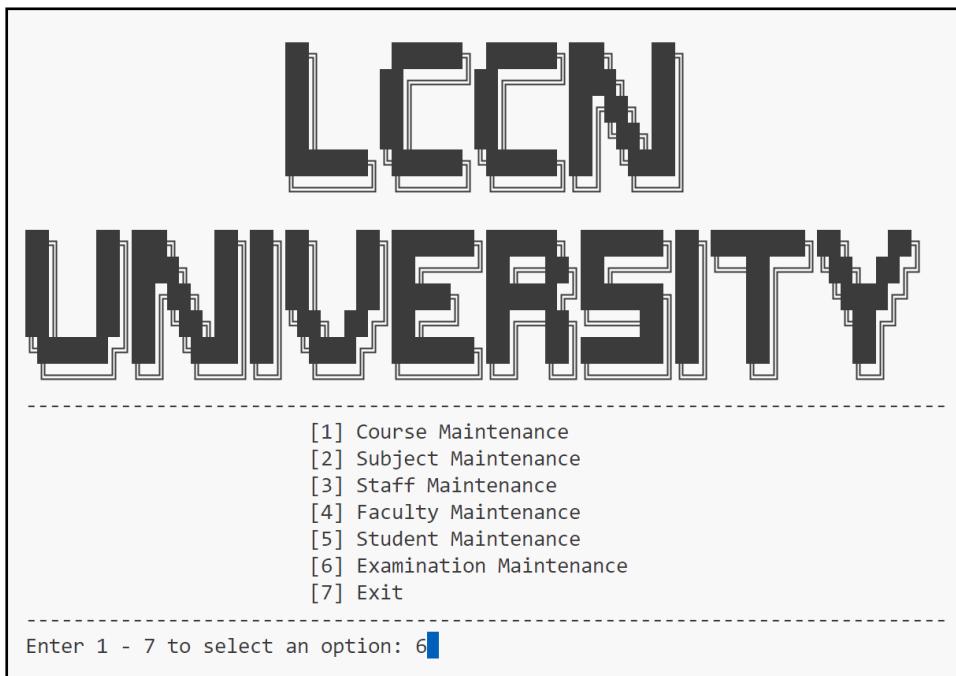
4.3.5.6 Return to Main Menu



By selecting [5] Return to Main Menu, it will be redirected back to the main menu interface.

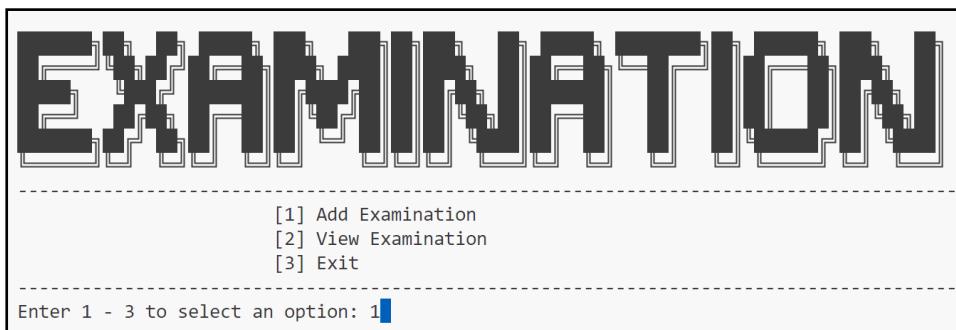
Note: Since the updated version activates the student function, the menu list will now be option [6].

