



# **Course File Management System (CFMS)**

## **Business Requirements Document**

Office of Undergraduate Education & Accreditation

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## 1. Introduction

A course file is a folder that contains information about an offered course, such as the course syllabus, course materials, assignments, and other relevant details. The accreditation requirements set forth by the Pakistan Engineering Council (PEC) and the National Computing Education Accreditation Council (NCEAC) necessitate the maintenance of a Course Files. Prior to the COVID-19 pandemic, all course files were maintained in physical folders, with faculty and Program Coordinators printing out hard copies of every document required. Starting 2020, course files were maintained online in shared folders with all documentation being uploaded by faculty, RAs and administration.

Programs need to maintain course files to keep track of the coursework, and for curriculum review and curriculum planning. Course files documents, usually in the form of Word documents, spreadsheets, or presentations are mostly downloaded from the Learning Management or Campus Management Systems, and are stored in an online database that can be shared with relevant faculty and academic staff. Main components of a course file are as follows:

1. Course Syllabus (Canvas/Simple Syllabus)
2. Lecture Notes (Canvas)
3. Assessments (Canvas)
4. Attendance (Canvas/PSCS)
5. Complete Result (Canvas/PSCS)
6. Student Evaluation (OIR)
7. Instructor's Feedback (From Instructor)
8. Any other document required by the respective accrediting body

A system to create, update, view and maintain course file is called course file management system. As of now, some form of course file management system exists at Habib University. Currently, instructors have to manually upload all of their course files on a share point portal developed and maintained by Office of Undergraduate Education and Accreditation (UGEA). Folders for each course offered by each faculty have to be manually created, with at least 7 sub-folders for each course. The instructors then populate each of the sub-folder for every course. This is repeated every semester.

The Computer Science (CS) and Electrical and Computer Engineering (ECE) programs have their own systems for course file management, depending on the preference of their faculty. CS uses Google Drive while ECE uses OneDrive folder that are managed by the respective program coordinators. The program coordinators have manually gone through each folder to verify if the instructor has uploaded the correct files in the correct folder. As of now, they also have to send multiple emails reminding instructors to populate the folders in case they have not done so.

Issues with the Existing Solution:

- Instructor have to manually first download each file required for each course from the CMS or LMS, and they upload them into the relevant course folders which is tedious and time consuming
- It becomes difficult for the instructors, so the completion rate for instructors remains low.
- There is no automated system to check if faculty have populated the course folders and uploaded the correct files.
- There is no automated system to remind instructors about which course files they have to fill.
- There is no systematic way for instructors to submit reflections for each course.

## 2. Objectives

The Habib University Course File Management System (CFMS) aims to streamline the process of managing course-related documents by integrating data from multiple sources such as Canvas LMS, PSCS, Simple Syllabus, and those manually uploaded. The system will consolidate this data and push it onto a OneDrive, which will be maintained by the Undergraduate Education and Accreditation (UGEA) department.

The ideal CFMS system would

- Allow faculty and RAs to populate course folders easily, with much of the required information automatically being pulled from the relevant online portals and management systems.
- Allow program and university administration to monitor and verify the completion status of course files at a glance via a dashboard.
- Serve as a repository or an archive of course information for all courses offered at HU.

## 3. User Roles and Permissions:

The Course File Management System (CFMS) shall provide distinct user roles and permissions to ensure appropriate access to course folders and system functionalities:

### 3.1. UGEA Office & Associate Deans:

Users in this role shall have the following permissions:

- Full access to edit and view all course folders.
- Access to the admin dashboard with the ability to perform administrative tasks.

### 3.2. Program Coordinators & Program Directors:

Users in these roles shall have the following permissions:

- Access to edit and view all folders within their respective programs.

### 3.3. Faculty and Research Assistants:

Users in these roles shall have the following permissions:

- Access to edit and view only their own course folders.

#### **4. Important Instructions pertaining to the functionalities of CFMS Users**

##### **4.1. Required Functionalities for Faculty/RAs**

###### **a. Faculty/RAs Authentication:**

1. Users, specifically Faculty and Research Assistants, shall be able to log into the CFMS using their university credentials, ensuring a seamless authentication process.
2. Upon logging in, Faculty/RAs shall be presented with the list of courses they have taught. This list shall be auto-filled through integration with the Canvas Learning Management System.

###### **b. Course Selection and Auto-population:**

3. Upon selecting a specific course from the list, the following fields shall be auto-populated through the Canvas integration module:
  - Lecture notes related to the selected course.
  - Samples of best, worst, and average assessments, including question papers and model solutions.
  - Course syllabus as available on Canvas.

###### **c. Manual Data Entry:**

4. Faculty/RAs shall have the ability to manually populate certain fields related to the selected course:
  - Attendance records for individual sessions.
  - Final results, including grades and assessment outcomes.
  - Student evaluation data in PDF format provided by the Office of Institutional Research (OIR).
  - Any additional documents required by accrediting bodies.

###### **d. Recording Instructor Reflections and Feedback:**

5. Faculty/RAs shall be provided with text boxes or a text editor within the CFMS to record their feedback for the course.
  - The entered feedback shall be dynamically saved as they type.
  - At the end of the feedback recording, Faculty/RAs shall have the option to generate a PDF of their feedback for archival purposes.

###### **e. Save and Resume:**

6. Faculty/RAs shall have the ability to save their progress and come back to it later. The system shall retain their inputs and selections.

#### **f. Course Creation for Multiple Courses:**

7. After completing the course file for one course, Faculty/RAs shall be able to navigate back to their dashboard and initiate the creation process for another course they have taught.

#### **4.2. Required Functionalities for Program Directors & Coordinators:**

In addition to the functionalities available to Faculty/RAs, Program Coordinators shall have the following additional capabilities:

1. Limited access to the admin dashboard with relevant administrative functionalities.

The admin dashboard shall provide the following capabilities:

- a. User Activity: Users with admin privileges can view a log of users from the respective program activities within the system, including initialization, uploads and edits.
  - b. Completion Status: The admin dashboard shall display the completion status of folders, indicating whether required documents have been submitted.
  - c. Sorting Options: Users can sort course folders by semester, course code, or any other relevant parameter.
  - d. Filtering Option: The dashboard shall offer filters to narrow down folders by faculty name, and completion status.
  - e. Search Functionality: Admins can search for a specific folder using relevant keywords.
  - f. Reminders: Admins have the ability to set up automatic email reminders to faculty/RAs to complete their missing or incomplete course folder.
  - g. Raise flags: Admins have the ability to raise flags to respective faculty/RAs in case there is some mistake, a missing file or any other issue that the faculty/RAs must know.
2. Full access to view and edit all folders respective to their program.

### **4.3. Required Functionalities for UGEA & Associate Deans:**

UGEA and Associate Deans shall have full access to edit and view all course folders and access to the admin dashboard.

Admin dashboard shall provide access to:

- User activity log.
- Completion status of folders.
- Sorting by semester and course code.
- Filtering by program, faculty name, and completion status.
- Search functionality for specific folders.
- Send automatic reminders
- Raise flags

UGEA and Associate Deans shall have administrative rights for every course folder.