

# ERP POLICY

This document details the policy and manual for the ERP / LMS implemented in the institute





## **VISION**

To be a centre of excellence for learning and research in engineering and technology, producing intellectually well-equipped and socially committed citizens possessing an ethical value system.

## **MISSION**

- Offer well-balanced programme of instruction, practical exercise and opportunities in technology.
- Foster innovation and ideation of technological solutions on sustainable basis.
- Nurture a value system in students and engender in them a spirit of inquiry.

## **MUTHOOT INSTITUTE OF TECHNOLOGY AND SCIENCE**



Muthoot Institute of Technology and Science (MITS: <http://mgmits.ac.in/>), is promoted by Muthoot M. George Institute of Technology, is a Section 25 Company within the Muthoot Group. It is a self-financing Engineering College, situated in the Industrial suburb of Kochi, close to the Smart City and Info Park. Started in 2013 with a clear vision to become a centre of excellence in learning, we have made some remarkable achievements and stand first among the self-financing Engineering colleges in Kerala in terms of academic results in Kerala Technological University (KTU). We train our students to be professionally capable, taking up new challenges and exploring latest technologies.

## INSTITUTE OBJECTIVES

- **Academic Excellence:** To provide high-quality education that ensures students achieve academic excellence in engineering and related fields.
- **Research and Innovation:** To foster a culture of research, innovation, and creativity among students and faculty, encouraging cutting-edge research and development activities.
- **Industry Collaboration:** To establish and maintain strong collaborations with industries to ensure curriculum relevance, provide internship opportunities, and enhance employability through practical exposure.
- **Ethical and Social Responsibility:** To instil ethical values and a sense of social responsibility among students, preparing them to contribute positively to society and the environment.
- **Skill Development:** To equip students with the necessary technical, analytical, and soft skills required for their professional growth and adaptability in a dynamic global environment.
- **Lifelong Learning:** To encourage and support continuous learning and professional development among students and alumni, promoting a culture of lifelong learning.
- **Inclusive Education:** To provide an inclusive educational environment that supports diversity and offers equal opportunities for all students, regardless of their background.
- **Community Engagement:** To actively engage with the local community through outreach programs, partnerships, and service projects that address local and regional challenges.
- **Enhance Infrastructure and Facilities:** Continuously upgrade campus facilities, laboratories, and resources to provide a conducive learning environment and support cutting-edge research.

# INTRODUCTION

**Purpose of the Manual:** To outline the policies, procedures, and best practices for usage of ERP in Muthoot Institute of Technology and Science.

**Scope:** Applies to all stakeholders (Faculty, Students, Staff and Parents) of the college.

**Components:**

- Faculty login.
- Student login.
- Staff login.
- Parent login.

### **MITS – Etlab Campus Management Software ERP.**

The structure of the program will involve several modules which will carry out different sets of academic functionalities. The program will have the following modules/functionalities.

#### **Modules:**

##### **User login System**

- The software needs to be designed to work in a **user specific** manner. **Management, Principal, HOD, Staff adviser, Students, Parents, Teaching staff, Course coordinators, Office staff, and Managements** have their **separate logins** (There will be a provision to provide additional logins according to the request of the college).
- For each login, the system will perform only the functionalities corresponding to that particular login.

##### **User-Administrator- Features**

- The general features will include Course creation, Batch creation, Syllabus display, Student management, Staff management, Time table generation, Report generation including academic reports, facility to export to pdf, csv and word formats, Website administration and managements, SMS alerts, Emails, Internal messaging system, Campus news/bulletins issue, Exam schedules, Hall ticket generation, Exam results display, Parent interaction, ID card generation, Software login statistics, Graphical Analysis and Leave processing.
- It will be able to facilitate suspension of classes and periods, display attendance defaulters and Software user login statistics.

##### **User- Faculty – Features**

- Features such as attendance marking, academic Statistics Graphical Analysis, Student remarks, Parent interaction, Exam calendar, Exam scheduler, Exam Results, Internal marks, Evaluations, Digital Notice board, Remarks, Reviews, Time table, Calendar notifications, Performance comparison, Question bank, Question paper preparation, Assignments and Report generation, Study Materials, Subject Coverage, Subject Plan, Subject Syllabus, Subject Year Calendar, Course Diary creation, Substitutions, Special Class creation, SMS alerts, Internal messaging system and Emails will be available.

##### **User- Student – Features**

- Such features such include Attendance details, Exam Results, Study materials, Student activity corner, Calendar notifications, Home works, Question bank, Syllabus, News and events, Remarks, Reviews, Internal assessments, SMS alerts, Internal messaging system and Emails.

##### **User- Parent – Features**

- Attendance details, Student leave applying control, Exam Results, Study materials, Student activity corner, Calendar notifications, Home works, Question bank, Syllabus, News and

events, Remarks, Reviews, Internal assessments, SMS alerts, Internal messaging system and Emails will be available in this module.

**Student Admission Module:**

- Student online registration, Verification, Batch assigning, Admitting (admission no generation using desired criteria), Approval, Document submission and Report generation will be available in this mode.

**Grievance Redressal Module:**

- Grievance type, Grievances, Monthly report, Staff allocation with respect of grievance type, tracking status of grievances and customization as per institute requirements.

**Analysis Module:**

- Academic analysis, Batch analysis, Department analysis, Exam wise analysis, Student wise analysis, All Department wise analysis etc.

**Survey Module:**

- Faculty Feedback Surveys- Add surveys for students to review teacher performance of each semester subjects, Score calculation using desired formula, Resulting publishing, Result export as pdf.
- General Surveys- Add surveys for students, parents and faculties
- Course Exit Survey, Program exit survey etc.

**Communications Methods:**

- There will be a facility for SMS Alert System, Email integration, Circular, Digital Notice board, internal messaging system and Push notification.

**Online Learning Modules:**

- Online Live Class Room, Video Class Room Materials, Online Exam, Online Module Test, Online home work and Assignment and Online Study Material / Notes.

**University Exam**

- KTU Exam Creation (Regular/ supplementary), University Mark list Bulk Uploading (pdf or excel), Integrated with Attainment calculation etc.

**User- Placement Coordinator – Features**

- Placement coordinator will be able to sort students according to internal mark filters, university mark filters, backlogs, number of attempts to pass, total attempts, Student profile generation, Campus Drive details, Student Report Generation.

**User- Alumni – Features**

- TC issued students automatically become the member of Alumni module.



**NAAC Accreditation Module:**

This module will be able to generate the following reports

- Faculty Reports- Academic year wise/ Department wise report generation of faculty researches, publications, programs coordinated, programs attended, seminars guided, projects guided, consultancies, positions held etc.
- College Academic Report- Report generation based on filters (passed/not passed students, course, batch, semester, subject, total attempts to pass, total backlogs, current backlogs, internal mark %, university mark %, total mark % etc.).
- Student Academic Report- Report generation semester-wise and subject-wise based on filters (passed/not passed, total attempts to pass, internal mark %, university mark %, total mark % etc.)

**NBA Module:**

- Institute Program Outcomes (Admin Role), Department PEOs and PSOs (HOD Role), CO attainment (Subject teacher), CO Based Questions, CO Based Module Test, CO Based Tutorials, CO Based Surveys, CO Based Series Exam Mark adding, correspondence with Cos (CO1,CO2,CO3 etc.), Question Bank creation option (according to Bloom's Taxonomy), CO Based Assignments, Question Paper creation option from question bank, Mark Entry, Cut off criteria Settings, Bench Mark Settings, Internal/ External Attainment Calculation, CO attainment calculation, CO-PO Mapping, Direct Attainment, Course PO attainment and SAR Generation

**Campus Management Software Mobile Applications:****Functionalities:**

- Android and iOS Mobile Application
- Android and iOS Mobile application will be native in nature
- Mobile application will be available in Play Store and App Store

**Teaching Staff Mobile Application Features**

- Features such as attendance marking, Online classroom, Video Lectures, Course outcome entry, academic Statistics Graphical Analysis, Student remarks, Parent interaction, Exam calendar, Exam scheduler, Exam Results, Digital Notice board, Remarks, Reviews, Time table, Calendar notifications, Question bank, Assignments and Report generation, Study Materials, Subject Coverage, Subject Plan, Subject Syllabus, Series Exam, Assignment, Substitutions, Special Class creation, SMS alerts, Internal messaging system and Emails should be available.

**Student Mobile Application Features**

- Such features such include Attendance details, Online classroom, Video Lectures, Exam Results, Study materials, Student activity corner, Calendar notifications, Series exam, Assignment, Semester registration, Home works, Question bank, Syllabus, News and

events, Remarks, Reviews, Internal assessments, SMS alerts, Internal messaging system and Emails.

**Parent Mobile Application Features**

- Attendance details, Student leave applying control, Exam Results, Study materials, Student activity corner, Series exam, Assignment, Online classroom, Video Lectures, Calendar notifications, home works, Question bank, Syllabus, News and events, Remarks, Reviews, Internal assessments, SMS alerts and Internal messaging system.

**Academic Fee Management – Features**

- Fee Structure creation, Fee Collection window, Fee report (Transactional and receipt report), Fine System, Dues Integration, defaulters report, SMS and Email Interaction, receipt printing and Activity Log.

**Hostel Management - Features:**

- Web based Admin Section control panel, Master module to Create /modify Hostels, Mess bill calculation, Dues integration, Payment gateway integration, Mess out /Mess in Calculation, Fully responsive (compatible to all hand devices with iOS, Android and Windows), administration area secured with a username and password defined during installation, Monthly Billing, Mess point calculation, Mess bill Calculation, SMS and Email Integration and Receipt printing.

**Transport Fee Management – Features**

- Adding of vehicles, boarding point creations, monthly/ yearly fee creation, Fee Structure creation, Fee Collection window, Fee report (Transactional and receipt report), Fine System, Dues Integration, defaulters report, SMS and Email Interaction, receipt printing and activity Log.

**Document Request Module:**

- Students are able to request for different types of certificates like TC, Course Certificate, expense certificate, Bonafede certificate etc. Staff advisor verification, HoD approval and authorized authority to provide the certificate.

**Semester Registration Module:**

- Student online registration, Verification through staff advisor and approval from HoD. All type of reports like applied/verified/rejected/revoked/approved status. Due clearance section available here. Direct approval and hierarchy level semester registrations are available.

**User- Due Management – Features**

- All type of due system like department, library, fee, hostel, lab, placement etc. Easy access to view dues to the students, online payment gateway integrated due clearance system, automated no due certificates, different type of custom reports etc.

**Internship Management– Features:**

- Students are able to apply for internship, staff advisor verification and issuing certificate for submitting to the company. Company internship certificate upload option for student and custom reports.

**Online Payment Gateway System:**

- Multiple payment collection method for academic fee payment, Hostel Fee payment, custom reports, payment tracking system etc.

**Fee Payment System for University Exams:**

- Fee System for collecting University exams fee like regular exams, supplementary and improvement exams, Fee Collection window, Fee report (Transactional and receipt report), defaulters report, SMS and Email Interaction, Alerts and calendar integration, Receipt printing and Activity Log.

**Counseling Module:**

- Counseling types, Requests, Monthly report, Staff allocation with respect of counseling type, tracking status of counseling and customization as per institute requirements.

**Institute Ticketing Module:**

- Institute inside ticketing system for Staffs, Students and parents, tracking tickets with different status, ticket assigning to staffs and custom reports.

**Asset Management Module:**

- Adding new item, listing room wise items, category wise item list, different type of items adding/editing/deletion and item status (live/repair/replace/dead).

**Exam Management (Autonomous) Software Module:**

- User login System Module, Exam Calendar, Student Registration, Course Management, Question Paper Management, Attendance Management, Answer Script, Valuation Module, On-screen Valuation, Result Module, Online Payment Gateway System and Data Exporting Module (csv, excel, word and pdf).

## STAFF

### ➤ Login to staff dashboard



### ➤ Choose to edit personal details

### ➤ Staff can edit these profile details

- **Qualifications**
- 🕒 **Experiences**
- **Subjects Engaged/Engaging**
- 📖 **Publications**
- 📋 **Programs Co-ordinated (Eg: STTP)**
- 📋 **Programs Attended (Eg: STTP)**
- 🔧 **Funded Projects / Research Activities**
- 🔧 **Consultancies**
- 📁 **Projects / Researches Guided**
- 📁 **Seminars Guided**
- 🔄 **Interactions with Outside World**
- 📋 **Positions Held / Other Responsibilities**
- 🔧 **Research Interests**
- ★ **Achievements**
- **Interested Subjects**

➤ Choose



to manage students in different batches

| Teaching Classes / Subjects |                     |          |  |   |  |
|-----------------------------|---------------------|----------|--|---|--|
| Batch Name                  | Staff Advisor       | Students | Current Semesters (Subjects)   | Previous Semesters (Subjects)   |  |
| CSCE 2K19                   | SMT. KAVITHA K V    | 10       | <b>IInd Semester - Timetable, Class Timetable</b><br>• Machine Learning (Elective III)                   |   |  |
| CS 2K18                     | SMT. BINURAJAN M R  | 65       | <b>IVth Semester - Timetable, Class Timetable</b><br>• Free and Open Source Software Lab                 | <b>IIIrd Semester - Timetable</b><br>• Data Structures<br>• Data Structures Lab |  |
| CS 2K16                     | SMT. KUTTY MALU V K | 62       | <b>VIIth Semester - Timetable, Class Timetable</b><br>• Principles of Information Security(Elective IV ) |   |  |

➤ All batches are listed here.

➤ Choose particular batch

| Machine Learning (Elective III)                          |           |                |             |                   |       |
|--|-----------|----------------|-------------|-------------------|-------|
| Class Name: CSCE 2K19<br>Staff Advisor: SMT. KAVITHA K V |           |                |             |                   |       |
| Roll No  | Uni.RegNo | Name           | Remarks     | Academics         | Photo |
| 1  |           | AISWARYA P B   | Add remarks | Academic Analysis |       |
| 2  |           | ANJANA S KUMAR | Add remarks | Academic Analysis |       |
| 3  |           | ARYA R S       | Add remarks | Academic Analysis |       |
| 4  |           | ASHIQ S        | Add remarks | Academic Analysis |       |

Total 10 results

➤ All students in that batch are listed here.

➤ To add attendance of students, click on

**+ Add Attendance**

Home > My Classes > CSCE 2K19 - IInd Semester - Machine Learning (Elective III) > Select date

Select A date to Add Attendance

=> Attendance already added. => Attendance not added. => Period Suspended.

Attendance By Date  
2020-03-23

Previous week Next week

| Date       | Day       | Period 1 | Period 2 | Period 3 | Period 4 | Period 5 | Period 6 |
|------------|-----------|----------|----------|----------|----------|----------|----------|
| 23/03/2020 | Monday    |          | Add      |          |          |          |          |
| 25/03/2020 | Wednesday |          |          |          | Add      |          |          |
| 27/03/2020 | Friday    | Add      |          |          |          |          |          |


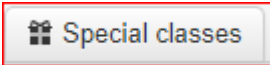

➤ Select the date and click on add button.

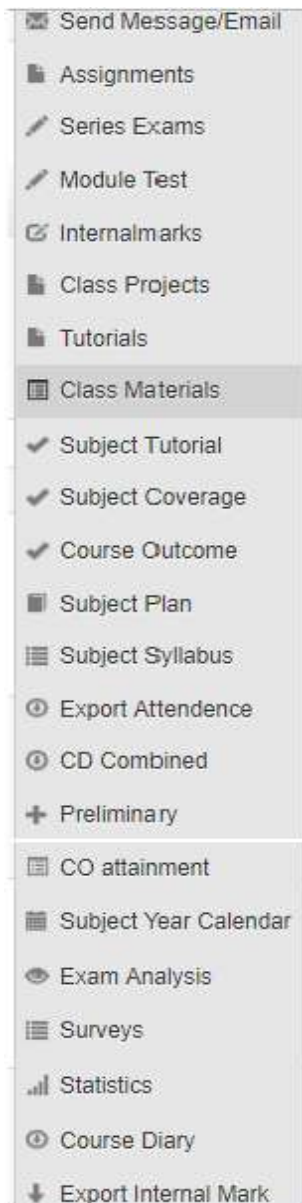
Add Attendance for 23/03/2020

| Roll No      | Name               | Period                              |
|--------------|--------------------|-------------------------------------|
|              |                    | 1 <input type="checkbox"/>          |
| 58           | VISHNU N           | <input checked="" type="checkbox"/> |
| 59           | VISMAYA.A          | <input checked="" type="checkbox"/> |
| 62           | YAMUNA.P.V         | <input checked="" type="checkbox"/> |
| 65           | ARYA SUJEESH       | <input type="checkbox"/>            |
| 66           | ASWATHI CHANDRAN C | <input checked="" type="checkbox"/> |
| 74           | ADARSH K           | <input checked="" type="checkbox"/> |
| 75           | AMAL M P           | <input checked="" type="checkbox"/> |
| 76           | JIBIN MATHEW       | <input checked="" type="checkbox"/> |
| Total Absent |                    | 2                                   |

Subject Coverage:

➤ Enter the attendance and click on save button.

- Choose  to view attendance by date or by month.
- Choose  to add special classes.  
Can add morning and evening sessions and other sessions.
- Choose  to substitute a particular hour to another staff.
- Click on more button



- Staff can send message/email to students and parents.
- Can issue assignments.
- Can create series exams.
- Can create module tests.
- Can add internal marks.
- Can give class projects
- Can upload tutorials.
- Can upload class materials.
- Can upload subject tutorials.
- Can add subject coverage.
- Can add course outcomes.
- Can create subject plan.
- Can add subject syllabus.
- Can download attendance of all the students.
- Can download combined course diary.
- Can manage project and seminars.
- Staff can calculate co attainment.
- Can view subject year calendar.
- Can analyze exam marks.
- Can issue surveys.
- Can view student performance statistics.
- Can download course diary.
- Can download internal marks

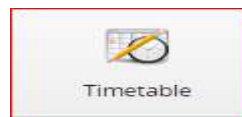
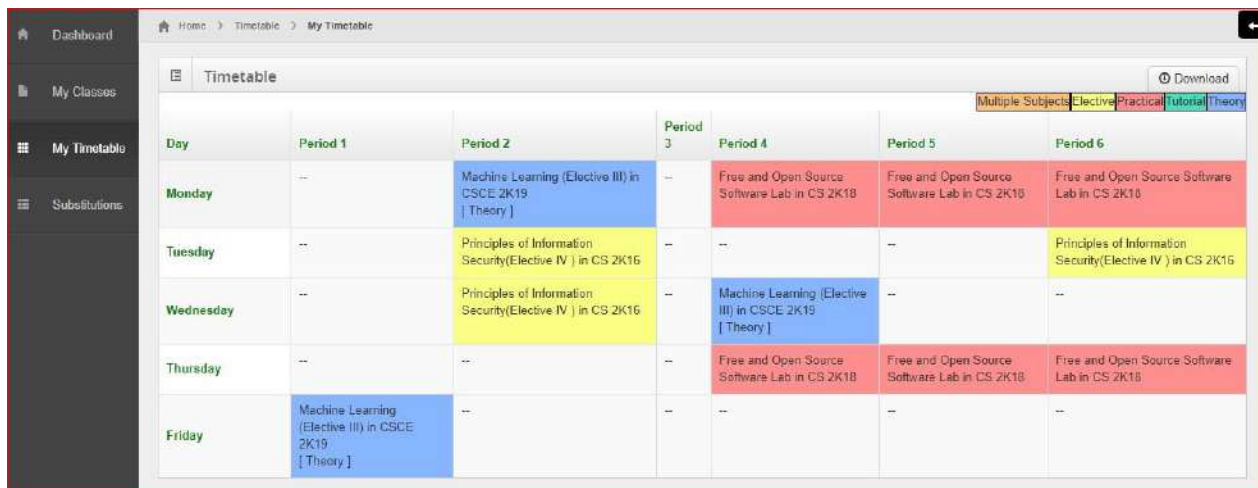


- Choose  to view time table, substitutions from other staff

and attendance restrictions



- Choose

The screenshot shows the 'My Timetable' page. It includes a sidebar with navigation links: Dashboard, My Classes, My Timetable, and Substitutions. The main content area displays a weekly timetable with columns for Day, Period 1, Period 2, Period 3, Period 4, Period 5, and Period 6. The timetable is color-coded by subject: Multiple Subjects (orange), Elective (yellow), Practical (green), Tutorial (blue), and Theory (red).

| Day       | Period 1  | Period 2  | Period 3 | Period 4  | Period 5                                     | Period 6  |
|-----------|---|---|----------|---|--|---|
| Monday    | --  | Machine Learning (Elective III) in CSCE 2K19 [Theory]       | --       | Free and Open Source Software Lab in CS 2K18          | Free and Open Source Software Lab in CS 2K18 | Free and Open Source Software Lab in CS 2K18                |
| Tuesday   | --  | Principles of Information Security(Elective IV ) in CS 2K16 | --       | --  | --   | Principles of Information Security(Elective IV ) in CS 2K16 |
| Wednesday | --  | Principles of Information Security(Elective IV ) in CS 2K16 | --       | Machine Learning (Elective III) in CSCE 2K19 [Theory] | --   | --  |
| Thursday  | --  | --  | --       | Free and Open Source Software Lab in CS 2K18          | Free and Open Source Software Lab in CS 2K18 | Free and Open Source Software Lab in CS 2K18                |
| Friday    | Machine Learning (Elective III) in CSCE 2K19 [Theory] | --  | --       | --  | --   | --  |

- Time table of staff is displayed here.