4.3.6 Examination Maintenance

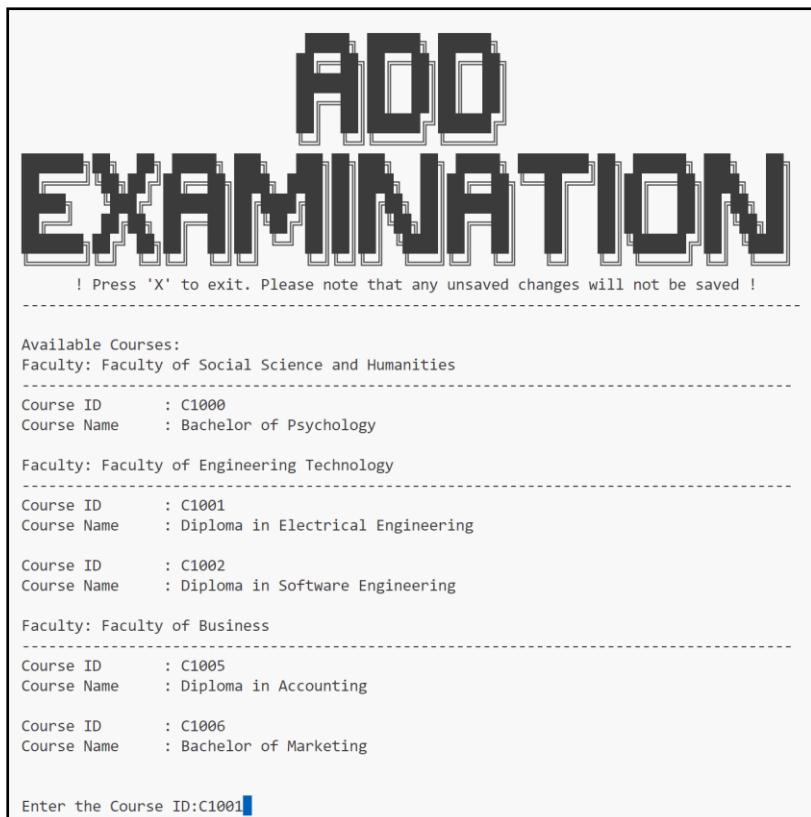


By entering [6] Examination Maintenance, admin will be navigated to Examination Maintenance Interface to manage the examination records.