- Choose  to upload YouTube videos



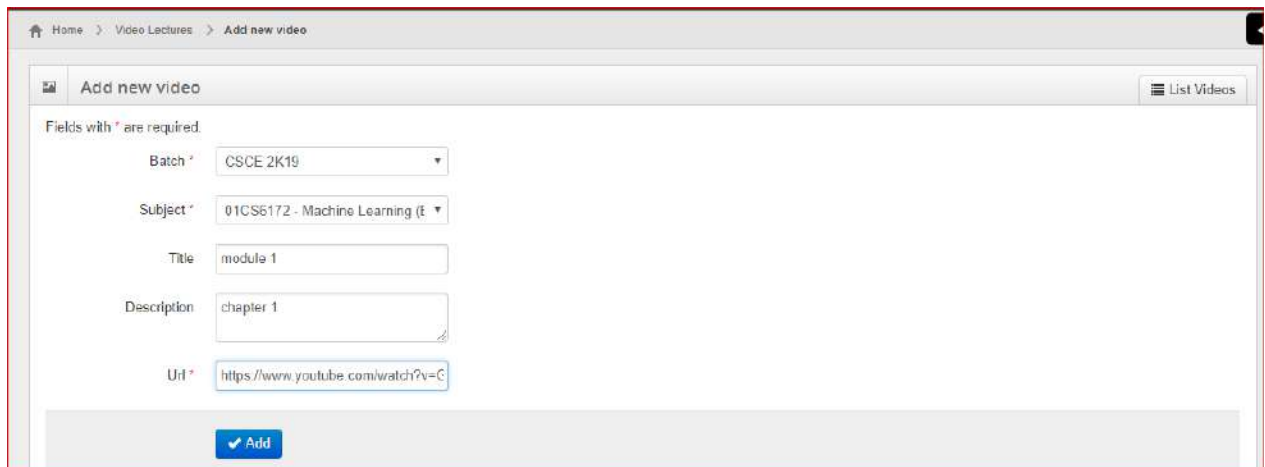

The screenshot shows the 'Video Lectures' page. It includes a sidebar with navigation links: Dashboard, My Classes, My Timetable, and Substitutions. The main content area displays a table of added videos. The table has columns: Batch, Semester, Subject, Title, Description, Url, Added, and actions (view, update, delete). A '+ Add New Video' button is in the top right corner.

| Batch     | Semester      | Subject                         | Title | Description | Url   | Added      |   |
|-----------|---------------|---------------------------------|-------|-------------|---|------------|---|
| CSCE 2K19 | IInd Semester | Machine Learning (Elective III) | test1 | test        |  | 25/03/2020 |    |

- Previously added videos will display here. Can view, update and delete the video.

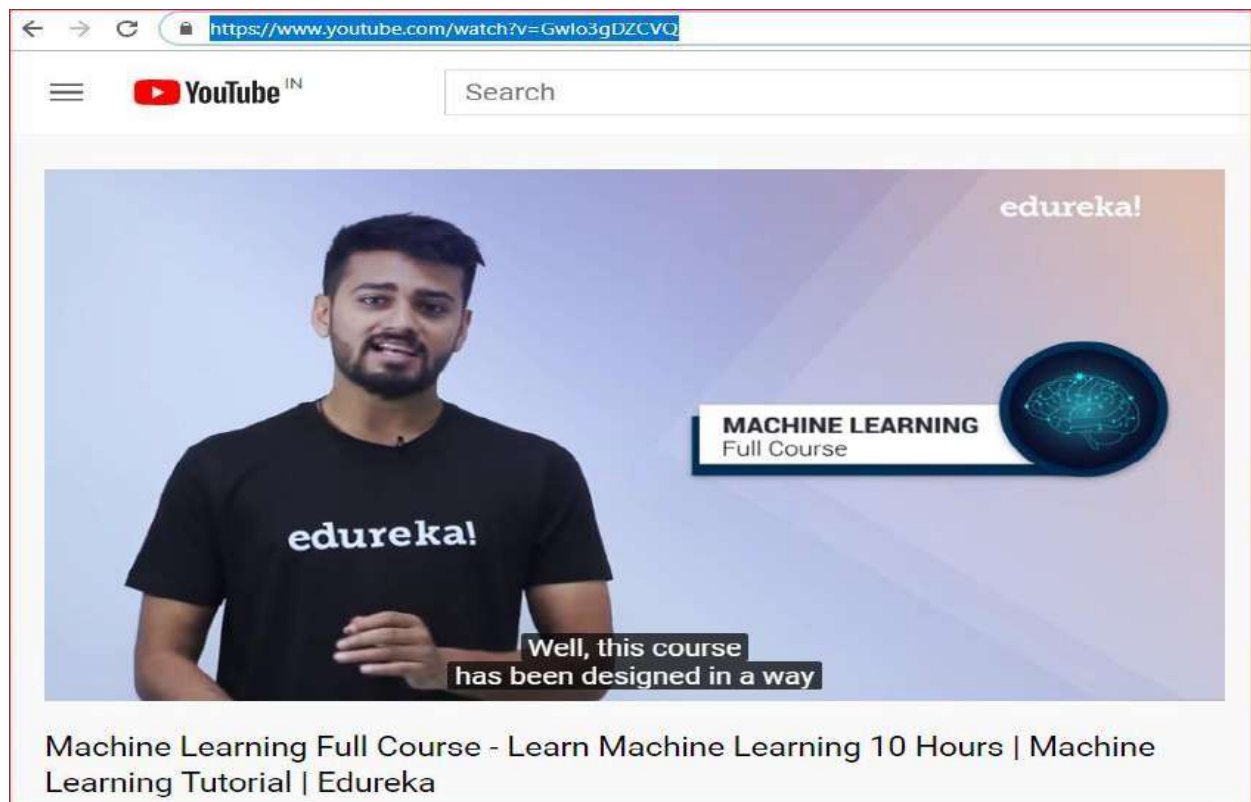


- To upload new video, click on **+ Add New Video** button.



The screenshot shows a web application interface for adding a new video. The breadcrumb trail at the top reads 'Home > Video Lectures > Add new video'. The form is titled 'Add new video' and includes a 'List Videos' link. A note states 'Fields with \* are required.' The form contains the following fields: 'Batch \*' with a dropdown menu showing 'CSCE 2K19'; 'Subject \*' with a dropdown menu showing '01CS6172 - Machine Learning (E'; 'Title' with a text input field containing 'module 1'; 'Description' with a text input field containing 'chapter 1'; and 'Url \*' with a text input field containing 'https://www.youtube.com/watch?v=C'. A blue 'Add' button with a checkmark icon is located at the bottom of the form.

- Choose batch, subject with title and description
- Copy URL from browser and paste on Url field, then click on add button to upload the video.
- Copy url as shown below:



## Login to admin dashboard

## ➤ Choose batches

| Course Name                             | Type       | Department                              | No of active batches | No of students |
|---|------------|---|----------------------|----------------|
| MECHANICAL ENGINEERING                  | B.Tech KTU | MECHANICAL ENGINEERING                  | 11                   | 803            |
| COMPUTER SCIENCE AND ENGINEERING        | B.Tech KTU | COMPUTER SCIENCE & ENGINEERING          | 6                    | 450            |
| CIVIL ENGINEERING                       | B.Tech KTU | CIVIL ENGINEERING                       | 11                   | 747            |
| CHEMICAL ENGINEERING                    | B.Tech KTU | CHEMICAL ENGINEERING                    | 5                    | 348            |
| ELECTRONICS & COMMUNICATION ENGINEERING | B.Tech KTU | ELECTRONICS & COMMUNICATION ENGINEERING | 10                   | 707            |
| ELECTRICAL & ELECTRONICS ENGINEERING    | B.Tech KTU | ELECTRICAL & ELECTRONICS ENGINEERING    | 10                   | 707            |
| MECHANICAL ENGINEERING_PRODUCTION       | B.Tech KTU | MECHANICAL ENGINEERING                  | 4                    | 252            |

## ➤ Choose course and batch

| Admission No | University RegNo | Roll No  | Name         | Add/Update Marks | View Marks | Academics         | Photo        |
|--------------|------------------|----------|--------------|------------------|------------|-------------------|--------------|
| 200196       |                  | B20MEA02 | AABID NASAR  | Add/Update Marks | View Marks | Academic Analysis | AABID NASAR  |
| 200699       |                  | B20MEA03 | AADIL SWALAH | Add/Update Marks | View Marks | Academic Analysis | AADIL SWALAH |

- Click on more button and choose **Assign Teachers** to assign multiple teachers to subjects.

Dashboard | Home > Batches > MECHANICAL ENGINEERING > ME 2K20A > Promote to another Semester

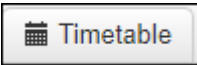
Please Assign teachers to subjects

MAT101 - LINEAR ALGEBRA AND CALCULUS: DR. RIYAS A.

PHT110 - ENGINEERING PHYSICS B: DR. SHEMIM S S, DR. PRABHASH PRASANNAN, GEETHA

EST110 - ENGINEERING GRAPHICS: DR. KRISHNA KUMAR T S, SYED MUHAMMED FAHD

EST130 - BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING: ASWATHY G P, SUNITHA BEEVI K, MOHAMED NADIR N

- Assign teachers and click on save button.
- Then click on  **Timetable** button to set timetable with multiple teachers for single subject.

etlab | Tue, 20 Apr 2021 14:38:35 GMT+0530 (India Standard Time) | admin | Messages | Logout

Home > Batches > MASTER OF COMPUTER APPLICATIONS > MCA 2K19 A > Timetable

Timetable | Timetable History | Change Date | Edit | Edit Practical timetable | More

| Day       | Period 1  | Period 2   | Period 3   | Period 4  | Period 5  | Period 6   | Period 7    | Period 8    |
|-----------|---|--|--|---|---|--|-------------|-------------|
| Monday    | RLMCA204 - BIG DATA TECHNOLOGIES [Theory] FOUSIA M SHAMSUDEEN | RLMCA206 - MOBILE COMPUTING [Theory] FOUSIA M SHAMSUDEEN | Elective 1 [Theory]  | RLMCA208 - INTRODUCTION TO MACHINE LEARNING [Theory] DR. NADERA BEEVI S | Practical   | Practical  | Free Period | Free Period |
| Tuesday   | Elective 1 [Theory]   | RLMCA206 - MOBILE COMPUTING [Theory] FOUSIA M SHAMSUDEEN | RLMCA202 - Application Development And Maintenance [Theory] JASMIN M R | RLMCA208 - INTRODUCTION TO MACHINE LEARNING [Theory] DR. NADERA BEEVI S | Practical   | Practical  | Free Period | Free Period |
| Wednesday | Elective 1 [Theory]   | Practical  | Practical  | RLMCA204 - BIG DATA TECHNOLOGIES [Theory] FOUSIA M SHAMSUDEEN           | RLMCA208 - INTRODUCTION TO MACHINE LEARNING [Theory] DR. NADERA BEEVI S | RLMCA202 - Application Development And Maintenance [Theory] JASMIN M R | Free Period | Free Period |

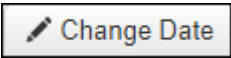
➤ Click on **Edit** button to edit timetable

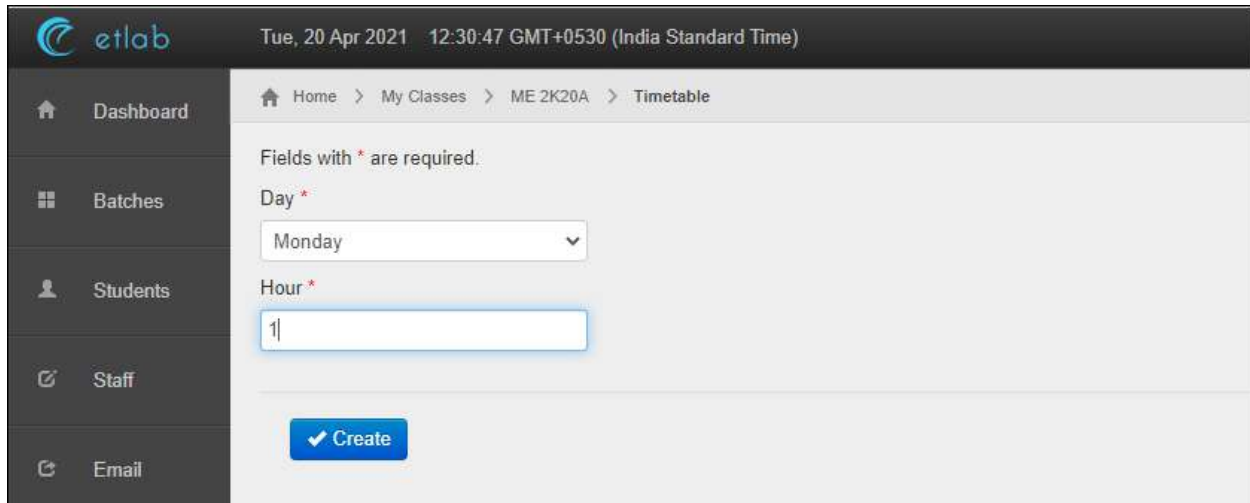
The screenshot displays the 'etulab' Timetable Edit interface. The top navigation bar shows the date and time: Tue, 20 Apr 2021, 11:43:40 GMT+0530 (India Standard Time). The breadcrumb trail indicates the path: Home > Batches > MECHANICAL ENGINEERING > ME 2K20A > Timetable > Edit. The main content area is a grid with columns for Periods 1 through 5 and rows for days of the week. The grid shows various assignments, including subjects like 'BASICS OF ELI', 'ENGINEERING', and 'LINEAR ALGEBRA', and staff members like 'ASWATHY G.P.', 'SUNITHA BEEVI K.', 'MOHAMED NADIR N.', 'DR. RIYASA A.', 'DR. KRISHNA KUMAR T.S.', 'DR. PRABHASH PRASANNAN', 'DR. SHEMIM S.S.', and 'DR. SUDHEERA A.'. An orange arrow points to the staff selection dropdown for Monday, Period 1. The sidebar on the left contains navigation options: Dashboard, Batches, Students, Staff, Email, SMS, User Stats, and Reports. At the bottom, there is a 'Start Date' field set to 2021-04-20 and a 'Save' button.

| Day      | Period 1   | Period 2   | Period 3   | Period 4  | Period 5   |
|----------|--|--|--|---|--|
| Monday   | Theory<br>BASICS OF ELI<br>ASWATHY G.P. x<br>SUNITHA BEEVI K. x<br>MOHAMED NADIR N. x<br>Select tutorial | Practical<br>Select Some Options                                     | Practical<br>Select Some Options   | Theory<br>ENGINEERING<br>DR. SHEMIM S.S. x<br>DR. PRABHASH PRASANNAN x<br>GEETHA<br>Select tutorial | Theory<br>Life Skills<br>DR. SUDHEERA A. x<br>Select tutorial                              |
| Tuesday  | Theory<br>LINEAR ALGEBRA<br>DR. RIYASA A. x<br>Select tutorial   | Theory<br>ENGINEERING<br>DR. KRISHNA KUMAR T.S. x<br>Select tutorial | Theory<br>ENGINEERING<br>DR. PRABHASH PRASANNAN x<br>GEETHA<br>Select tutorial | Practical<br>Select Some Options  | Practical<br>Select Some Options   |
| Friday   | Theory<br>BASICS OF ELI<br>MOHAMED NADIR N. x<br>Theory  | Theory<br>ENGINEERING<br>DR. KRISHNA KUMAR T.S. x<br>Select tutorial | Theory<br>LINEAR ALGEBRA<br>DR. RIYASA A. x<br>Select tutorial                 | Free Period<br>Select Some Options  | Theory<br>ENGINEERING<br>DR. SHEMIM S.S. x<br>DR. PRABHASH PR<br>GEETHA<br>Select tutorial |
| Saturday | Free Period<br>Select Some Options   | Free Period<br>Select Some Options                                   | Free Period<br>Select Some Options   | Free Period<br>Select Some Options  | Free Period<br>Select Some Options   |

Start Date: 2021-04-20  
Save

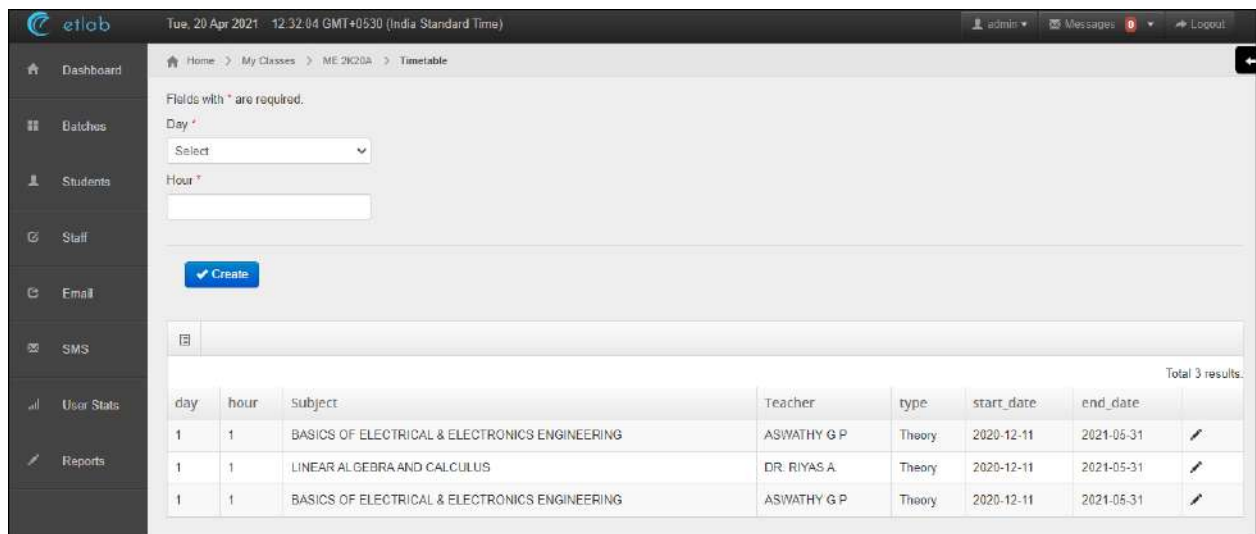
- Assign required staff.
- Admin can set the start date of the change in the timetable.
- Then click on save button.

- Click on  button to change the start date and end date of a particular hour in the timetable.






The screenshot shows the 'Timetable' page in the etlab system. The breadcrumb trail is 'Home > My Classes > ME 2K20A > Timetable'. The form includes a 'Day' dropdown menu set to 'Monday' and an 'Hour' input field with '1' entered. A blue 'Create' button with a checkmark is at the bottom. The left sidebar contains links for Dashboard, Batches, Students, Staff, and Email. The top header shows the date and time: 'Tue, 20 Apr 2021 12:30:47 GMT+0530 (India Standard Time)'.

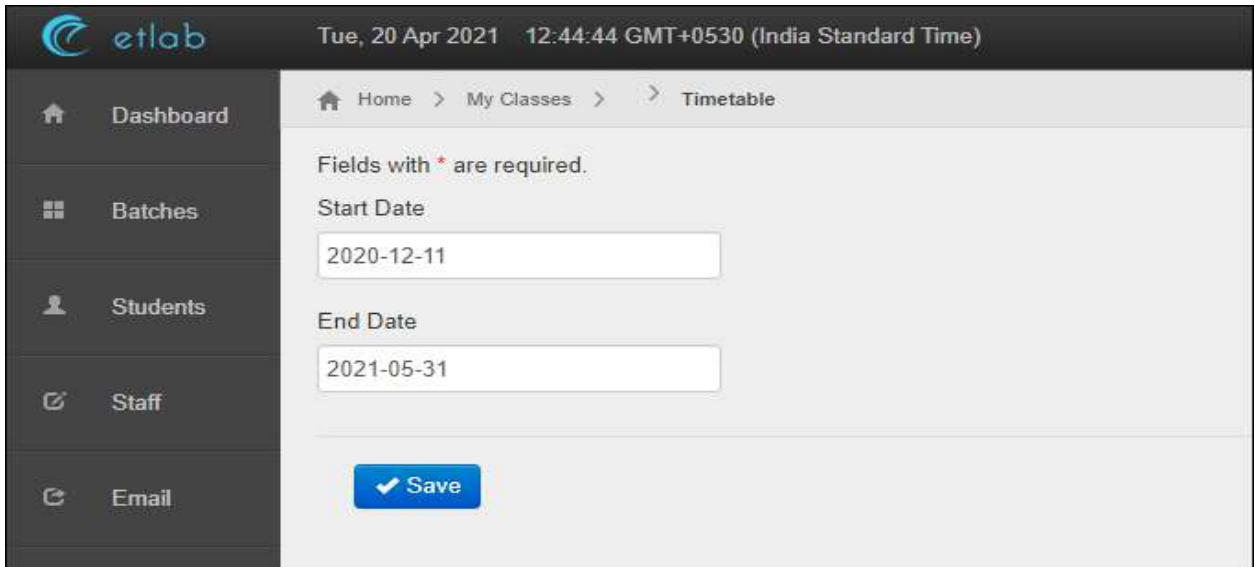
- Select day and hour and click on create button.




The screenshot shows the 'Timetable' page after the 'Create' button has been clicked. The 'Day' dropdown is now 'Select' and the 'Hour' field is empty. Below the form is a table displaying the created timetable entries. The table has columns for day, hour, subject, Teacher, type, start\_date, end\_date, and an edit button. There are 3 results shown.

| day | hour | subject  | Teacher       | type   | start_date | end_date   |   |
|-----|------|--|---------------|--------|------------|------------|---|
| 1   | 1    | BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING | ASI/WATHY G P | Theory | 2020-12-11 | 2021-05-31 |  |
| 1   | 1    | LINEAR ALGEBRA AND CALCULUS                    | DR. RIYAS A.  | Theory | 2020-12-11 | 2021-05-31 |  |
| 1   | 1    | BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING | ASI/WATHY G P | Theory | 2020-12-11 | 2021-05-31 |  |

- You can edit start date and end date of the particular periods by clicking on edit button



The screenshot shows the 'etlab' web application interface. The top header displays the date and time: 'Tue, 20 Apr 2021 12:44:44 GMT+0530 (India Standard Time)'. A left sidebar contains navigation links: 'Dashboard', 'Batches', 'Students', 'Staff', and 'Email'. The main content area shows a breadcrumb trail: 'Home > My Classes > Timetable'. Below this, a message states 'Fields with \* are required.' followed by two input fields: 'Start Date' with the value '2020-12-11' and 'End Date' with the value '2021-05-31'. A blue 'Save' button with a checkmark is positioned at the bottom of the form.

- Enter start and end date and click on save button
- Click on  **Timetable History** to check time tables by date.

# COURSE PLAN

- Access my classes section from the staff login dashboard.
- Select any class from the listed classes.
- And click on the “Course Plan” button (Fig:1).

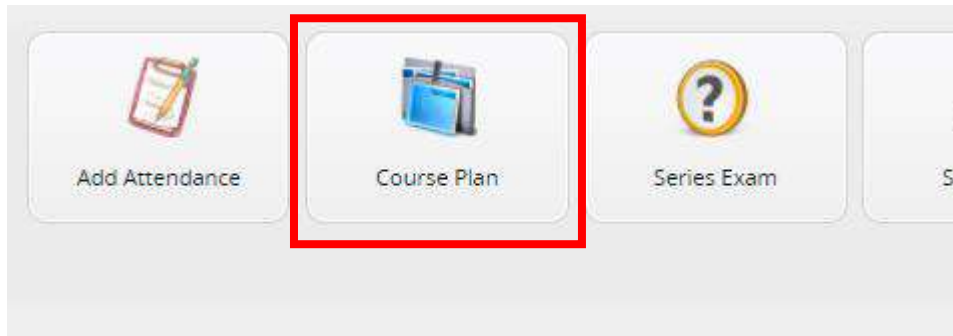


Fig:1

- Course plan module comprises of **Subject Syllabus, Subject Plan And Subject coverage**.
- The default loaded page will be **Subject Coverage** and you can navigate between Syllabus, Plan and Coverage from the buttons (Fig:2) available at the top of the page.

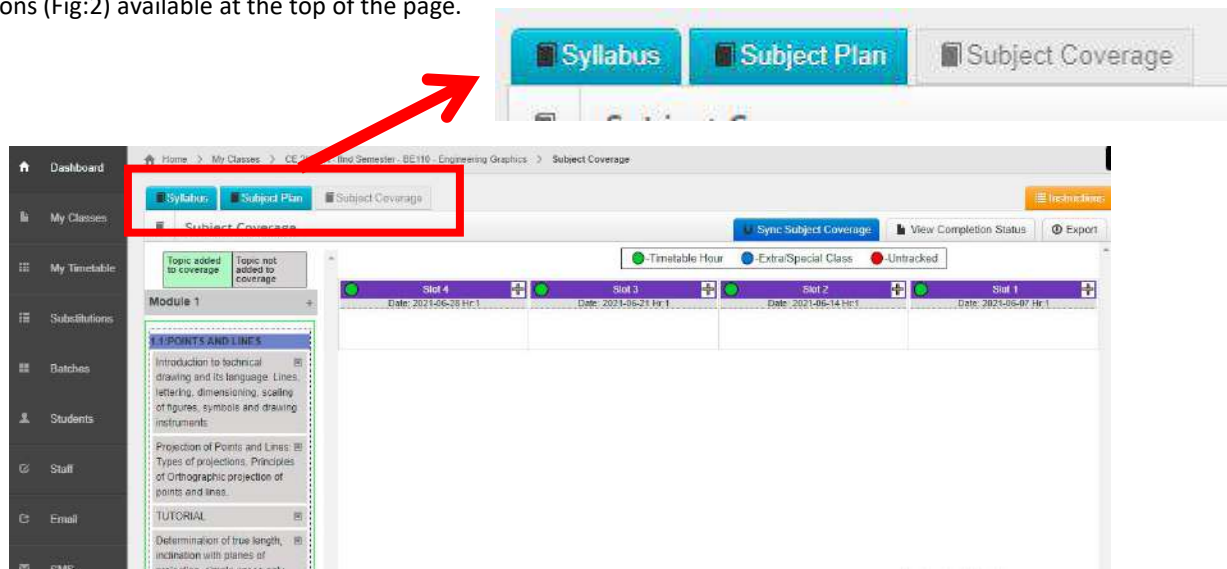


Fig:2

## 1. Syllabus

- Click on Syllabus button from Fig:1 to access the Subject Syllabus.
- The subject Syllabus added will be listed module wise.(Fig: 3)



Fig:3



- To add new syllabus topics click on the “**Add Syllabus Topics**” button available on the top right of the screen.
  - On clicking the above button you will be guided to a form (Fig:4) and there you have to select the module name, enter the main topic and then click on the “**Add Sub Topic**” button to add the sub topic (Each time this button is clicked a new text field will be visible to add another sub topic) and click on the “**Add**” button to save the syllabus.
  - NB: For practical subjects the option syllabus is renamed as Experiments and here you have to enter the experiment name instead of topic. And add sub topic button wont be available.

While adding a topic you should add the subtopics too. Without subtopics you cannot add Subject Plan or Subject Coverage.

**+ Add Syllabus Topics For BE110 - Engineering Graphics**

Module: \*

Topic: \*

| S.No. | Sub Topic*                                   |                                  |
|-------|--|----------------------------------|
| 1.    | <input type="text" value="Enter Sub Topic"/> | <input type="button" value="X"/> |
| 2.    | <input type="text" value="Enter Sub Topic"/> | <input type="button" value="X"/> |

**+ Add Sub Topic**

**✓ Add**

Fig:4

- To view each module syllabus click on the module name (Fig:3). Click on “**Update/Archive/Delete**” button to update or archive a topic and its sub topic. Clicking the button you will be guided to the update form where you can update topic and sub topics or add new sub topics or archive each topic or the topic and sub topics together.
  - NB: Archiving a topic will disable all the subject plan and subject coverage added on that topic by all teachers. Any updates made to the syllabus will be reflected in syllabus, plan and coverage of all other teachers currently handling and previously handled this subject in any batch.



## 2. Subject Plan

- Click on Subject Plan button from Fig:1 to access the Subject Plan.
- In subject plan view page on the left-side of the screen all the Syllabus of the subject is listed and on the remaining screen the slots corresponding to your timetable will be shown(Fig: 5)

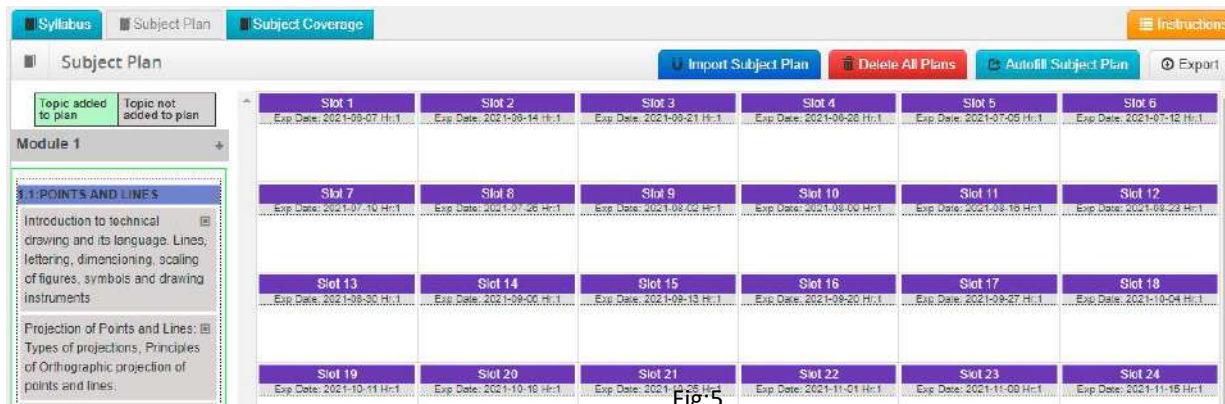


Fig:5

- In a slot it will have the slot number and the expected date and hour that the slot will occur as per the timetable.
- Click on the module name of the syllabus section expand syllabus of each module.
- To add a subject plan topic to a timetable slot place your mouse cursor on a syllabus sub-topic (Mouse cursor will change to drag/grab icon) and **drag** (Fig:6) the topic on to the top of the desired timetable slot and **drop** (Fig:7) it there. Then you can see the selected topic added to the corresponding slot.(Fig:8)

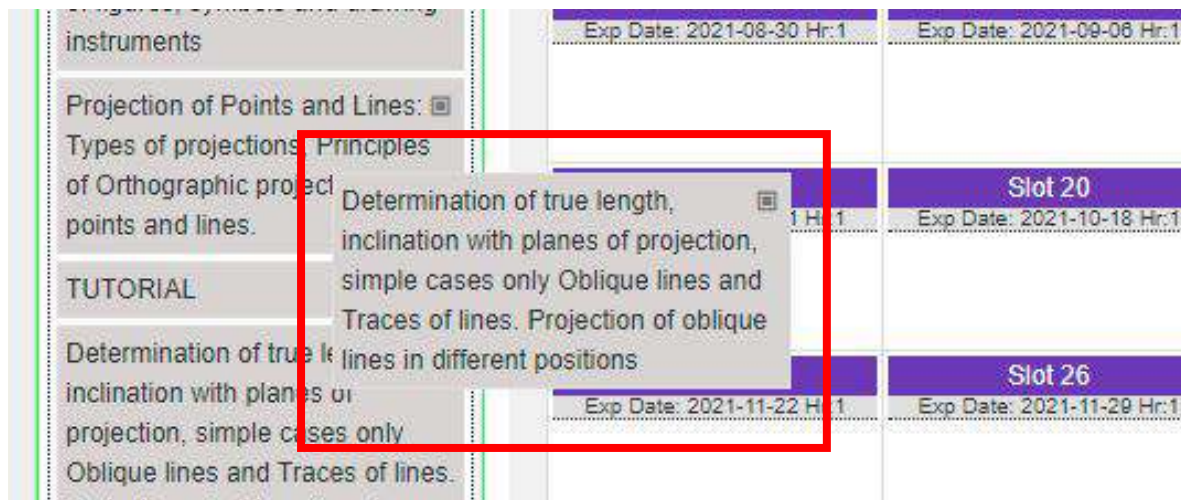


Fig:6

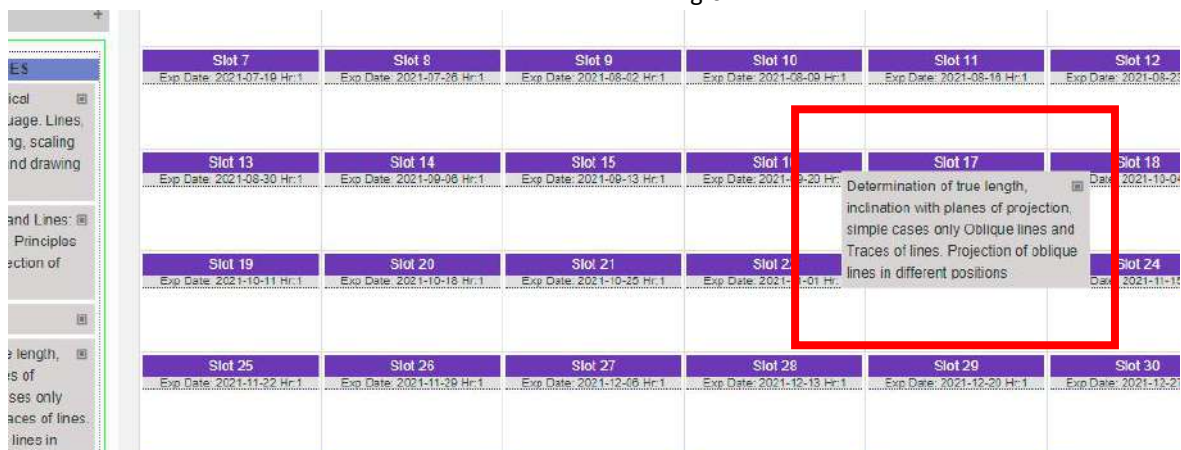


Fig:7

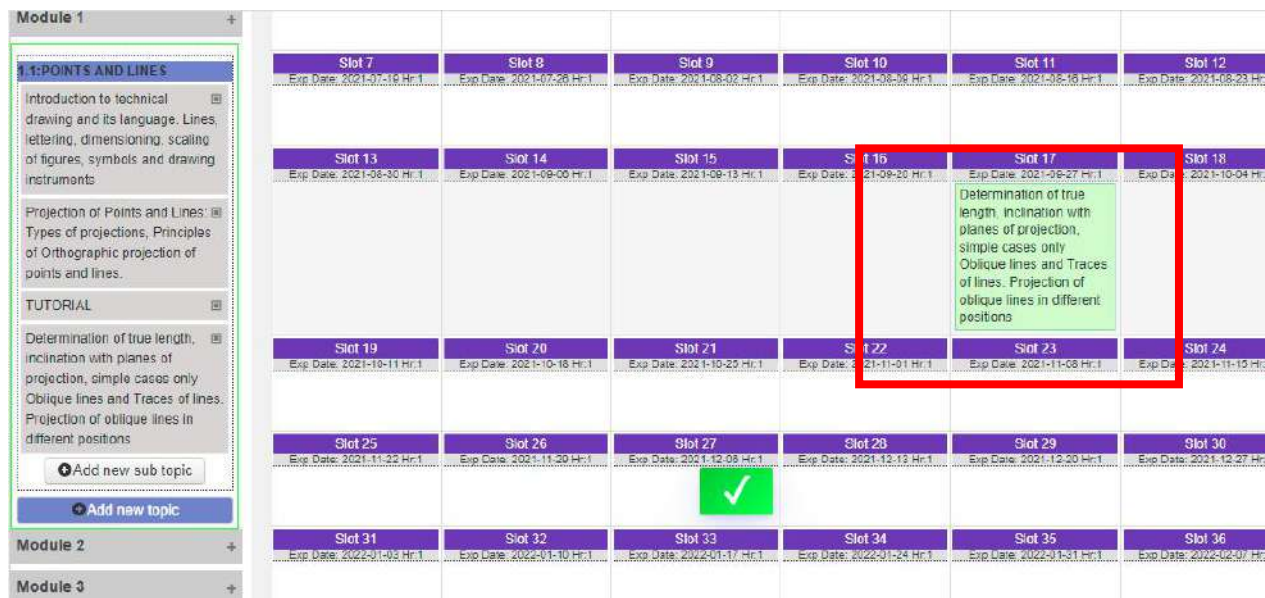


Fig:8

- You can drag and drop multiple topics to a slot if required.
- Also if needed a topic can be added multiple times in to the subject plan.
- On adding a subject plan topic to a slot by dragging it will be saved with a default delivery method (Fig: 9). You can edit this by just choosing required delivery method from the drop-down.
- To delete a subject plan topic click on the trash icon (Fig: 9).
- You can move one subject plan from one slot to another by drag and dropping.(Fig:10)

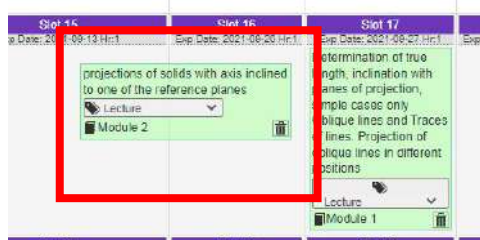


Fig:10 a) Dragging from slot 16 to slot 17.

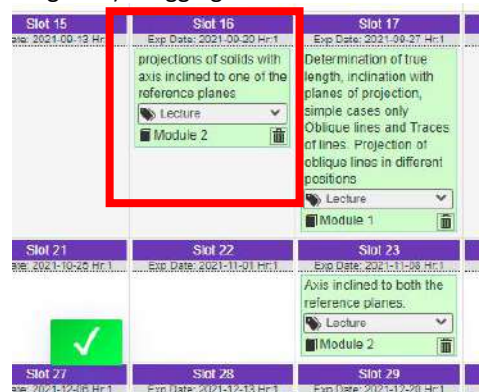


Fig:10 b) Subject plan dropped to slot 17.

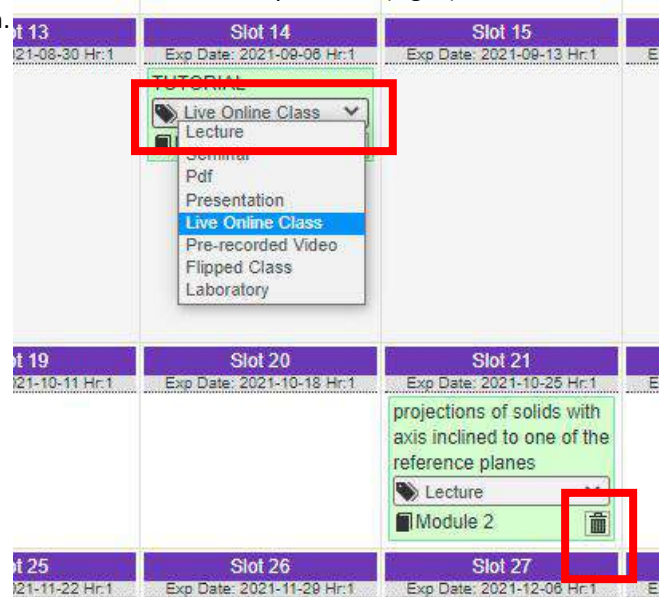


Fig:9



Fig:11

- You can delete all the subject plan topic at once by using the “Delete All Plans” button (Fig:11).
- NB: If the subject timetable is multiple teacher type (multiple teachers assigned to same timetable hour) or single teacher type, deleting the subject plans will delete the entire subject plans for the subject (ie., in multiple teacher type if one faculty uses the option delete all subject plan, it will delete all the added topic irrespective of which faculty added it). But if the subject timetable is combined teacher type (multiple teachers assigned to the subject for different hours) the faculty when using delete all plans option, only the topics added by that faculty get deleted..
- NB: Once a subject plan is deleted it cannot be recovered.



- Using the option “**Autofill Subject Plan**” (Fig:12) you can auto fill all the available syllabus topics to the available timetable slots in subject plan in random order.
- Using “**Import Subject Plan**” (Fig:12) options you can import subject plans added in another batch for this subject to this class. The plans added will be imported according to the slot order and if there are any excess slot plans needed to the imported the system will accordingly assign it to the last slot available in this class.

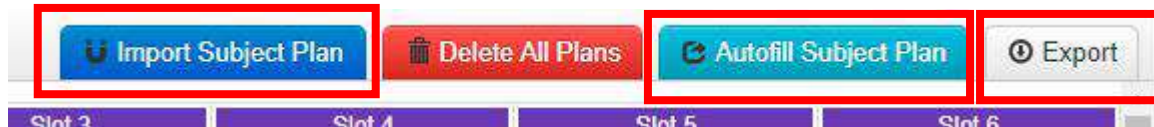


Fig:12

- On clicking on “Import Subject Plan” option a modal popup will appear(Fig:13). In that you have to select a class type from, Own Class and Any Class.
  - Own Class implies other classes with the same subject handled by you.
  - Any class implies all other classes with same subject handled by any other teachers.
 Based on your selection options will be populated in the ‘import from’ drop-down, with subject code-batch name-handled faculty name. Select the desired item and click on “Import” button to import the subject plan.

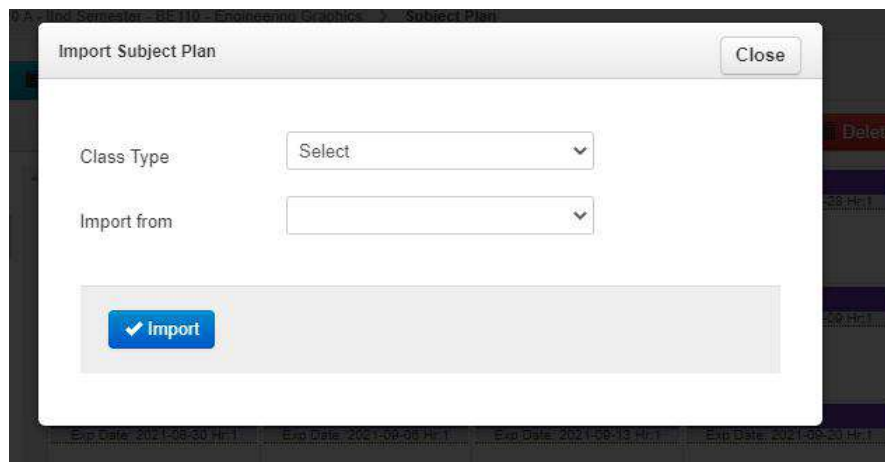


Fig:13

- Use “**Export**” option (Fig:12) to download all the subject plan added for this subject. You can choose in which file format to download the report.
- NB: “Autofill Subject Plan” and “Import Subject Plan” buttons will be visible only if no subject plan is added. Also both this options are force disabled to subject handled in combined teacher method.
- NB: During importing subject, options will be listed in ‘import from’ drop-down only if other classes have subject plan added.

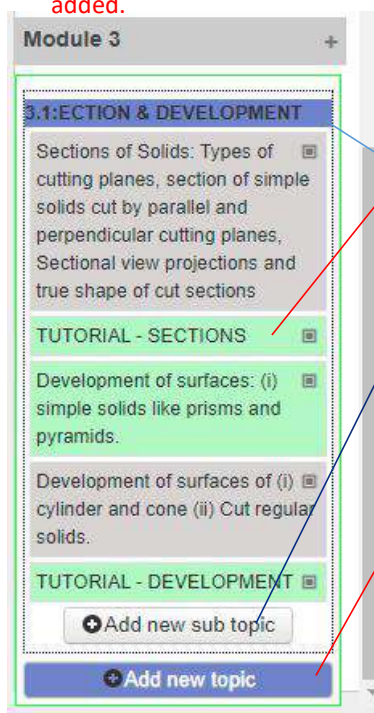


Fig:14

- In the subject plan view page as said before we have Syllabus topics listed module wise on the left side of the screen. (Fig:14).
- Topics added to the subject plan will be shown in green colour instead of the default gray colour.
- In this syllabus view the main topics in a module is shown inside blue banners. And the subtopics of such a main topic will be listed below it.
- “Add new sub topic” button is available below the subtopics listed under a main topic. Using this option a new sub topic can be added under this main topic.
- Similarly an “Add new topic” button is available below the main topics listed under a module. Using this option a new main topic can be added to the module.
- On clicking “Add new topic” or “Add new sub topic” a popup with a text field will appear on the screen and enter the topic name to be added in this text field and click on “OK” to save the added topic.
- NB: The topics and subtopics added here will be available to all other faculties handling this subject in any batch. So it is more appropriate to add this topics according to the college / university recommended format. For practical subjects “Add new sub topic” & “Add new topic” options won't be available.

- NB: If the subject is “Multiple Teacher” type all the faculties can add, update and delete subject plan for all the available slots. If the subject type is “Combined Teacher” only the specific allotted timetable slots will be made visible to you and you will can add, update and delete data in that lot only.
- When timetable gets changed, the added subject plan also gets automatically rearranged accordingly on the subject plan page load.