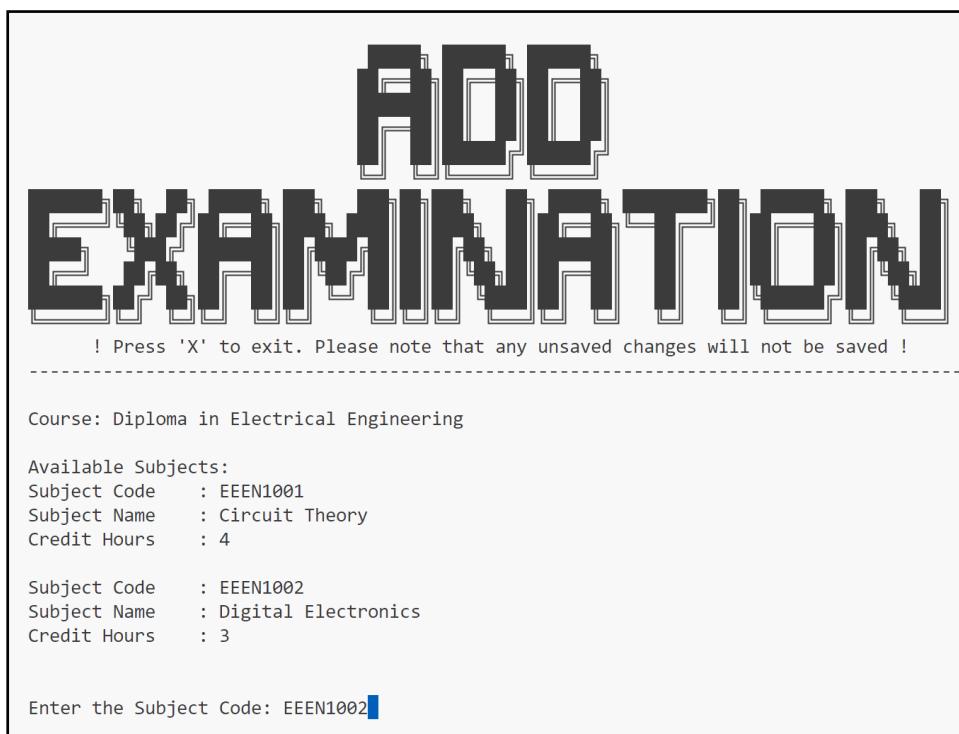
4.3.6.1 Add Examination



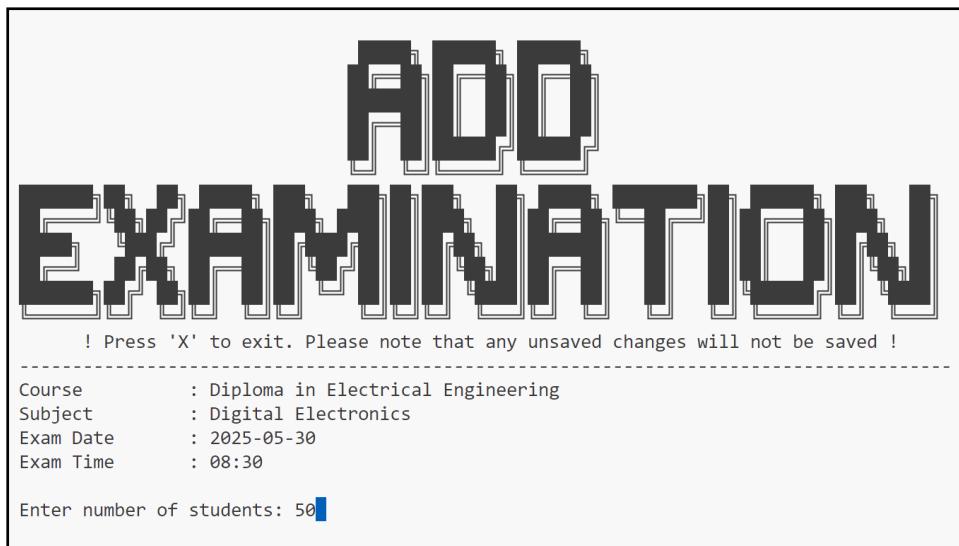
Admin can add examination by selecting [1] Add Examination.



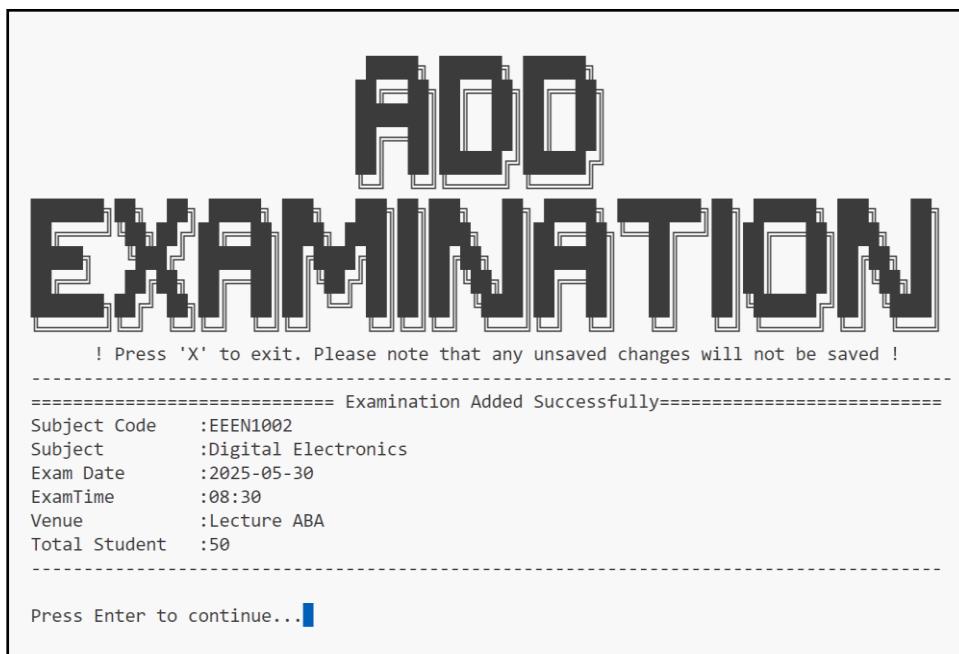
Admin enters the Course ID for which they wish to add the examination.



If the Course ID is valid, the system will display the list of subjects related to the entered Course ID. The admin can then enter the subject code to add examination details for that specific subject.