### 3. Subject Coverage

- Click on Subject Coverage button from Fig:1 to access the Subject Coverage.
- In subject coverage view page on the left-side of the screen all the Syllabus of the subject is listed and on the remaining screen the slots corresponding to the **Attendance Added hours** are shown.(Fig: 15)

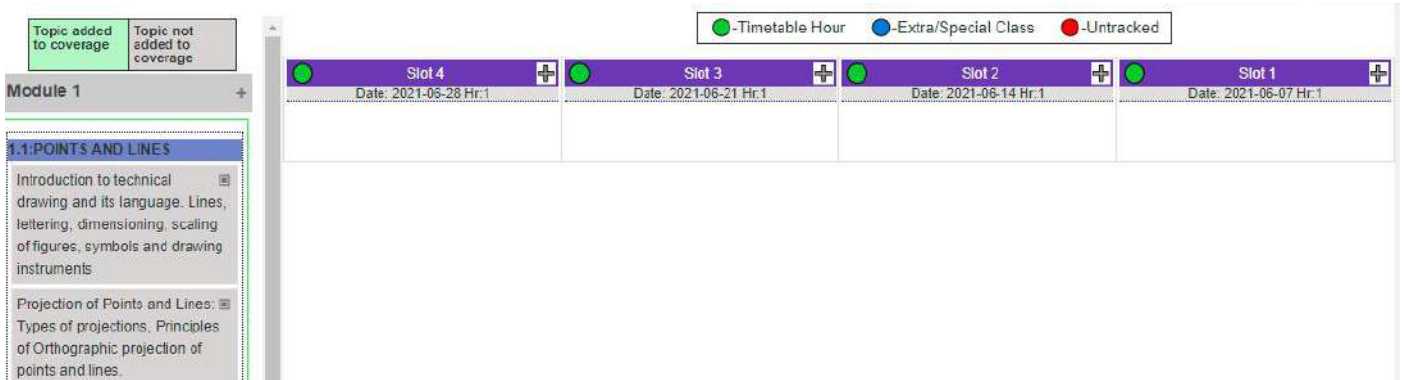


Fig: 15

- In the reference subject coverage view shown in Fig:15 only 4 hour attendance is marked. So there are only 4 slots. Whenever new hour attendance are marked it will show as new slots. In a slot you can see slot number, the date and period the attendance was marked.
- The hour type of each slots can be understood from the colour code given on the top of each slot.(Fig:16). If the colour is green the attendance added slot corresponds to a timetable hour, If the colour is blue the attendance slot corresponds to a extra class hour or special class hour and if the colour is red then the attendance slot is neither a timetable hour nor a extra/special class hour. Usually this occur when deleting the attendance after adding subject coverage or changing the timetable hour or assigning the attendance added hour as holiday later or coverage was added incorrectly using the old subject coverage module.

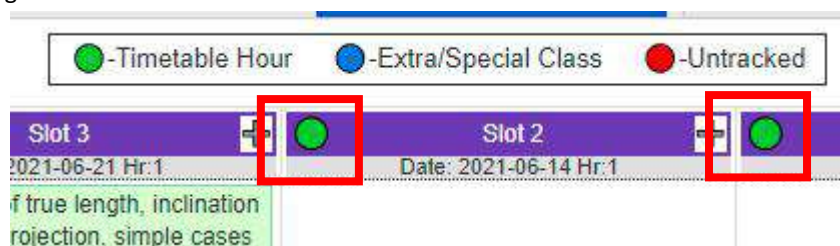




Fig:16

- Similar to the subject plan, to add a coverage topic you can drag and drop desired topics to the desired attendance slots. Also you can move coverage topics from one slot to another (Similar to subject plan (Fig:6, Fig:7, Fig:8, Fig:10)).
- If needed multiple coverage topics can be dropped to same slot.
- After adding a coverage to a slot to add the remarks click on the “” icon (Fig :17) and then a text field will appear there to enter your remarks .After entering the remarks click on “” icon (Fig:18) to save it.

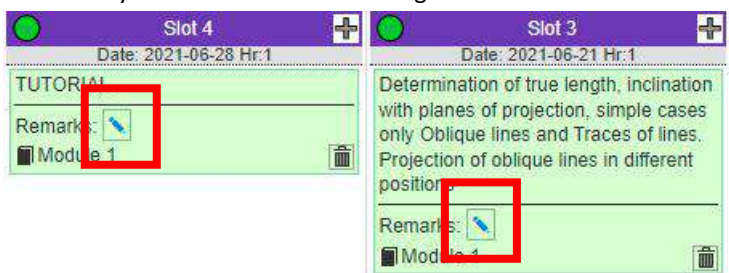


Fig:17

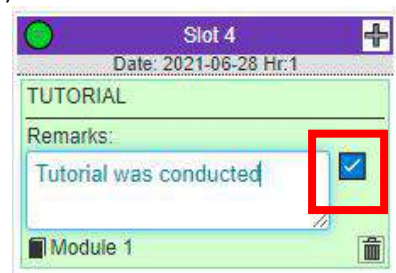


Fig:18

- To delete a subject coverage topic click on the trash icon (Fig: 19).

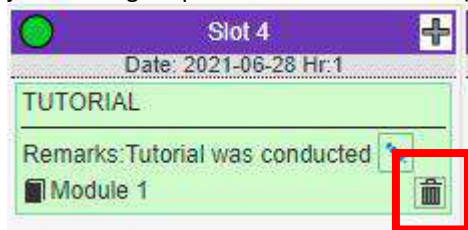


Fig:19

- To add a beyond syllabus topic as coverage, click on the “+” icon shown in Fig:20. Then a popup will appear at the top of the screen with a text field. Enter the extra topic details and click “OK” to save it.

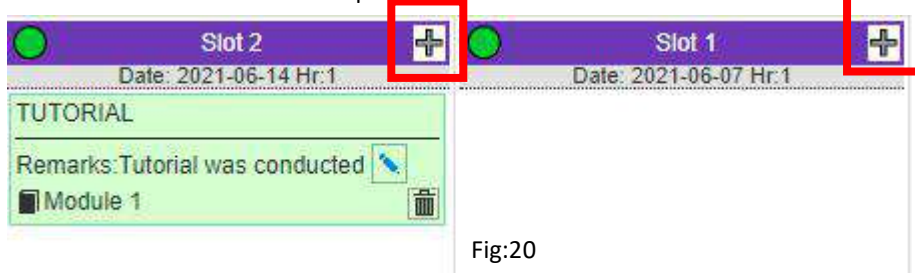


Fig:20

- Any beyond syllabus topics added will be shown inside a blue tile and will be labelled as extra topic.(Fig:21)

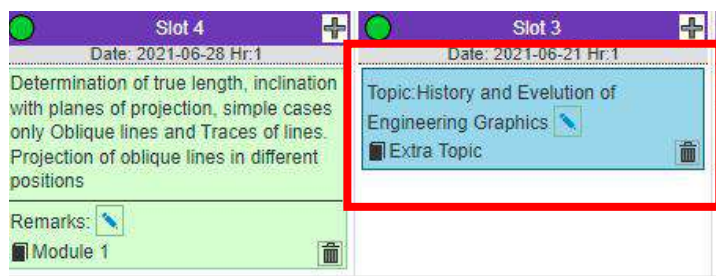


Fig:21

- Using “Sync Subject Coverage” option (Fig:22) available on the top right of the screen you can sync the subject coverage of this class with another class handled by you. On clicking on “Sync Subject Coverage” option a modal will popup (Fig:23) where you can select the batch to sync from the drop-down



Fig:22

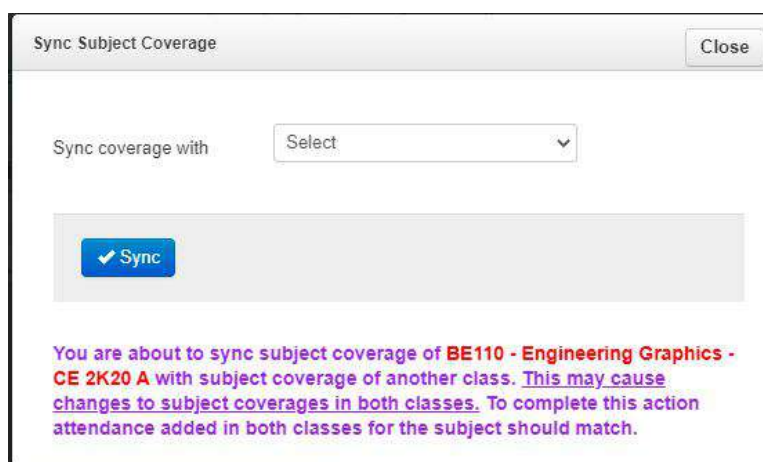


Fig:23

- After selecting the correct class to sync the coverage, click on the option “Sync” to complete the syncing process.

- If you are syncing coverage of class A and class B, then all coverage present in A and which is not added in B will be copied to the corresponding slots in B. And similarly coverage added in B and not available in A will be copied to the corresponding slots in A. After syncing the coverage in both class will be the same.
- NB: For syncing coverage of two batches the batches should have same timetable hours and the attendance added should be in same slots in both class.
- Once synced the changes cannot be reversed.
- Coverage syncing option is disabled for 'Combined Teacher' type subjects.
- To see the course plan completion status of the subject click on “**View Completion Status**” (Fig:22) option.
- In course-plan completion status all the subject plan topic added will be listed (Fig:24) in which the topics covered will be displayed in green colour and topic not yet covered will be displayed in blue colour. Also the percentage of completion of subject plan topics will be represented graphically.

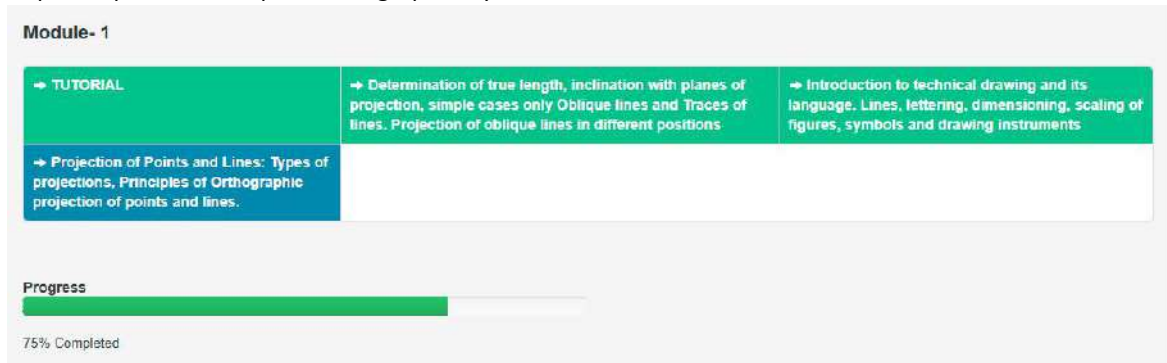


Fig:24

- Any beyond syllabus topics will be also displayed in brown colour as separate section.(Fig:25)

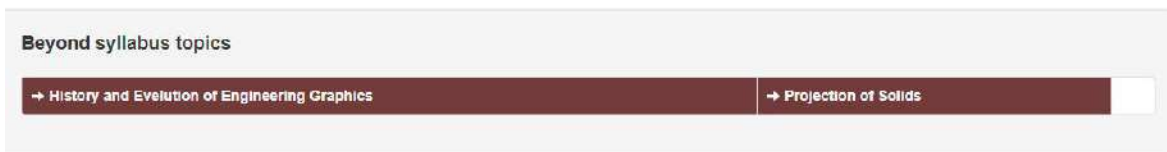
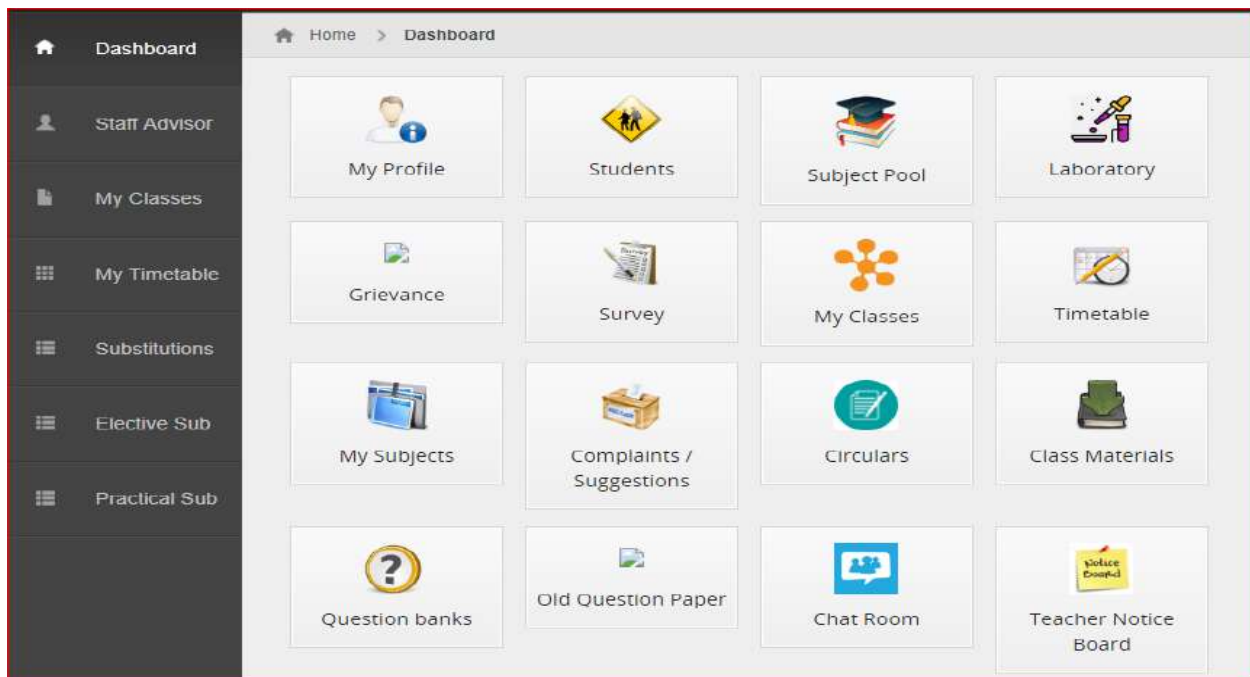


Fig:25

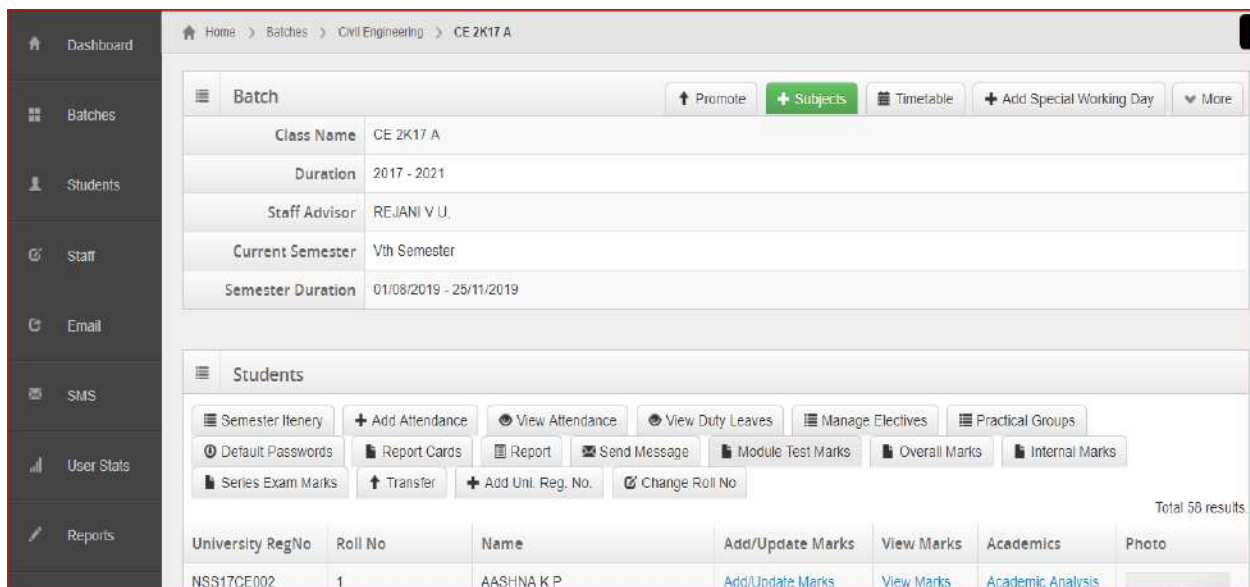
- NB: Course plan completion status will display all the subject plan and coverage of the subject irrespective of the timetable teacher type.
- Use “Export” option (Fig:22) to download all the subject coverage added for this subject. You can choose in which file format to download the report.
- The subject syllabus section on the left side of the screen (Fig:15) is similar to the syllabus section discussed in subject plan view. Here topics added to the coverage will be shown in green colour and all other topics in gray colour. Similar to what we saw in subject plan view here also we can add new sub topics and main topics to the syllabus.
- NB: When drag and dropping a new syllabus topic to the coverage slot, if the topic is not available in the subject plan then the topic will get **automatically added to the subject plan** in the corresponding available slot.
- In 'Combined Teacher' type subjects, faculty can add, edit, delete coverage in only the slots in which attendance added by that faculty.



➤ Login to staff advisor dashboard



➤ Click on staff advisor option, and choose the batch.



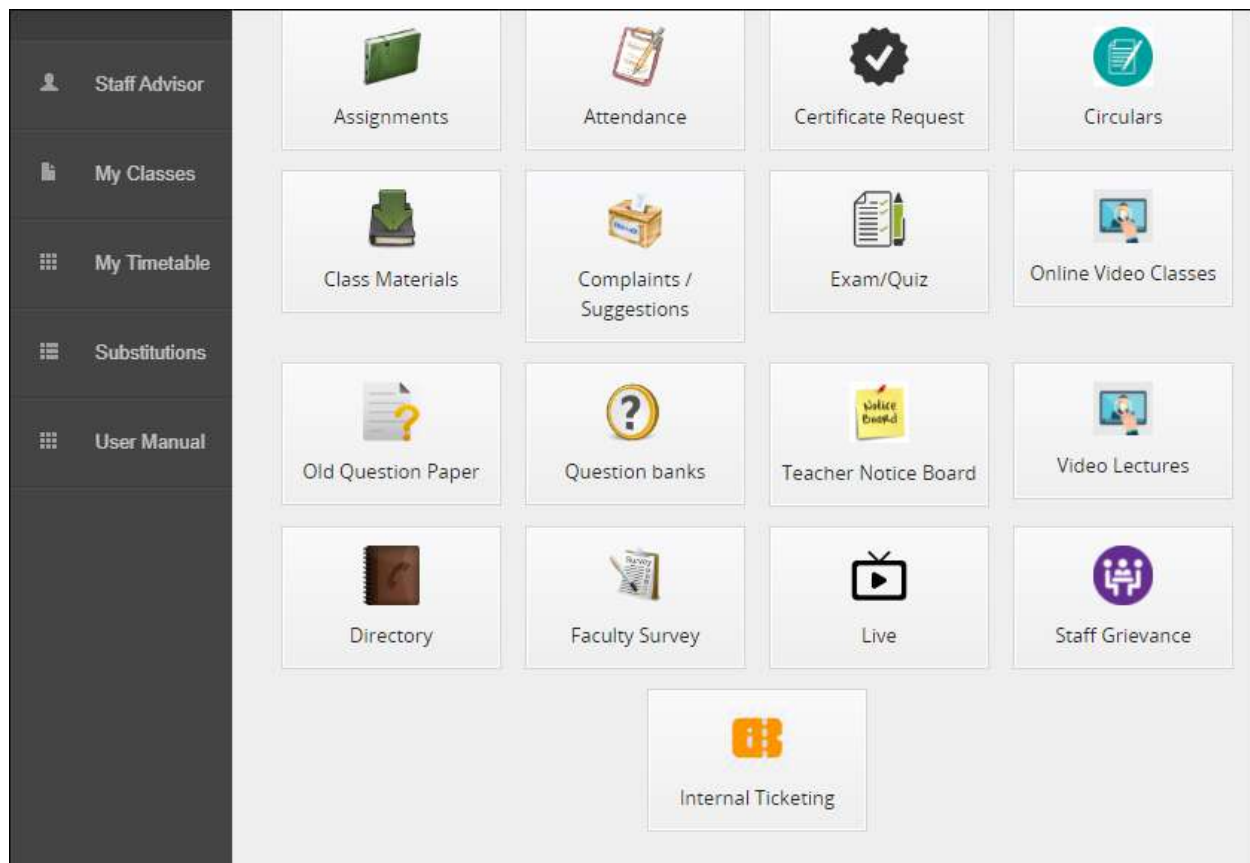
➤ Click on Manage Electives

| <div>Students</div> <div>Staff</div> <div>Email</div> <div>SMS</div> <div>User Stats</div> <div>Reports</div> | Roll No | Name                | Elective Group1   |
|---|---------|---------------------|---|
|   | 1       | AASHNA K P          | FUNCTIONAL DESIGN OF BUIL ▾   |
|   | 2       | ABHINAYA AZHCHATH S | Please select Subject<br>GEOTECHNICAL INVESTIGATION<br>ADVANCED CONCRETE TECHNOLOGY<br>FUNCTIONAL DESIGN OF BUILDINGS |
|   | 3       | ABHISHEK KRISHNAN P | ADVANCED CONCRETE TECHI ▾   |
|   | 4       | AGNES MARIA K.J     | GEOTECHNICAL INVESTIGATI ▾  |
|   | 5       | AKHIL C C           | FUNCTIONAL DESIGN OF BUIL ▾   |
|   | 6       | AKSHAYA K           | ADVANCED CONCRETE TECHI ▾   |
|   | 7       | AKSHAY ASHOK K      | FUNCTIONAL DESIGN OF BUIL ▾   |
|   |         |                     | Activate Window<br>Go to Settings to acti   |

- Choose the elective subject for all students from dropdown list and click on save button.



- Login to staff dashboard



- Click on Exam/Quiz tab

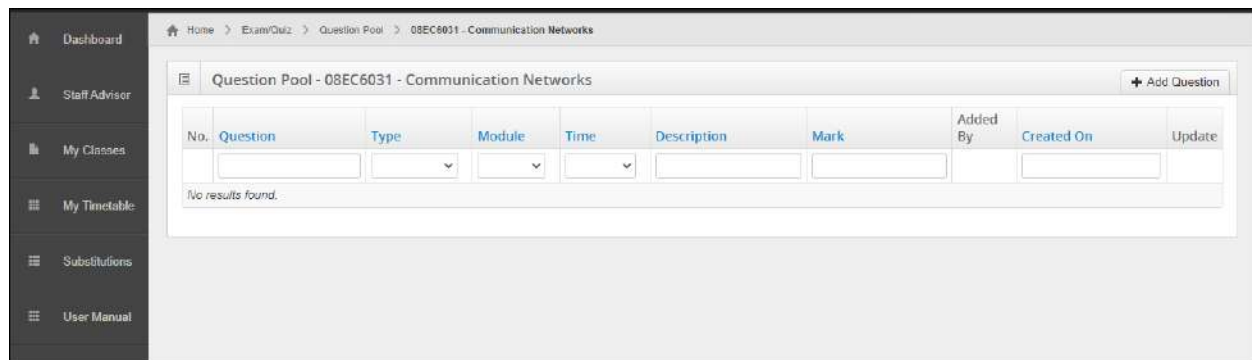
The Exam/Quiz interface displays a table with exam details. The table has columns for Batch Name, Students, and View Quiz/Exams. The View Quiz/Exams column contains links to specific exams and their details.

| Batch Name    | Students | View Quiz/Exams   |
|---------------|----------|---|
| EC 2K17 B     | 49       | <b>Vllth Semester</b> <ul style="list-style-type: none"><li>• EC405 - OPTICAL COMMUNICATION</li><li>• EC451 - SEMINAR &amp; PROJECT PRELIMINARY</li></ul> |
| MTech-EC 2k19 | 13       | <b>Illrd Semester</b> <ul style="list-style-type: none"><li>• 08EC7041 - Project (Phase-1)</li></ul>  |
| EC 2K16 A     | 46       | <b>Vllth Semester</b> <ul style="list-style-type: none"><li>• EC492 - PROJECT</li></ul>   |

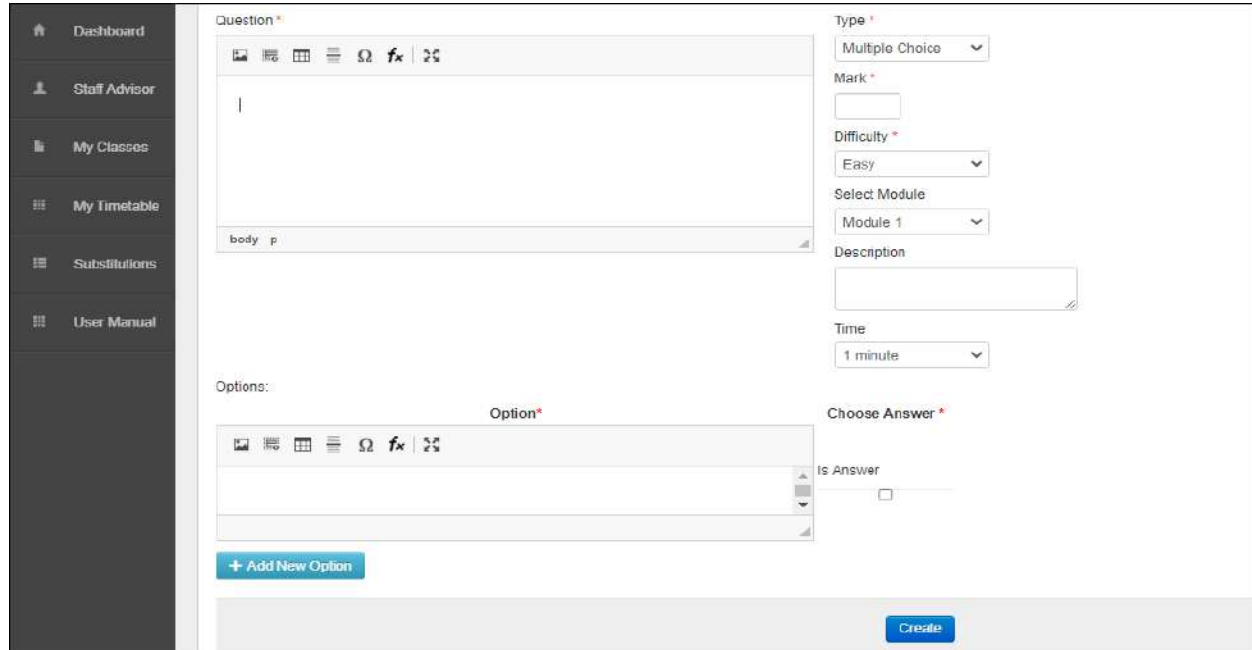
- Click on Question pool to add questions for the quiz.



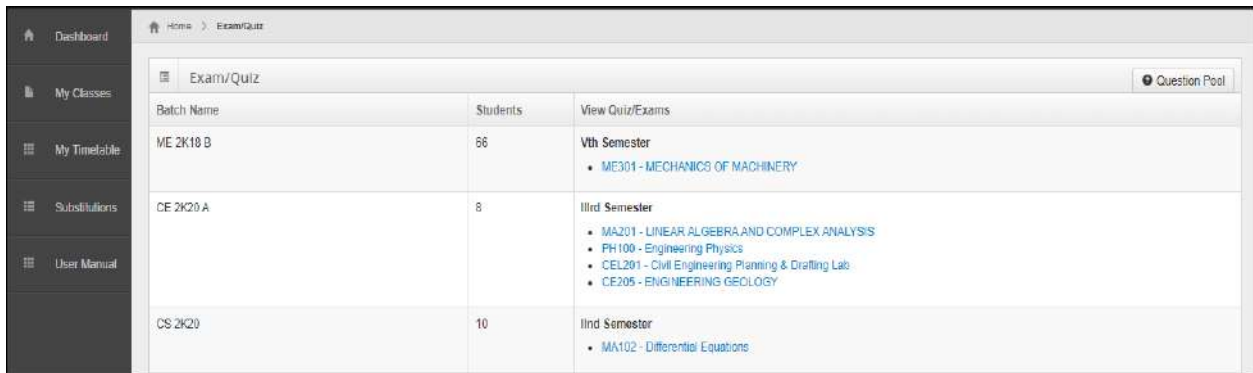
- Click on subject name to add questions for this subject.



- Click on add question button.

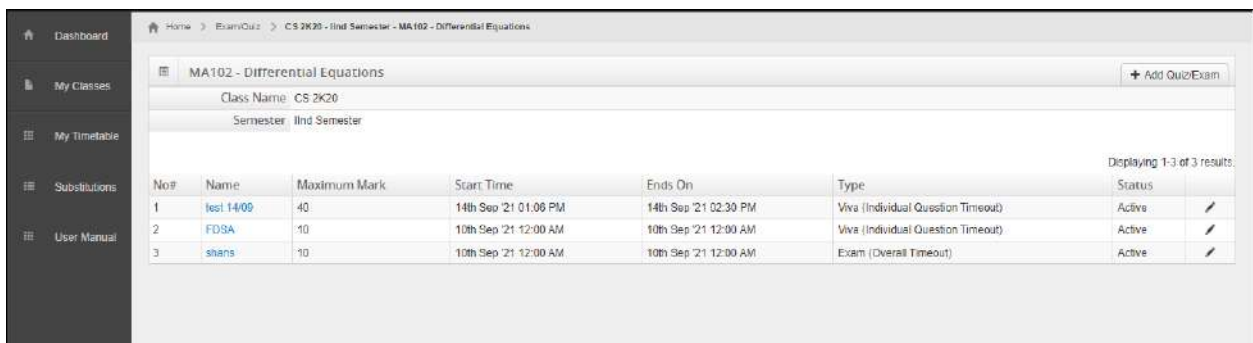


- Fill all details and click on create button.
- Questions can be multiple choice, descriptive, file upload
- Questions can give time (in case of individual time out quiz)
- Add all required questions.



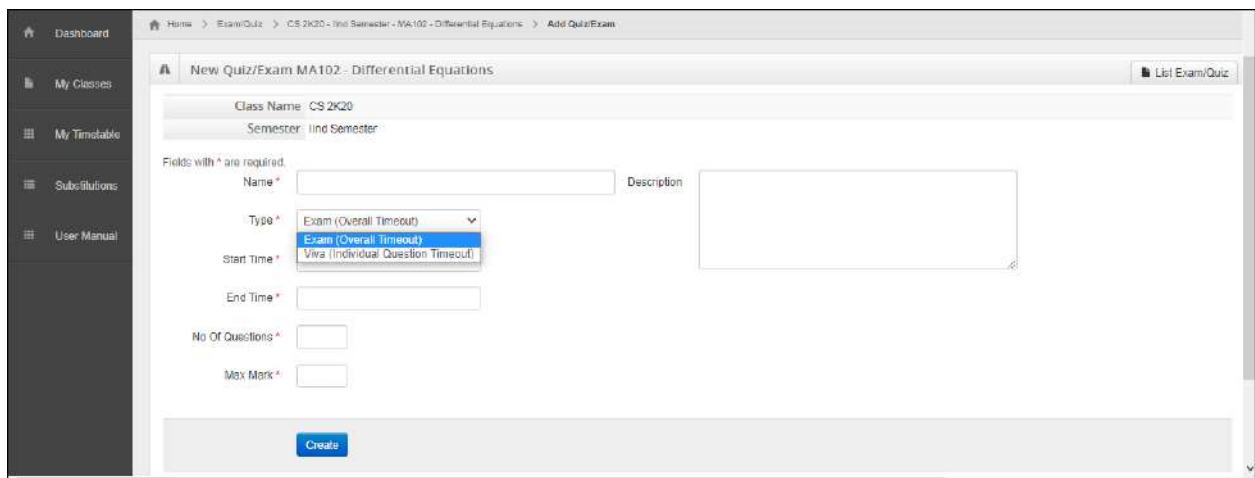
| Batch Name | Students | View Quiz/Exams  |
|------------|----------|--|
| ME 2K18 B  | 66       | <b>Vth Semester</b> <ul style="list-style-type: none"> <li>ME301 - MECHANICS OF MACHINERY</li> </ul>   |
| CE 2K20 A  | 8        | <b>IInd Semester</b> <ul style="list-style-type: none"> <li>MA201 - LINEAR ALGEBRA AND COMPLEX ANALYSIS</li> <li>PH100 - Engineering Physics</li> <li>CEL201 - Civil Engineering Planning &amp; Drafting Lab</li> <li>CE205 - ENGINEERING GEOLOGY</li> </ul> |
| CS 2K20    | 10       | <b>IInd Semester</b> <ul style="list-style-type: none"> <li>MA102 - Differential Equations</li> </ul>  |

- click on subject name to add quiz



| No# | Name       | Maximum Mark | Start Time            | Ends On               | Type                               | Status |
|-----|------------|--------------|-----------------------|-----------------------|------------------------------------|--------|
| 1   | test 14/09 | 40           | 14th Sep '21 01:08 PM | 14th Sep '21 02:30 PM | Viva (Individual Question Timeout) | Active |
| 2   | FDQA       | 10           | 10th Sep '21 12:00 AM | 10th Sep '21 12:00 AM | Viva (Individual Question Timeout) | Active |
| 3   | shans      | 10           | 10th Sep '21 12:00 AM | 10th Sep '21 12:00 AM | Exam (Overall Timeout)             | Active |

- Click on Add quiz/Exam



**New Quiz/Exam MA102 - Differential Equations**

Class Name: CS 2K20  
Semester: IInd Semester

Fields with \* are required.

Name \*  Description

Type \*

Start Time \*

End Time \*

No Of Questions \*

Max Mark \*

- Fill the quiz details and click on create button.
- Then choose the newly created quiz.

Dashboard

Home > Exam/Quiz > CS 2K20 - 1st Semester - MA102 - Differential Equations > Manage test 14/09

Successfully Disabled Exam/Quiz

Manage Quiz

Enable Quiz/Exam Extend End Time Status Monitoring Results More

SELECT QUESTION FROM POOL Select ADD NEW QUESTION Multiple Descriptive Upload

Question 1 Multiple Choice

who invented dynamite

answer choices

- alfred nobel
- orville
- alexander graham bell
- mustafa
- enstein

1 minute Module 1 Easy 10 Marks

Question 2 Multiple Choice

who invented roll film?

answer choices

- takeshi
- mulala

test 14/09

Subject MA102 - Differential Equations

Batch CS 2K20

Status Inactive

Start Time 14-Sep-2021 1:06 PM

End Time 14-Sep-2021 2:30 PM

Max Mark 40

Quiz Type Viva (Individual Question Timeout)

Questions Added 4

Total Marks 40

- Click on SELECT QUESTION FROM POOL to add previously created question to this quiz.
- Add all required questions and click on enable Quiz/Exam Button.
- Students can attempt the quiz only at the start time of the quiz.
- Click on result button to calculate the result of the quiz.
- Click on calculate marks to calculate the marks.
- Click on status monitoring to view attempted and not attempted student list.

My Classes

My Timetable

Substitutions

User Manual

Result Calculation test 14/09

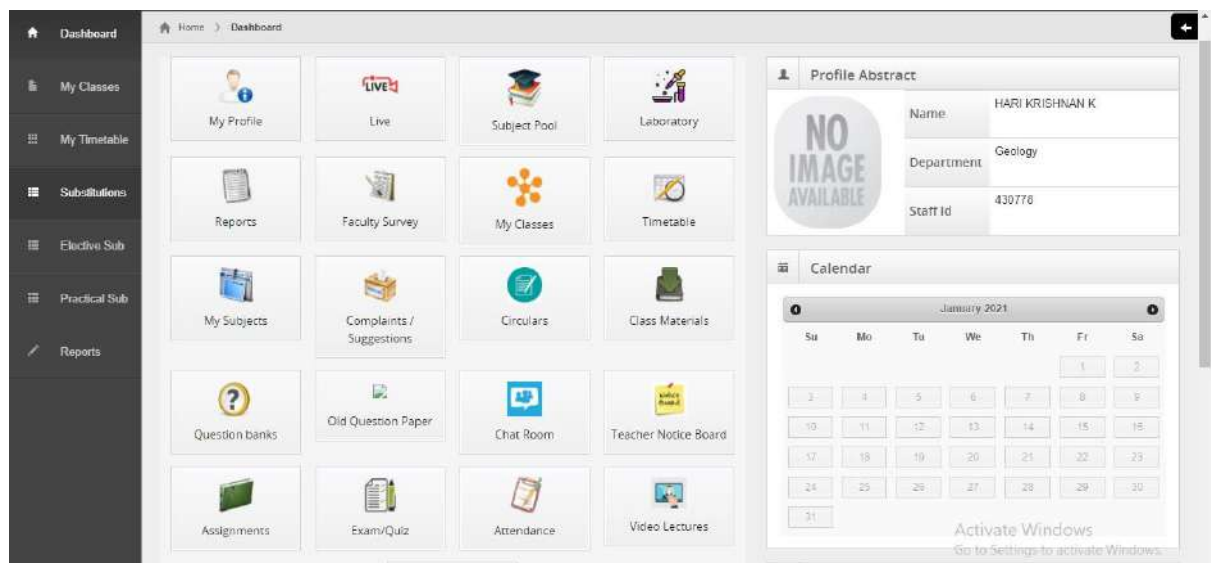
Mark Modification

Calculate Marks

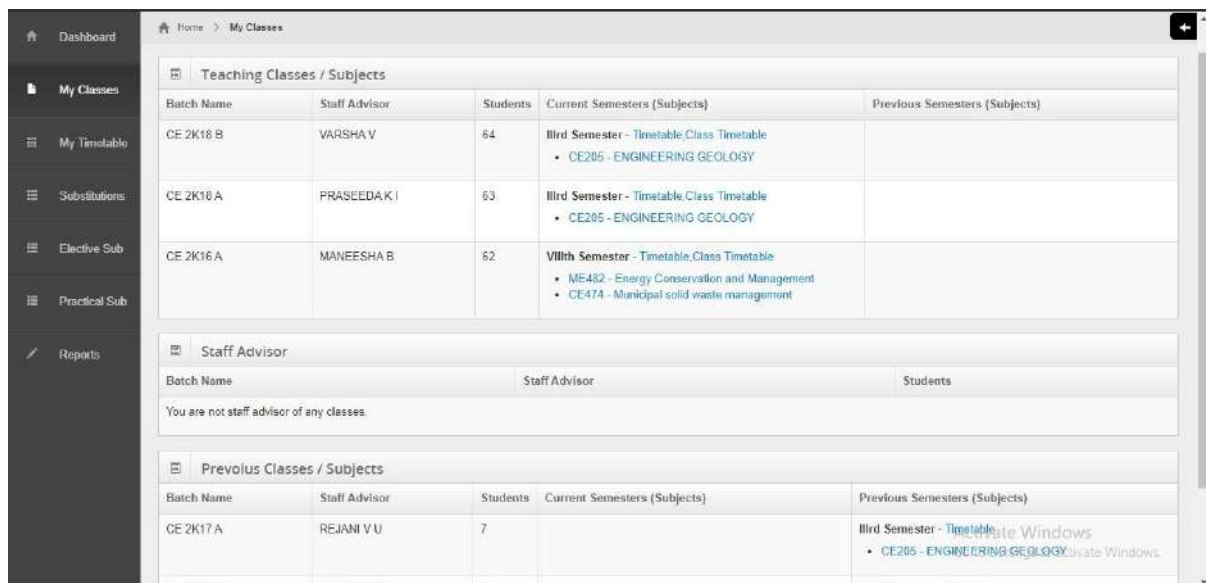
| Roll No | Student             | Total Questions | Maximum Marks | Obtained Marks | Marks out of 40 | Evaluate |
|---------|---------------------|-----------------|---------------|----------------|-----------------|----------|
|         | AJITH KUMAR P       | 0               | 40            | Not Attempted  | 0               | Evaluate |
|         | ATUL SAJU SUNDARESH | 4               | 40            | Not Calculated | 0               | Evaluate |
|         | GOWTHAM KRISHNA B   | 0               | 40            | Not Attempted  | 0               | Evaluate |
|         | LAKSHMI MOHANDAS    | 4               | 40            | Not Calculated | 0               | Evaluate |
|         | NANDANA S           | 0               | 40            | Not Attempted  | 0               | Evaluate |
|         | NIRANJAN V RAM      | 0               | 40            | Not Attempted  | 0               | Evaluate |
|         | PARVATHY MANOJ      | 0               | 40            | Not Attempted  | 0               | Evaluate |
|         | SIV HARI NAIR       | 4               | 40            | Not Calculated | 0               | Evaluate |

- After evaluating all questions, click on publish button to publish the exam.
- Exam results can be downloaded by clicking on download button.

## ➤ Login to Teacher dashboard



## ➤ Choose



- Available subjects are shown here
- Click on the subject to add internal mark

The screenshot shows the 'Internal Marks' section of the software. The left sidebar contains navigation options: Dashboard, My Classes, My Timetable, Substitutions, Elective Sub, Practical Sub, and Reports. The main content area displays the class name 'CE 2K18 B' and staff advisor 'VARSHA V'. Below this are icons for 'Add Attendance', 'Subject Coverage', 'Special classes', 'Substitute', 'Internalmarks', 'Homeworks', and 'Assignments'. A 'View More' link is present. A table shows student results with columns: Roll No, Uni.RegNo, Name, Remarks, Academics, and Photo. The table lists three students: JITHIN KRISHNA S R, MEKHA M, and MUHAMMEDSUHAIL K A. The 'Photo' column shows 'NO IMAGE AVAILABLE' for each student. A 'Total 64 results' label is at the top right of the table.

| Roll No | Uni.RegNo  | Name               | Remarks     | Academics         | Photo              |
|---------|------------|--------------------|-------------|-------------------|--------------------|
| 1       | NSS18CE061 | JITHIN KRISHNA S R | Add remarks | Academic Analysis | NO IMAGE AVAILABLE |
| 10      | NSS18CE071 | MEKHA M            | Add remarks | Academic Analysis | NO IMAGE AVAILABLE |
| 11      | NSS18CE072 | MUHAMMEDSUHAIL K A | Add remarks | Academic Analysis | NO IMAGE AVAILABLE |

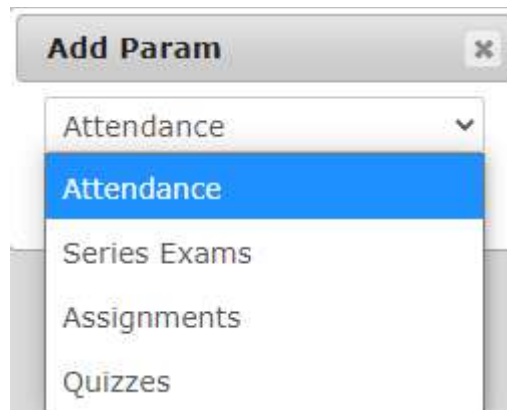
➤ Choose



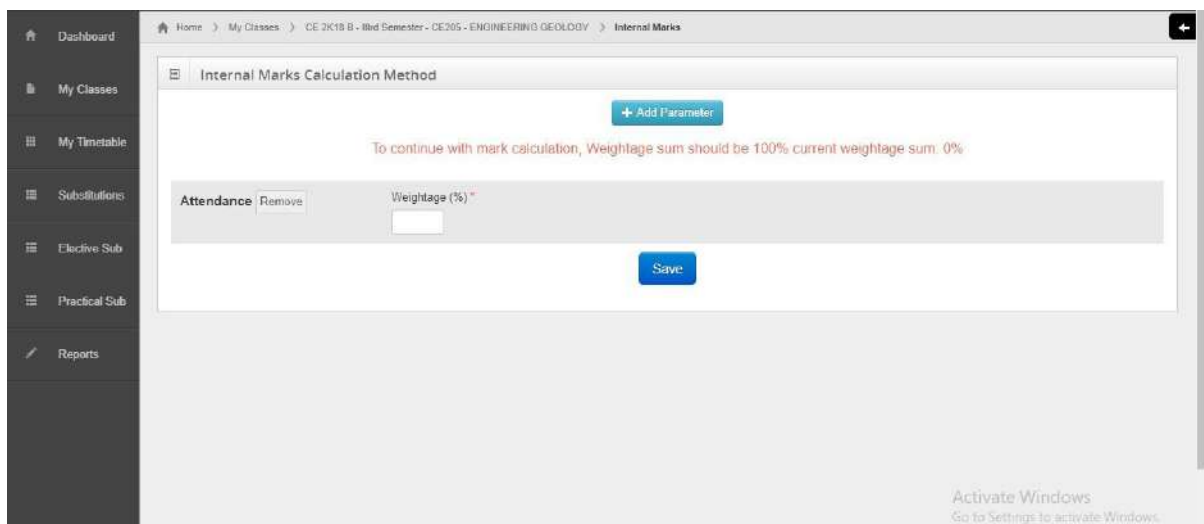
The screenshot shows the 'Internal Marks Calculation Method' section. The left sidebar is the same as the previous screenshot. The main content area has a title 'Internal Marks Calculation Method' and a '+ Add Parameter' button. Below the button, a message states: 'To continue with mark calculation, Weightage sum should be 100% current weightage sum: 0%'. A 'Save' button is at the bottom.