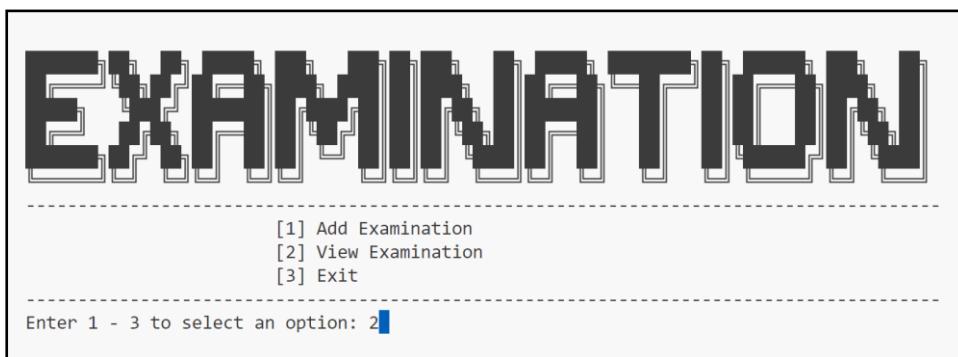


Once admin done entering the exam date, time and the number of students.



The examination will be added successfully and will automatically be assigned a venue with a capacity larger than the number of students.

Note: If no venue is available that can accommodate the number of students, the system will prompt the admin to enter the number of students again.

4.3.6.2 View Examination

Admin can view examination by selecting [2] View Examination.

===== All Examination Record =====				
Subject Code	ExamID	Exam	Exam Date	Exam Time
PSYC1001	EX1000	Introduction to Psychology	2025-06-23	08:30 AM
EEEN1001	EX1001	Circuit Theory	2025-06-20	09:00 AM
ENSC1005	EX1002	Environmental Chemistry	2025-06-21	10:00 AM
ACCT1009	EX1003	Financial Accounting	2025-06-22	01:00 PM

Press Enter to continue... █

After done entering, all examination record will be displayed.

5.0 Updated Version: Check for Existing Records

5.1 Phone Number

```
Contact Number      : + 60173018307
This contact number is already registered to an admin.
Please try again. Press any key to continue...■
```

If the phone number is already registered by an admin, student, or faculty member, the system will display an invalid message specifying who is currently using the phone number.

5.2 IC Number

```
IC No              :051109101888
This IC Number is already registered to an admin.
Please try again. Press any key to continue...■
```

If the IC number is already registered by an admin, student, or faculty member, the system will display an invalid message specifying who is currently using the IC number.

5.3 Subject Name

```
Subject Name       :Object Oriented Programming
Invalid input. Subject already exists!
Please try again. Press any key to continue...■
```

If the subject name already exists in the system, an error message will be displayed to inform the user.

5.4 Course Name

```
Course Name        : Diploma in Accounting
Invalid input. Course already exists!
Please try again. Press any key to continue...■
```

If the course name already exists in the faculty, an error message will be displayed to inform the user.

5.5 Faculty Code

```
Faculty Code       :FBIZ
Invalid input. Faculty code already exists.
Please try again. Press any key to continue...■
```

If the faculty code already exists in the faculty, an error message will be displayed to inform the user.

5.6 Faculty Name

```
Faculty Name       :Faculty of Business
Invalid input. Faculty already exists!
Please try again. Press any key to continue...■
```

If the faculty name already exists in the faculty, an error message will be displayed to inform the user.

6.0 Updated Version: User Selection List

6.1 Admin Position List

Please select an admin position:

- [1] Registrar
- [2] Administrative Officer
- [3] Admissions Officer
- [4] Finance Officer
- [5] Human Resources Officer
- [6] IT Administrator
- [7] Library Manager
- [8] Facilities Manager
- [9] Student Affairs Coordinator
- [10] Examination Officer

Please enter a number (1-10) to select position:

6.2 Position List

Please select a position:

- [1] Lecturer
- [2] Senior Lecturer
- [3] Assistant Professor
- [4] Associate Professor
- [5] Professor
- [6] Head of Department
- [7] Dean
- [8] Research Fellow
- [9] Tutor
- [10] Visiting Lecturer

Enter a number (1-10) to select the position:

6.3 Department List

Please select a department:

- [1] Computer Science
- [2] Business Administration
- [3] Mechanical Engineering
- [4] Electrical Engineering
- [5] Psychology
- [6] Biology
- [7] Mathematics
- [8] Economics
- [9] Law
- [10] Education

Please enter a number (1-10) to select department:

7.0 References

(n.d.). Retrieved from Drawio: <https://app.diagrams.net/#G1P2Qs2MWqa5GjbZU-deD6b6iYf7tABEUF#%7B%22pageId%22%3A%22DevtzNZvwUNiCLEr2kKM%22%7D>