➤ Click

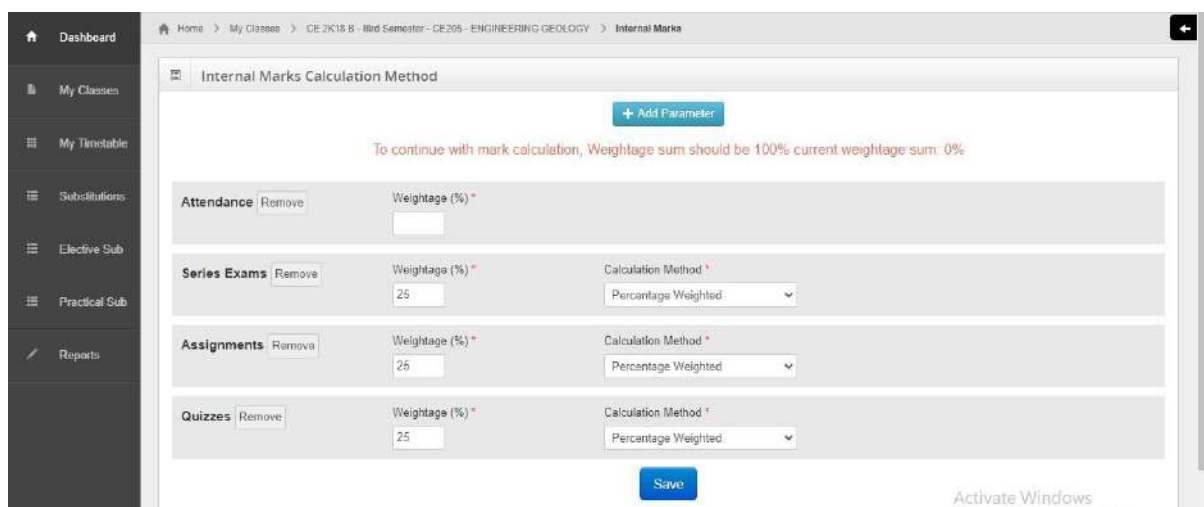


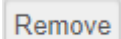


- Select Parameter one by one, to calculate internal marks and click add button respectively
- If you choose Attendance, then enter the weightage in nearby box.

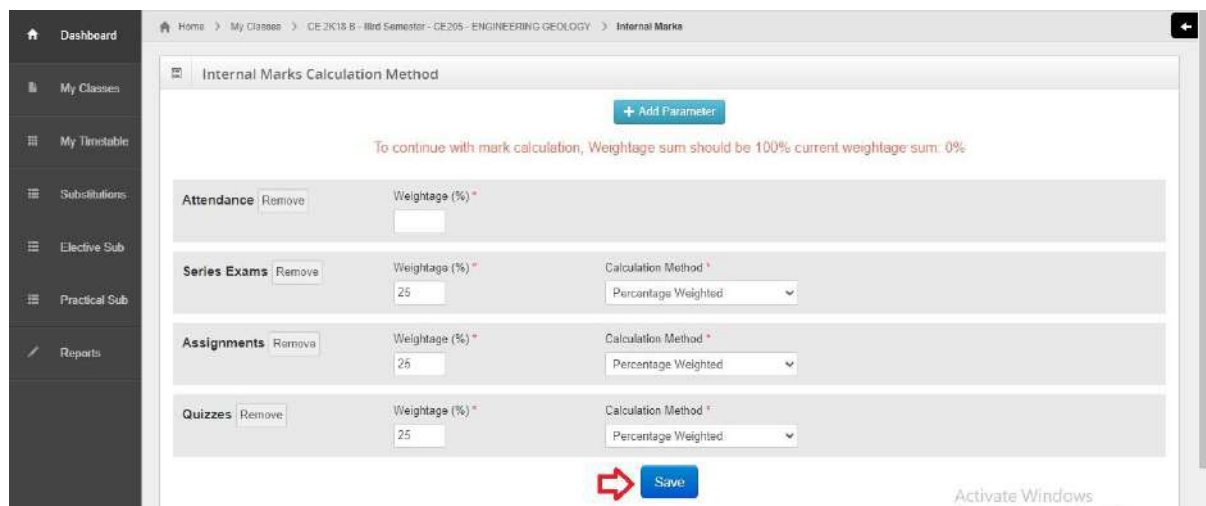


- Add the remaining parameters if it is required.
- Insert corresponding weightage and select calculation method from the drop-down menu.



- If you want to remove any parameters
- Click 

- After adding Parameters click the save button below




Internal Marks Calculation Method

[+ Add Parameter](#)

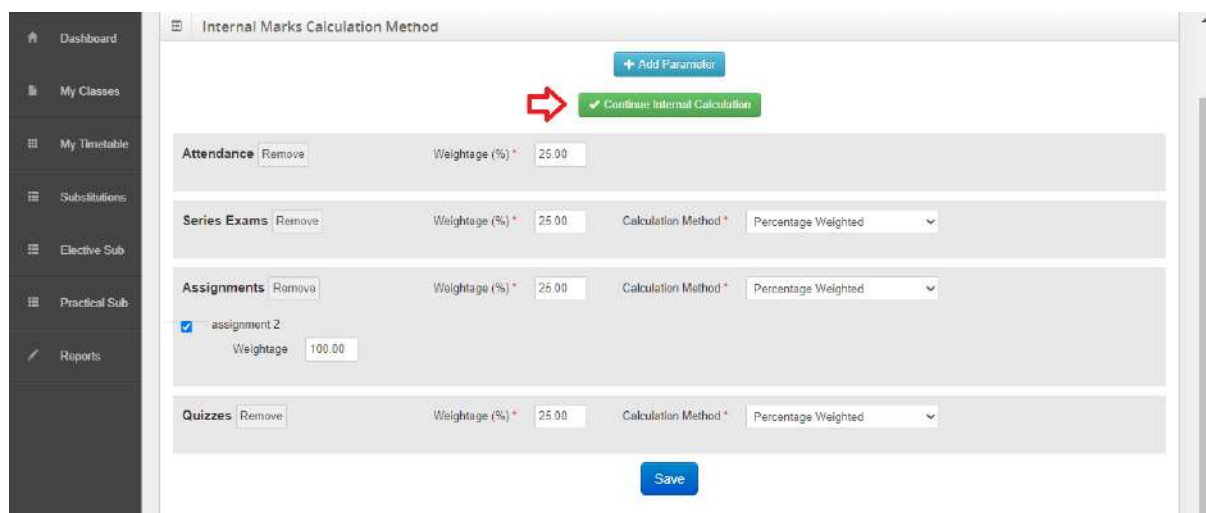
To continue with mark calculation, Weightage sum should be 100% current weightage sum: 0%

|              |                        |                 |    |                      |                     |
|--------------|------------------------|-----------------|----|----------------------|---------------------|
| Attendance   | <a href="#">Remove</a> | Weightage (%) * |    | Calculation Method * |                     |
| Series Exams | <a href="#">Remove</a> | Weightage (%) * | 25 | Calculation Method * | Percentage Weighted |
| Assignments  | <a href="#">Remove</a> | Weightage (%) * | 25 | Calculation Method * | Percentage Weighted |
| Quizzes      | <a href="#">Remove</a> | Weightage (%) * | 25 | Calculation Method * | Percentage Weighted |

 [Save](#)


Activate Windows

- Click on the Continue Internal Calculation



Internal Marks Calculation Method

[+ Add Parameter](#)

 [Continue Internal Calculation](#)

|  |                        |                 |        |                      |                     |
|--|------------------------|-----------------|--------|----------------------|---------------------|
| Attendance                                       | <a href="#">Remove</a> | Weightage (%) * | 25.00  | Calculation Method * |                     |
| Series Exams                                     | <a href="#">Remove</a> | Weightage (%) * | 25.00  | Calculation Method * | Percentage Weighted |
| Assignments                                      | <a href="#">Remove</a> | Weightage (%) * | 25.00  | Calculation Method * | Percentage Weighted |
| <input checked="" type="checkbox"/> assignment 2 |                        | Weightage       | 100.00 |                      |                     |
| Quizzes  | <a href="#">Remove</a> | Weightage (%) * | 25.00  | Calculation Method * | Percentage Weighted |

[Save](#)



- Previously entered attendance and marks for Series exams, assignments, and quizzes for each student will be displayed in the table.

Internal Marks

Forward Marks To Staff Advisor Download (Ktu Format) Download

Calculation Method

Save marks by submitting Save button in the bottom of the table

Save Marks & Calculate Internal

| Roll No | Name               | Attendance (25.00 %) |               | Series Exams (25.00 %)<br>Method: Percentage Weighted |               | Assignments (25.00 %)<br>Method: Percentage Weighted |               | Quizzes (25.00 %)<br>Method: Percentage Weighted |                            | Total |    |
|---------|--------------------|----------------------|---------------|---|---------------|--|---------------|--|----------------------------|-------|----|
|         |                    | (out of 12.5)        | (out of 12.5) | (out of 12.5)   | (out of 12.5) | (out of 12.5)  | (out of 12.5) | Grace Marks<br>Add                               | Final Score<br>(out of 50) |       |    |
| 1       | JITHIN KRISHNA S R | 1/1 (100%)           | 12.50         | 0.00  | 0             | 0.00   | 0.00          | 0.00   |                            |       | 13 |
| 10      | MEKHA M            | 1/1 (100%)           | 12.50         | 0.00  | 0             | 0.00   | 0.00          | 0.00   |                            |       | 13 |
| 11      | MUHAMMEDSUHAIL K A | 1/1 (100%)           | 12.50         | 0.00  | 0             | 0.00   | 0.00          | 0.00   |                            |       | 13 |
| 12      | NAJIYA NASRIN      | 1/1 (100%)           | 12.50         | 0.00  | 0             | 0.00   | 0.00          | 0.00   |                            |       | 13 |
| 13      | NANDINI A          | 1/1 (100%)           | 12.50         | 0.00  | 0             | 0.00   | 0.00          | 0.00   |                            |       | 13 |
| 14      | NASEEBANA          | 1/1 (100%)           | 12.50         | 0.00  | 0             | 0.00   | 0.00          | 0.00   |                            |       | 13 |
| 15      | NATHASHAAS         | 1/1 (100%)           | 12.50         | 0.00  | 0             | 0.00   | 0.00          | 0.00   |                            |       | 13 |

- Save marks by submitting save button in the bottom of the table. And it will automatically calculate total internal mark for individual student.

|    |                   |            |       |      |   |      |      |      |  |  |    |
|----|-------------------|------------|-------|------|---|------|------|------|--|--|----|
| 56 | VIGNESH K R       | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 57 | VISMAYA BABU      | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 58 | YADHU SURESH      | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 59 | ATHIRA K          | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 6  | LINA MAQBOOL      | 0/1 (0%)   | 10.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 10 |
| 60 | HISHAM K          | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 61 | LAMEESHA SHERIN K | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 62 | NIMI P R          | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 63 | PEER ROUF AHMAD   | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 64 | PREEMA K          | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |
| 7  | MANISHA M         | 0/1 (0%)   | 10.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 10 |
| 8  | MANJIMA B         | 0/1 (0%)   | 10.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 10 |
| 9  | MEGHANA K C       | 1/1 (100%) | 12.50 | 0.00 | 0 | 0.00 | 0.00 | 0.00 |  |  | 13 |

Save Marks & Calculate Internal

➤ To download Mark sheet click

Download

Internal Marks

Save marks by submitting Save button in the bottom of the table

| Roll No | Name               | Attendance (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Series Exams (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Assignments (25.00 %)<br>Method: Percentage Weighted<br>assignment 2(out of 10)<br>100.00%<br>(out of 12.5) | Quizzes (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Total<br>(out of 50) |
|---------|--------------------|--|--|---|---|----------------------|
| 1       | JITHIN KRISHNA S R | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 32                   |
| 10      | MEKHA M            | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 18                   |
| 11      | MUHAMMEDSUHAIL KA  | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 14                   |
| 12      | NAJIYA NASRIN      | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 13      | NANDINI A          | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 14      | NASEEBANA          | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 15      | NATHASHAAS         | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 16      | NAVANEETH K        | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 17      | NAVEEN R           | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |

➤ To download mark sheet in KTU format click

Download (Ktu Format)

Internal Marks

Save marks by submitting Save button in the bottom of the table

| Roll No | Name               | Attendance (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Series Exams (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Assignments (25.00 %)<br>Method: Percentage Weighted<br>assignment 2(out of 10)<br>100.00%<br>(out of 12.5) | Quizzes (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Total<br>(out of 50) |
|---------|--------------------|--|--|---|---|----------------------|
| 1       | JITHIN KRISHNA S R | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 32                   |
| 10      | MEKHA M            | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 18                   |
| 11      | MUHAMMEDSUHAIL KA  | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 14                   |
| 12      | NAJIYA NASRIN      | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 13      | NANDINI A          | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 14      | NASEEBANA          | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 15      | NATHASHAAS         | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 16      | NAVANEETH K        | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |
| 17      | NAVEEN R           | 1/1 ( 100%)<br>12.5  | 0  | 0   | 0   | 13                   |

➤ To publish marks to students, click

↑ Publish marks to students

Internal Marks

Save marks by submitting Save button in the bottom of the table

| Roll No | Name               | Attendance (25.00 %)<br>(out of 12.5) | Series Exams (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Assignments (25.00 %)<br>Method: Percentage Weighted<br>assignment 2(out of 10)<br>100.00%<br>(out of 12.5) | Quizzes (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Total<br>(out of 50) |
|---------|--------------------|---------------------------------------|--|---|---|----------------------|
| 1       | JITHIN KRISHNA S R | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 32                   |
| 10      | MEKHAM             | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 18                   |
| 11      | MUHAMMEDSUHAIL KA  | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 14                   |
| 12      | NAJIYA NASRIN      | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 13      | NANDINI A          | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 14      | NASEEBANA          | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 15      | NATHASHAAS         | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 16      | NAVANEETH K        | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 17      | NAVEEN R           | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |

➤ To forward marks to staff advisor, click

↑ Forward Marks To Staff Advisor

Internal Marks

Save marks by submitting Save button in the bottom of the table

| Roll No | Name               | Attendance (25.00 %)<br>(out of 12.5) | Series Exams (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Assignments (25.00 %)<br>Method: Percentage Weighted<br>assignment 2(out of 10)<br>100.00%<br>(out of 12.5) | Quizzes (25.00 %)<br>Method: Percentage Weighted<br>(out of 12.5) | Total<br>(out of 50) |
|---------|--------------------|---------------------------------------|--|---|---|----------------------|
| 1       | JITHIN KRISHNA S R | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 32                   |
| 10      | MEKHAM             | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 18                   |
| 11      | MUHAMMEDSUHAIL KA  | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 14                   |
| 12      | NAJIYA NASRIN      | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 13      | NANDINI A          | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 14      | NASEEBANA          | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 15      | NATHASHAAS         | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 16      | NAVANEETH K        | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |
| 17      | NAVEEN R           | 1/1 ( 100%)<br>12.5                   | 0  | 0   | 0   | 13                   |

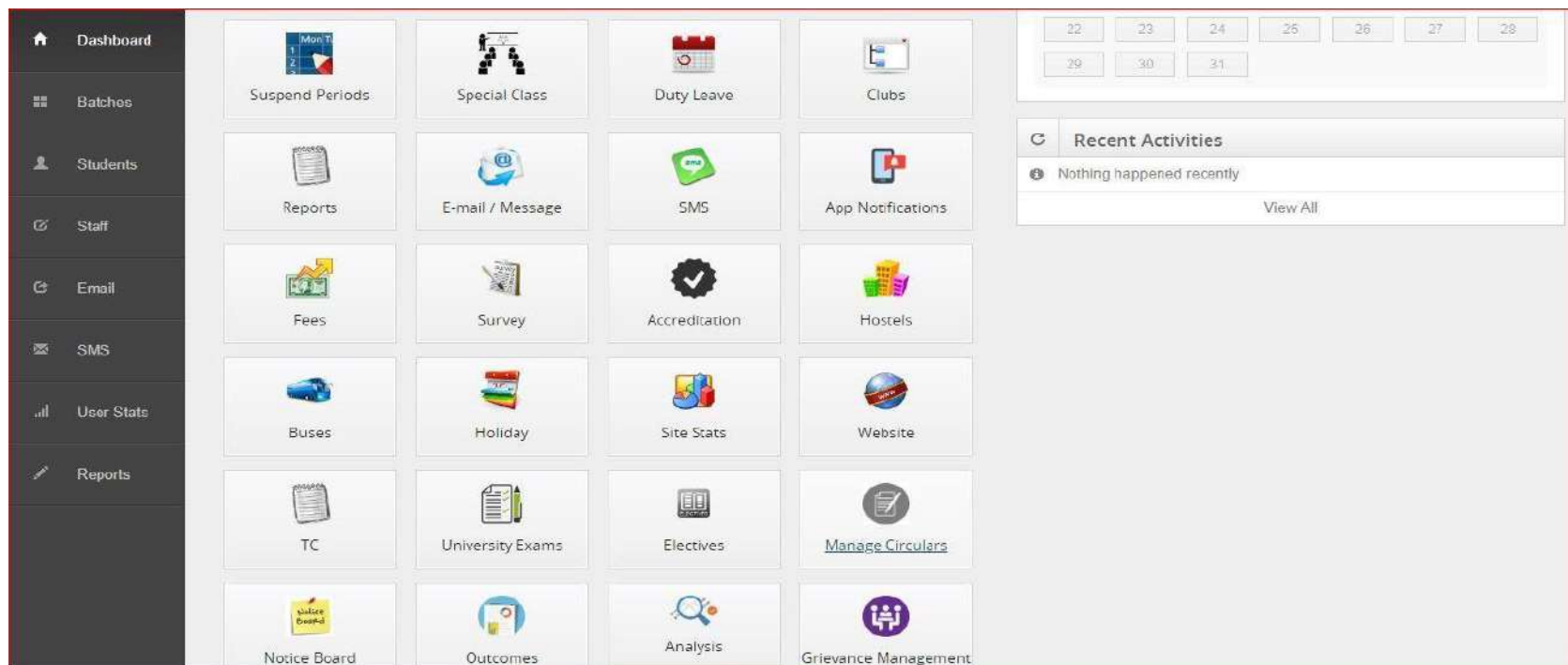


## CO ASSESSMENT

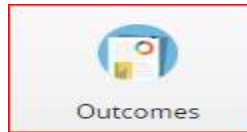
- To find co attainment, first we have to add Program Outcomes (POs), Programme Educational Objectives (PEOs) and Programme Specific Outcomes (PSO)
- Admin can add POs and HOD can add PEOs and PSOs.

### ❖ Admin

- Login to admin dashboard



➤ Choose



etlab Sat, 16 Nov 2019 14:40:27 GMT+0530 (India Standard Time) admin Messages 0 Logout

Home > Outcome Assessment > Program Outcomes

Program Outcomes + Add new Outcome PO Attainment

Displaying 1-10 of 12 results

| Category | Department | Heading | Content   |  |
|----------|------------|---------|---|--|
| PO       | -          | PO1     | Identify, formulate, design, analyze and implement an <b>electrical and electronics</b> system, component, or process to meet desired needs.  |  |
| PO       | -          | PO2     | Apply knowledge of Mathematics, Science and <b>Engineering</b> to solve the complex problems in <b>Electrical and Electronics Engineering</b> .   |  |
| PO       | -          | PO3     | Design system components that meet economic, environmental, social, political, ethical, health and safety, and sustainability requirements.   |  |
| PO       | -          | PO4     | Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.                    |  |
| PO       | -          | PO5     | Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. |  |
| PO       | -          | PO6     | Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.                           |  |

➤ Previously added program outcomes (PO) are displayed here. To add new PO, click on

[+ Add new Outcome](#)



The screenshot shows the 'etlab' web application interface. The top navigation bar includes the logo, the date and time 'Sat, 16 Nov 2019 15:01:04 GMT+0530 (India Standard Time)', and user options for 'admin', 'Messages', and 'Logout'. A left sidebar contains menu items: Dashboard, Batches, Students, Staff, Email, SMS, User Stats, and Reports. The main content area is titled 'Home > Program Outcomes > Create'. Below this is a 'Create Outcomes' section with a note 'Fields with \* are required.'. It contains two form fields: 'Category \*' with a dropdown menu showing 'PO' and 'Heading \*' with a text area containing 'PO 7'. To the right of these fields is a 'Content' editor with a rich text toolbar and a text area containing the text 'Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.'. At the bottom of the form is a blue 'Create' button with a checkmark icon.

- Fill the fields and click on create button.

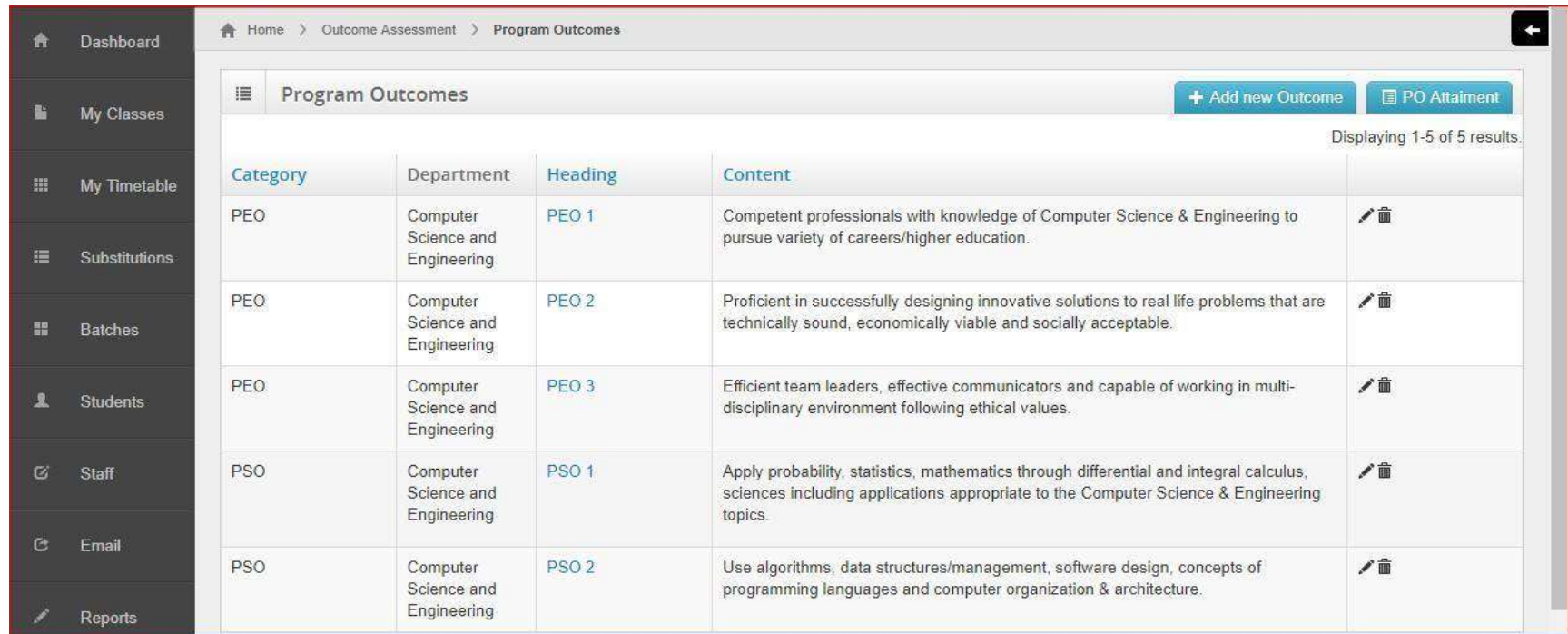
### ❖ HOD











- Login to HOD dashboard




➤ choose





| Category | Department                       | Heading | Content  |   |
|----------|----------------------------------|---------|--|---|
| PEO      | Computer Science and Engineering | PEO 1   | Competent professionals with knowledge of Computer Science & Engineering to pursue variety of careers/higher education.  |   |
| PEO      | Computer Science and Engineering | PEO 2   | Proficient in successfully designing innovative solutions to real life problems that are technically sound, economically viable and socially acceptable.                         |   |
| PEO      | Computer Science and Engineering | PEO 3   | Efficient team leaders, effective communicators and capable of working in multi-disciplinary environment following ethical values.   |   |
| PSO      | Computer Science and Engineering | PSO 1   | Apply probability, statistics, mathematics through differential and integral calculus, sciences including applications appropriate to the Computer Science & Engineering topics. |   |
| PSO      | Computer Science and Engineering | PSO 2   | Use algorithms, data structures/management, software design, concepts of programming languages and computer organization & architecture.   |   |

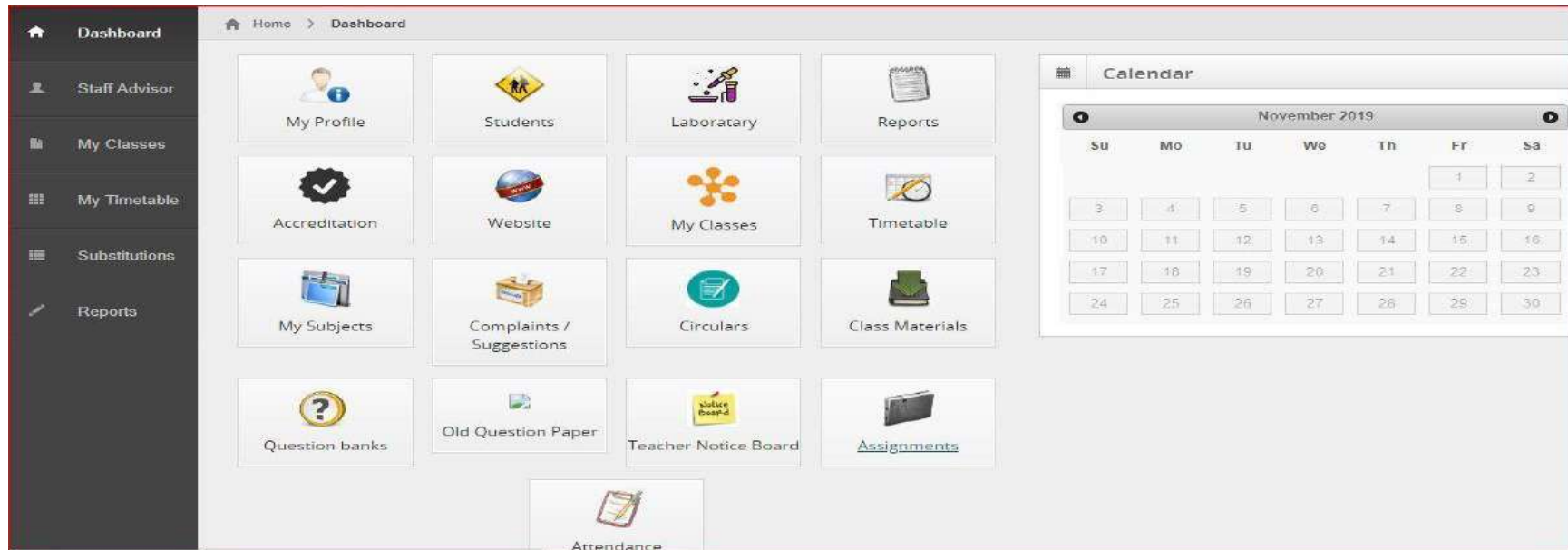
- Previously added PEOs and PSOs are displayed here.
- To add new PEO/PSO click on 

The screenshot shows a web application interface for creating program outcomes. On the left is a dark sidebar with navigation links: Dashboard, My Classes, My Timetable, Substitutions, Batches, Students, Staff, and Email. The main area has a breadcrumb trail: Home > Program Outcomes > Create. Below this is a tab labeled '+ Create Outcomes'. A note states 'Fields with \* are required.' The form contains three main fields: 'Category \*' with a dropdown menu showing 'PEO', 'Heading \*' with a text input field containing 'PEO 3', and 'Content' with a rich text editor. The rich text editor has a toolbar with icons for undo, redo, bold, italic, strikethrough, link, unlink, list, and other formatting options. The text in the editor reads: 'Capable of adapting to new technologies and constantly upgrade their skills with an attitude towards lifelong learning.' At the bottom of the form is a blue button with a checkmark and the text 'Create'.

- Choose PEO/PSO from category drop down list.
- Fill remaining fields and click on create button.

## ❖ Staff

### ➤ Login to staff dashboard



### ➤ Choose



|                               |                             |               |          |  |
|-------------------------------|-----------------------------|---------------|----------|--|
| <a href="#">Dashboard</a>     | Home > My Classes           |               |          |  |
| <a href="#">Staff Advisor</a> | Teaching Classes / Subjects |               |          |  |
| <a href="#">My Classes</a>    | Batch Name                  | Staff Advisor | Students | Current Semesters (Subjects)   |
| <a href="#">My Timetable</a>  | EE 2K17                     | SARITHA.M     | 71       | Vth Semester - Timetable, Class Timetable<br>• Object Oriented Programming                 |
| <a href="#">Substitutions</a> | EE 2K18                     | SUKESH A      | 68       | IIIRD Semester - Timetable, Class Timetable<br>• COMPUTER PROGRAMMING<br>• PROGRAMMING LAB |
| <a href="#">Reports</a>       | Staff Advisor               |               |          |  |
|                               | Batch Name                  | Staff Advisor | Students |  |
|                               | EE 2K12                     | BABURAJ P     | 0        |  |

- Choose the subject
- Click on ▼ More button.



- Choose **Series Exams** from **more** dropdown list.

| name          | Export                          | Status                |                                |
|---------------|---------------------------------|-----------------------|--------------------------------|
| Series Exam 1 | <a href="#">Download Report</a> | Results not published | <a href="#">Publish result</a> |
| Series Exam 2 | <a href="#">Download Report</a> | Results not published | <a href="#">Publish result</a> |

- Previously added series exams are displayed here. To add new series exam, click on

[+ Add an Exam](#)

Fields with \* are required.

Name \*

Maximum Mark \*

Date \*

Period \*

Periods as comma seperated (Eg. 1,2,3)

CO BASED ? ☒

[Create](#)

- Fill the exam name, maximum marks, date and period for the exam.
- If the exam is co based, then put ✓ mark for **CO BASED** check box.

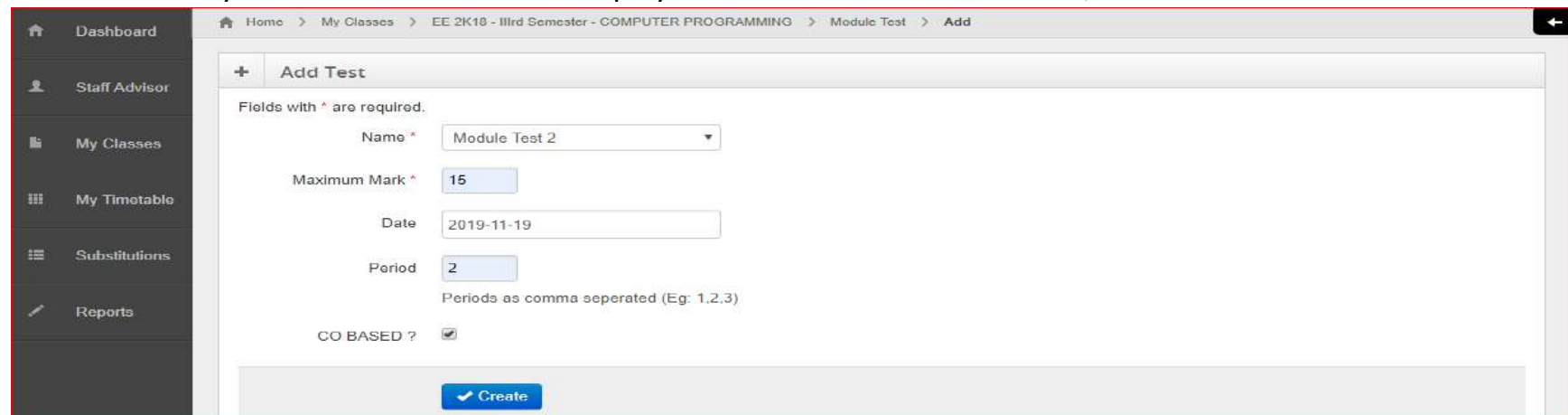
- Choose **Module Test** from **more** drop down list.



The screenshot shows a web application interface for managing module tests. On the left is a dark sidebar with navigation links: Dashboard, Staff Advisor, My Classes, My Timetable, Substitutions, and Reports. The main content area has a breadcrumb trail: Home > My Classes > EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING > Module Test. Below the breadcrumb is a 'Module Test' header with an '+ Add an Exam' button. A table displays the list of tests with columns for name, Export, and Status. One test, 'Module Test 1', is listed with a 'Download Report' link. To the right of the table, it says 'Displaying 1-1 of 1 result.' and a 'Publish result' button with an icon.

| name          | Export                          | Status |
|---------------|---------------------------------|--------|
| Module Test 1 | <a href="#">Download Report</a> |        |

- Previously added module tests will display here. To add new module test, click on



The screenshot shows the 'Add Test' form. The breadcrumb trail is: Home > My Classes > EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING > Module Test > Add. The form has a '+ Add Test' header. Below it, a note says 'Fields with \* are required.' The form fields are: Name \* (dropdown menu with 'Module Test 2' selected), Maximum Mark \* (input field with '15'), Date (input field with '2019-11-19'), Period (input field with '2'), and CO BASED ? (checkbox checked). A note below the Period field says 'Periods as comma seperated (Eg: 1,2,3)'. At the bottom is a blue 'Create' button with a checkmark icon.

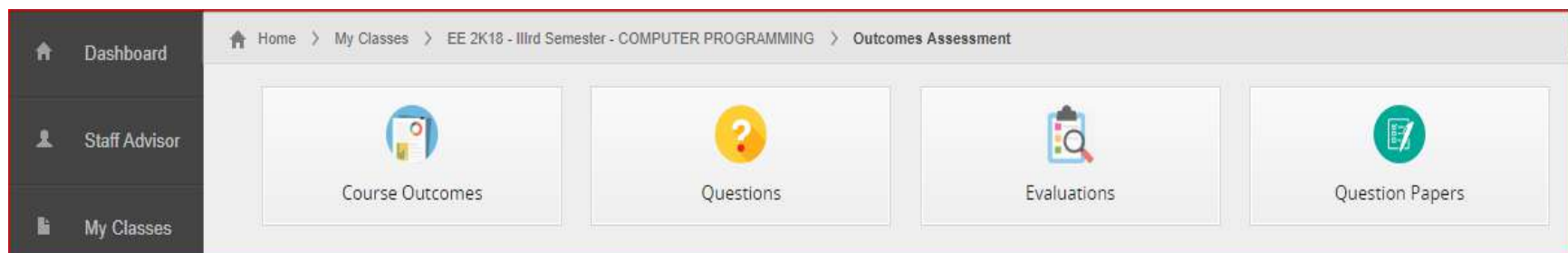
- Fill the exam name, maximum marks, date and period for the exam.
- If the exam is co based, then put ✓ mark for **CO BASED** check box and click create button.

- Choose **Assignments** from **more** drop down list.

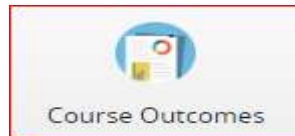
The screenshot shows the 'Issue an assignment' form within a web application. The left sidebar contains navigation links: Dashboard, Staff Advisor, My Classes, My Timetable, Substitutions, and Reports. The main content area has a breadcrumb trail: Home > My Classes > EE 2K18 - Illrd Semester - COMPUTER PROGRAMMING > Assignments > Issue. The form itself is titled '+ Issue an assignment' and includes a note 'Fields with \* are required.'. It contains several input fields: 'Title \*' (text box), 'Type \*' (dropdown menu set to 'SUBMIT BY UPLOAD'), 'Maximum Mark \*' (text box), 'Issued On Date \*' (date picker set to '2019-11-18'), and 'Last Date \*' (text box). There is an 'Upload File' section with a 'Choose File' button and the text 'No file chosen'. Below this, it specifies 'Maximum size 5MB' and lists supported file formats: 'jpg, jpeg, png, bmp, pdf, doc, docx, xls, xlsx, ppt, pptx, zip, rar'. A 'CO BASED ?' checkbox is at the bottom left. A large text area on the right is labeled 'Details:'. A blue 'Issue' button is at the bottom center.

- Give assignment title, type (manual submission/ submit by upload), issued date, last date, choose assignment questions.
- If the assignment is co based, then put ✓ mark for **CO BASED** check box and click issue button.

- Choose **co attainment** from **more** dropdown list.



➤ Choose



to add co for this subject.

Home > My Classes > EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING > Course Outcome

Course Outcome

Export + Add Course Outcome

| CO  | Description   | Bloom's taxonomy level |  |  |
|-----|---|------------------------|--|--|
| CO1 | Explain the basic concepts of hardware, system software and fundamentals of C programming language such as tokens, keywords, jumps, loops etc.                        | Understanding(U)       |  |  |
| CO2 | Develop algorithms and draw flow chart for solving a problem  | Applying(P)            |  |  |
| CO3 | Create, analyze and debug short C programs  | Analyzing(A)           |  |  |
| CO4 | Write programs using arrays, functions and do string manipulations  | Applying(P)            |  |  |
| CO5 | Divide a complex problem into simple problems to write codes using library functions, recursion, pointers, structures, file operations and different storage classes. | Analyzing(A)           |  |  |
| CO6 | Develop simple programs using Python  | Applying(P)            |  |  |

➤ Previously added COs are displayed here. To add new CO, click on

+ Add Course Outcome

button.

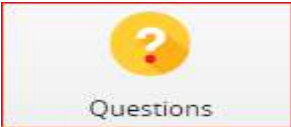
Home > My Classes > EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING > Course Outcome > Add

+ Add Course Outcome

CO Id \*

Blooms Taxonomy Level

Outcome \*

- Choose co id, bloom's taxonomy from dropdown list and enter outcome description, then click on Add button.
- Choose  to add co based questions for this particular subject.

etlab Thu, 21 Jul 2022 16:02:23 GMT+0530 (India Standard Time) SAJITH V S Messages 0 Logout

Home > My Classes > ME 2K17 B - VIIIth Semester - ME407 - MECHATRONICS > Outcome Assessment > CO based Questions

**CO based Questions** [+ Add new questions](#) [Linked Questions](#)

Displaying 1-4 of 4 results.

| Question ID | Question   | Mark  | Co  | Module | Category | Type |   |
|-------------|--|-------|-----|--------|----------|------|---|
| 1           | orem ipsum dolor sit amet, consectetur adipiscing elit. Aenean commodo ligula eget dolor. Aenean massa. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Donec quam felis, ultricies nec, pellentesque eu, pretium quis, sem. Nulla consequat massa quis enim. Donec pede justo, fringilla vel, aliquet nec, vulputate eget, arcu. In enim justo, rhoncus ut, imperdiet a, venenatis vitae, justo. Nullam dictum felis eu pede mollis pretium. Integer tincidunt. Cras dapibus. Vivamus elementum semper nisi. Aenean vulputate eleifend tellus. Aenean leo ligula, porttitor eu, consequat vitae, eleifend ac, enim. Aliquam lorem ante, dapibus in, viverra quis, feugiat a, tellus. Phasellus viverra nulla ut metus varius laoreet. Quisque rutrum. Aenean imperdiet. Etiam ultricies nisi vel augue. Curabitur ullamcorper ultricies nisi. Nam eget dui. Etiam rhoncus. Maecenas | 10.00 | CO1 | 1      | Theory   | Easy |   |

- Previously added questions are displayed here. To add new question, click on [+ Add new questions](#) button.

**Create Cobasedquestions**

Fields with \* are required.

Module \*

Co \*

Level \*

Type \*

Category \*

Keyword \*

Mark \*

[Help for adding mathematical formulas](#)

Question

Uploaded Image  No file chosen  
Maximum size 2MB

Hint

Answer


- Choose module, co, level of question (Remembering/ Understanding/ Applying/ Analyzing/ Evaluate/ Create), type of the question (Easy/ Medium/ Hard), Category (Theory/ Practical), enter mark of the question.
- Enter question on question field.
- To add mathematical formula, click on [Help for adding mathematical formulas](#).
- Enter mathematical formula in question field as follows:

$$[m]S(f)(t)=a_{\{0\}}+\sum\{n=1\}\{+\infty\}\{a_{\{n\}}\cos(n\omega t)+b_{\{n\}}\sin(n\omega t)\}[/m]$$

➤ Type the formula in between [m] and [\\m] as shown in above example.

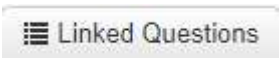
➤ To upload diagrams, click on choose file

and select the image.




➤ Image size should be less than 2 MB.

➤ Fill all data and click on create button.

- Choose  Linked Questions to make a group of same kind of questions.
- If one of the question is chosen from this group, then no question will choose from that group to same question paper.

[Home](#) > [My Classes](#) > [ME 2K17 B - VIth Semester - ME407 - MECHATRONICS](#) > [Outcome Assessment](#) > [CO based Questions](#) > [CO Based Questions Group](#)

Group similar topic questions to avoid them appearing in same question paper when auto generating question paper. ×

 **CO Based Questions Group**

[+ New Question Group](#)

| Name                 | Subject |
|----------------------|---------|
| <input type="text"/> |         |


No groups found

- Click on the new question group button.





Home > My Classes > ME 2K17 B - VIth Semester - ME407 - MECHATRONICS > Outcome Assessment > CO based Questions > CO Based Questions Group

Group similar topic questions to avoid them appearing in same question paper when auto generating question paper. ✕


 **CO Based Questions Group** + New Question Group

Displaying 1-1 of 1 result.

| Name                                  | Subject      |   |
|---------------------------------------|--------------|---|
| <a href="#">Remembering Questions</a> | MECHATRONICS |   |

- Click on the newly added group

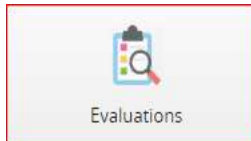
Home > My Classes > ME 2K17 B - VIth Semester - ME407 - MECHATRONICS > Outcome Assessment > CO based Questions > CO Based Questions Group > Linked Questions

 **Remembering Questions - Linked Questions** + Add New Question To Group Link Existing Questions

| Question      | Mark | Co | Module | Category |
|---------------|------|----|--------|----------|
| No data found |      |    |        |          |

- You can either create new question nor you can link existing questions to this group.

➤ Choose



[Dashboard](#)  
[Staff Advisor](#)  
[My Classes](#)  
[My Timetable](#)

Home > My Classes > EE 2K18 - IIIRD Semester - COMPUTER PROGRAMMING > Outcome Assessment > CO based Evaluation

CO Based Evaluations

[+ Add new Evaluation](#)[+ Overall attainment](#)[View Templates](#)

Displaying 1-2 of 2 results.

| Exam Name                      | Type        | Batch | Subject              | Total Mark | Total Time |  |
|--------------------------------|-------------|-------|----------------------|------------|------------|--|
| <a href="#">Series Exam1</a>   | Series Exam | 2K18  | COMPUTER PROGRAMMING | 20         | 1Hr        | <a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a> |
| <a href="#">Series Exam II</a> | Series Exam | 2K18  | COMPUTER PROGRAMMING | 20         | 1HR        | <a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a> |

➤ Previously added series exams, module tests, assignments will display here.

➤ To add new exam, click on [+ Add new Evaluation](#) button.

Home > My Classes > EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING > Outcome Assessment > CO based exams > Add New Exam

### + Create CO Based Exam

Fields with \* are required..

Exam Name \*

Type \*

Method \*

Total Mark \*

Total Time \*

[✓ Create](#)

- Fill the exam details and click on create button.
- Go to co based evaluations.

Home > My Classes > EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING > Outcome Assessment > CO based Evaluation

### CO Based Evaluations

[+ Add new Evaluation](#) [View Templates](#)

Displaying 1-3 of 3 results

| Exam Name     | Batch | Subject              | Total Mark | Total Time |  |
|---------------|-------|----------------------|------------|------------|--|
| series exam 1 | 2K18  | COMPUTER PROGRAMMING | 20         | 1 hr       |  |
| module test 1 | 2K18  | COMPUTER PROGRAMMING | 20         | 1 hr       |  |
| assignment 1  | 2K18  | COMPUTER PROGRAMMING | 20         | 1 hr       |  |

- All co based exams are displayed here.
- Choose each exam to upload marks.
- Choose the exam

Home > My Classes > EE 2K18 - Illrd Semester - COMPUTER PROGRAMMING > Outcome Assessment > CO based exams > series exam 1

**CO based Question Paper** Choose template Cut-Off Criteria

Exam Name series exam 1

Batch 2K18

Subject Name COMPUTER PROGRAMMING

Total Mark 20

Total Time 1 hr

| Question No          | Q Name | Question             | Type                 |  |
|----------------------|--------|----------------------|----------------------|--|
| <input type="text"/> |        | <input type="text"/> | <input type="text"/> |  |

- Click on to create template for the exam.
- Click on [create a template](#).

**Create A New Template** ×

Template Name ✖ SERIES EXAM 2

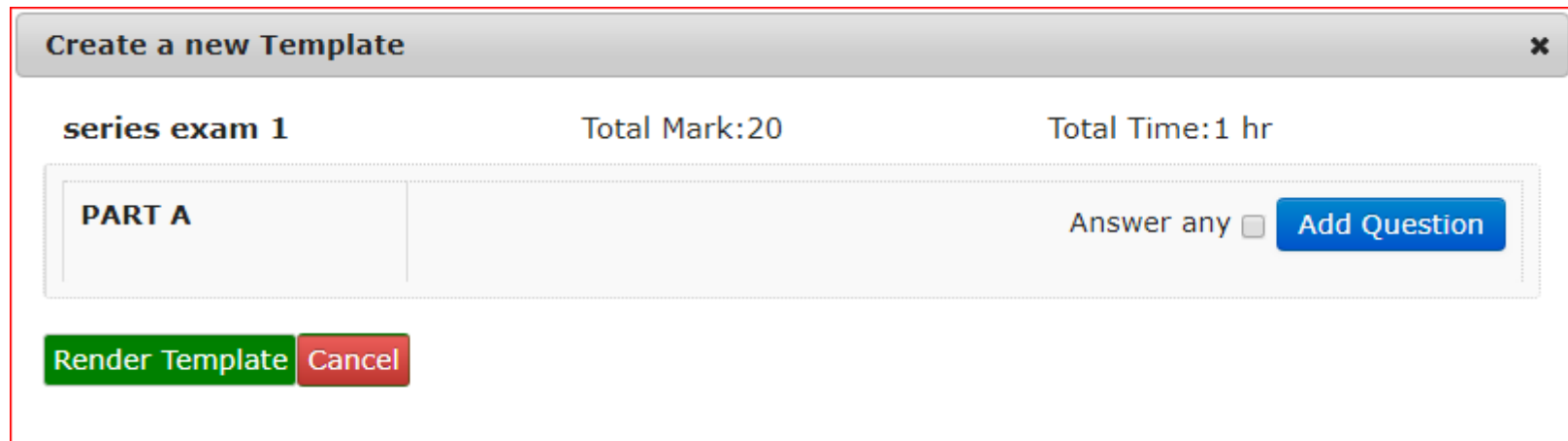
Total Mark ✖ 10

Total Time 1

No. of Parts 1

✓ Generate

- Fill the template details and click on generate button.



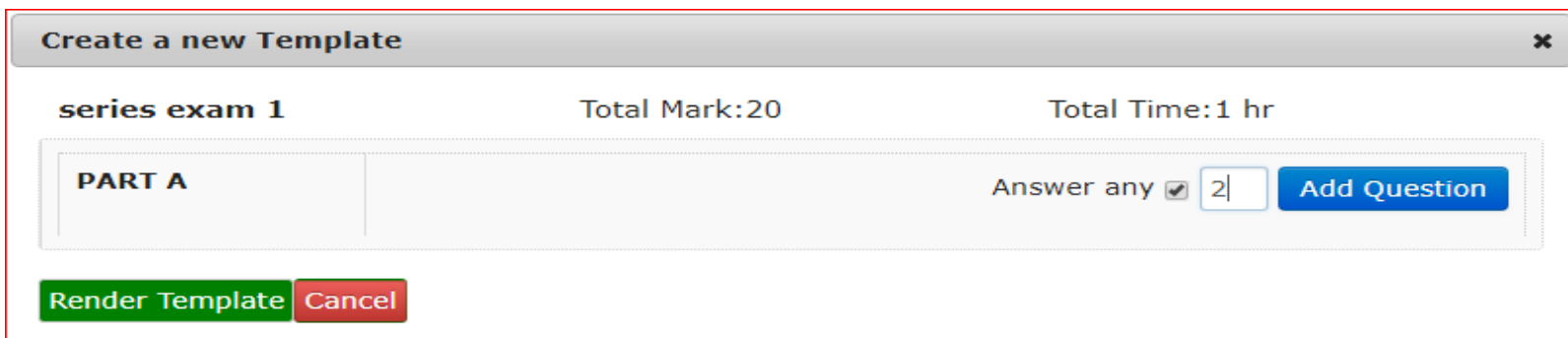
**Create a new Template** [X]

series exam 1      Total Mark:20      Total Time:1 hr

PART A      Answer any ☐      Add Question

Render Template   Cancel

- If the question paper contains answer any out of some question (eg: answer any 2 questions from the given 3 questions), then put ✓ mark for **Answer any** check box, then one box will display and fill that field with the number of questions to be attend as shown below.



**Create a new Template** [X]

series exam 1      Total Mark:20      Total Time:1 hr

PART A      Answer any ☒ 2      Add Question

Render Template   Cancel

- If we do not need “answer any question”, then click on to add questions to the question paper.

- Multiple co questions can be added here. For example, if a question has more than one co then choose multiple co from dropdown list as shown in above picture.

engnr.etlab.in says

Please enter mark of the multiple co question

OK Cancel

- Enter the mark of the question and click on ok button.

engnr.etlab.in says

Please specify the multiple CO's comma seperated (eg:1,2,3)

OK Cancel

- Enter Cos of the question comma separated and click on ok button.



Create A New Temp

SERIES EXAM 2

Total Mark:10  
Total Time:1

Q. 1

Multiple CO

1

2

5

2.5

2.5

PART A

Answer any ☐ Custom Display Text ☐

Add Question

Save Template

Cancel

- Enter mark for each co.

**Create a new Template**

series exam 1      Total Mark:20      Total Time:1 hr

**PART A**

Question      SubQuestion

**Q. 1**      no of sub-questic

**OR**

**Q. 2**      no of sub-questic

**OR**

**Q. 3**      2

**OR**

**Q. 4**      no of sub-questic

Answer any ☐ **Add Question**

**Render Template** **Cancel**

- If two questions are **OR questions**, then click on OR button in-between that two questions. If you click on the OR button, it will turn to green color.

- If any question have **sub questions**, then fill the sub question field with no of questions and click on render template button.

Create a new Template

series exam 1

Total Mark : 20

Total Time : 1 hr

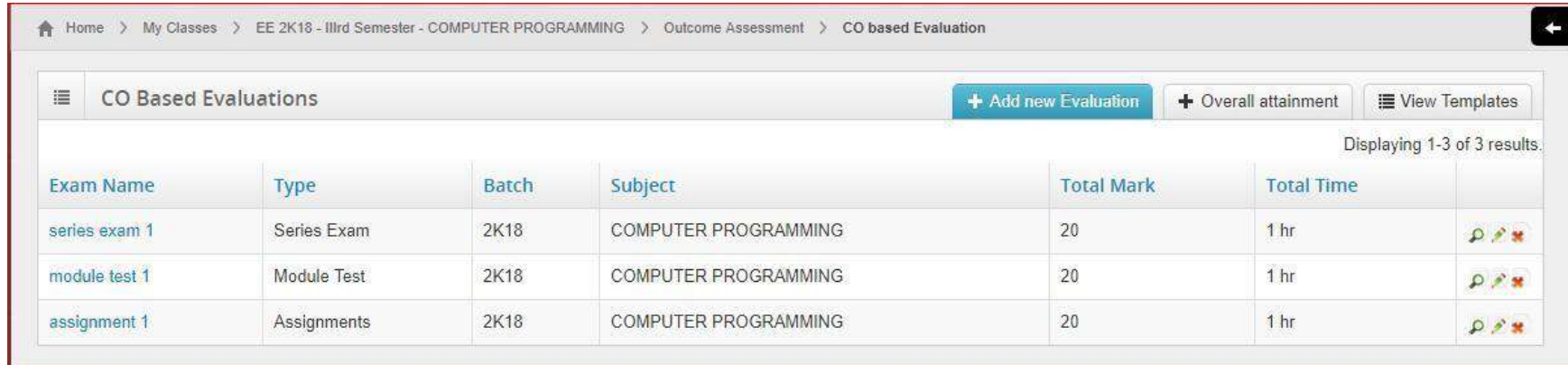
| Sl.    | CO | Mark |
|--------|----|------|
| PART A |    |      |
| 1      | 1  | 5    |
| 2      | 2  | 5    |
| 3      | 3  | 5    |
| 4      | 4  | 5    |










Save Template

Cancel

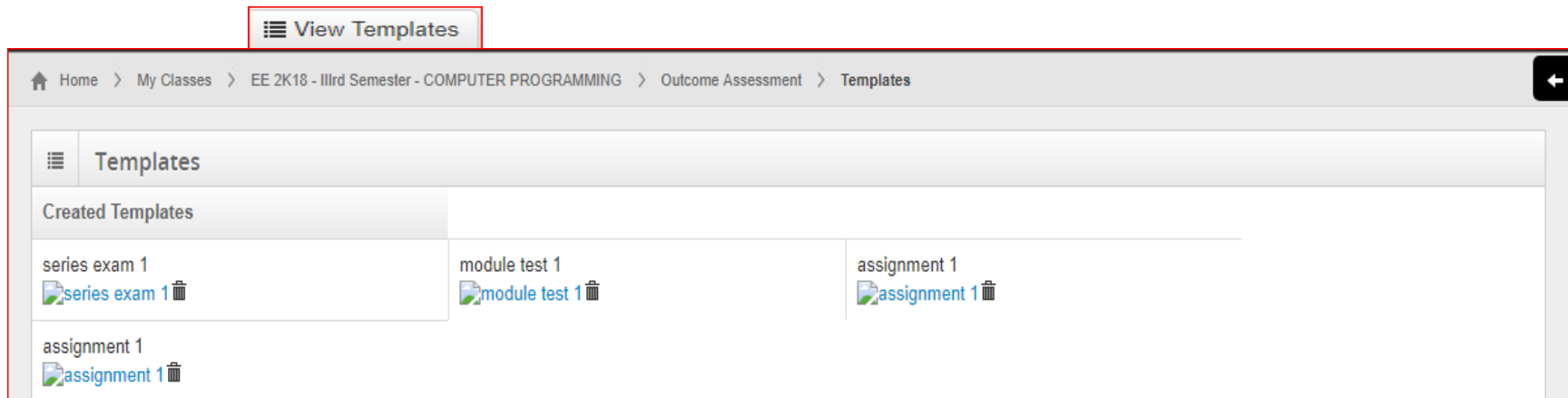
- Choose COs and enter marks for each question and click on save template button.
- Here has an option to copy and share the template.









## To copy / share a template




| CO Based Evaluations         |             |       |                      |            |            |   |
|------------------------------|-------------|-------|----------------------|------------|------------|---|
| Displaying 1-3 of 3 results. |             |       |                      |            |            |   |
| Exam Name                    | Type        | Batch | Subject              | Total Mark | Total Time |   |
| series exam 1                | Series Exam | 2K18  | COMPUTER PROGRAMMING | 20         | 1 hr       |    |
| module test 1                | Module Test | 2K18  | COMPUTER PROGRAMMING | 20         | 1 hr       |    |
| assignment 1                 | Assignments | 2K18  | COMPUTER PROGRAMMING | 20         | 1 hr       |    |

- Previously created templates are displayed here.
- If we want to copy the template [series exam 1](#), click on this exam



| Created Templates  |  |   |
|--|--|---|
| series exam 1<br>  | module test 1<br>  | assignment 1<br>  |
| assignment 1<br>   |  |   |



**Govt. College of Engineering Kannur Question Paper Template**  
Mangattuparamba Parassinikkadavu.P.O Kannur-670563,(Affiliated to Kerala Technological university)

Reg No. : \_\_\_\_\_

Name: \_\_\_\_\_

series exam 1  
Template Name \*

Total Mark:20  
Total Mark \*

Total Time:1 hr  
Total Time \*

Copy Template


| Q.No          | Sub.Q.No | Category | Module   | CO | Mark |
|---------------|----------|----------|----------|----|------|
| <b>PART A</b> |          |          |          |    |      |
| 1             | -        | Theory   | Module 1 | 1  | 5.0  |
| 2             | -        | Theory   | Module 1 | 2  | 5.0  |
| 3             | -        | Theory   | Module 1 | 3  | 5.0  |
| 4             | -        | Theory   | Module 1 | 4  | 5.0  |

Share Template

select

OK

➤ Click on **Copy Template** button to copy the template.



**Govt. College of Engineering Kannur Question Paper Template**  
Mangattuparamba Parassinikkadavu,P.O Kannur-670563,(Affiliated to Kerala Technological university)

Reg No.:

Name:

Template Name \*

series exam 3

Total Mark \*

25

Total Time \*

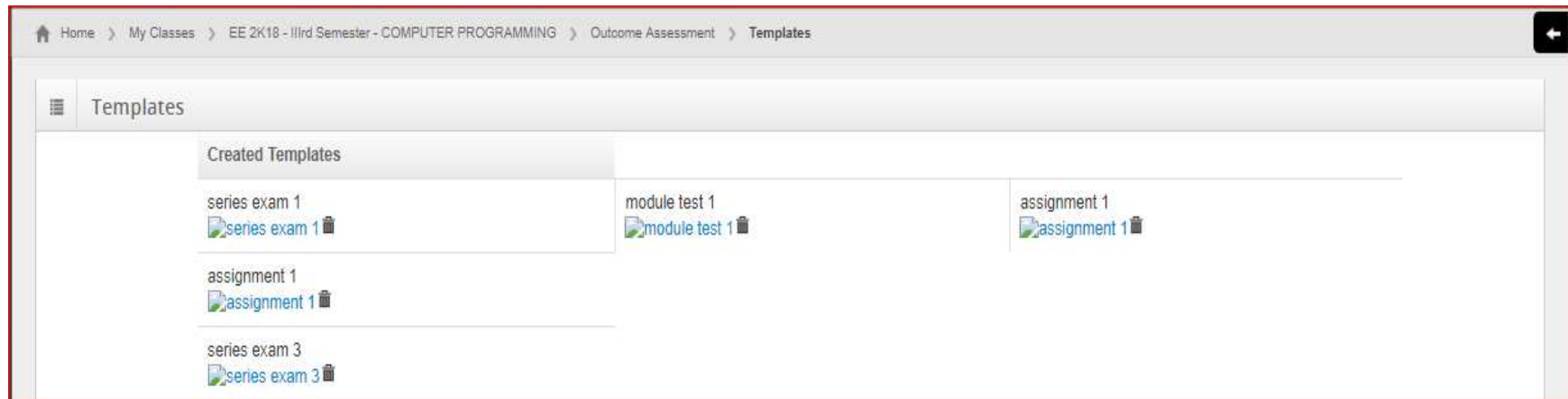
2 h

| Q.No          | Sub.Q.No | Category | Module   | CO | Mark |
|---------------|----------|----------|----------|----|------|
| <b>PART A</b> |          |          |          |    |      |
| 1             | -        | Theory   | Module 1 | 4  | 10   |
| 2             | -        | Theory   | Module 1 | 3  | 5.0  |
| 3             | -        | Theory   | Module 1 | 2  | 5.0  |
| 4             | -        | Theory   | Module 1 | 1  | 5.0  |

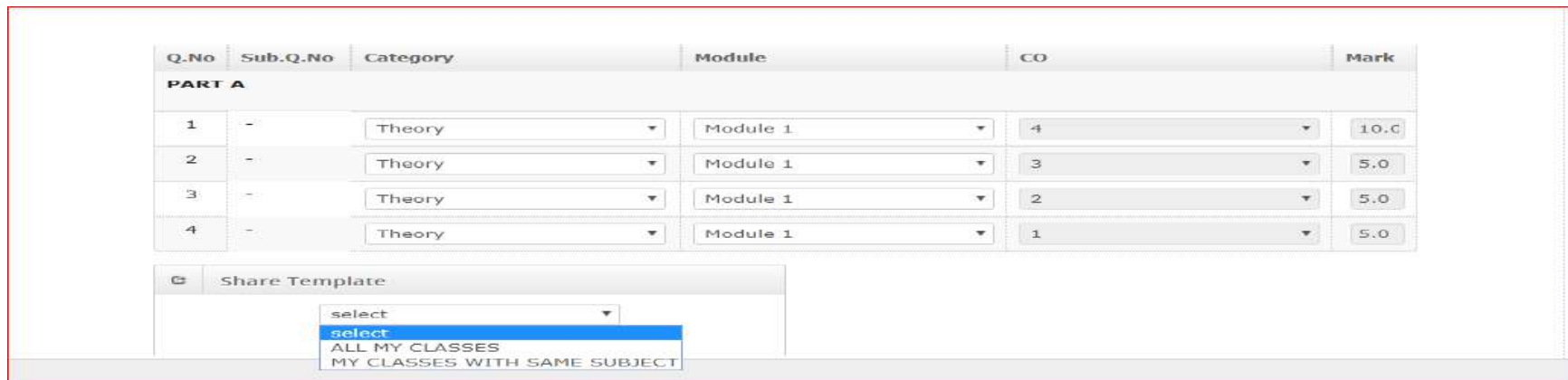
✓ Create

- Edit exam name, total mark and total time of the exam.
- We can change category, module, co and mark of each question
- Edit the exam details and click on [create](#) button.
- Other exams can choose the newly created template.

### ➤ To share template

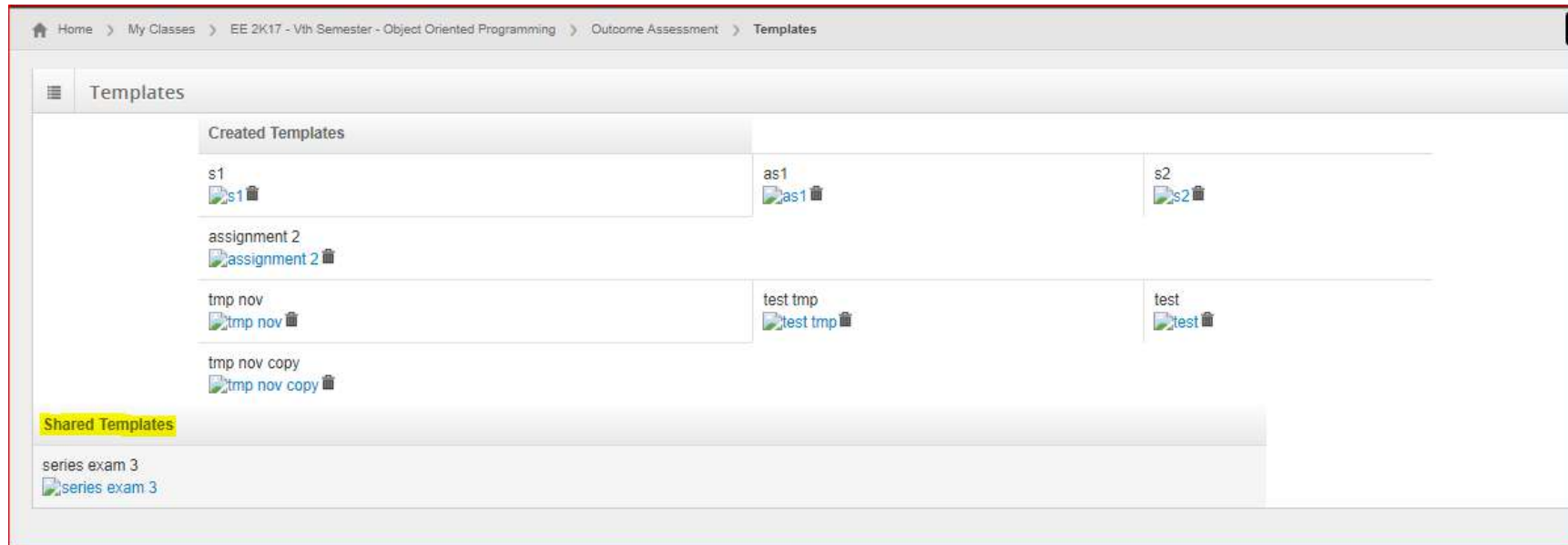


- Choose the template to be shared.
- Choose “ALL MY CLASSES” if you want to share the template to all your classes but with different subject.
- Choose “MY CLASSES WITH SAME SUBJECT” to share template to same subject that are in different classes.





- Choose the option and click on **ok** button.



- Shared template can choose from other classes.

➤ Choose the newly created template.

SERIES EXAM 2

Total Mark:10

Total Time:1

| Q.No | Sub.Q.No | Category          | Module              | CO           | Mark |
|------|----------|-------------------|---------------------|--------------|------|
| 1    |          | <div>Theory</div> | <div>Module 1</div> | Multiple CO  | 5.00 |
|      |          |                   |                     | <div>1</div> | 2.5  |
|      |          |                   |                     | <div>2</div> | 2.5  |
| 2    |          | <div>Theory</div> | <div>Module 1</div> | <div>3</div> | 5.00 |

+

Choose options

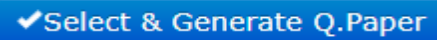
Type 


Easy

☒ Default ☐ 50-50% ☐ 60-40% ☐ 70-30% ☐ 80-20% ☐ 90-10%

[✔Select & Generate Q.Paper](#)[✔Select & Upload Marks](#)

➤ Choose










**Govt. College of Engineering Kannurseries exam 1**  
 Mangattuparamba Parassinikkadavu.P.O Kannur-670563,(Affiliated to Kerala Technological university)

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

|                                  |                    |                    |
|----------------------------------|--------------------|--------------------|
| series exam 1                    | Sem:IIIrd Semester | Course Code:EE 207 |
| Course Name:COMPUTER PROGRAMMING | Total Mark:20      | Total Time:1 hr    |

| Q.No          | Question  | Mark |   |
|---------------|---|------|---|
| <b>PART A</b> |   |      |   |
| 1             | What are constants?   | (5)  | Easy-M1-CO1    |
| 2             | Name different types of errors which can occur during the execution of a program? | (5)  | Easy-M1-CO2    |
| 3             | Define Numeric constants.   | (5)  | Easy-M1-CO3    |
| 4             | Define Low-level programming language.  | (5)  | Easy-M1-CO4  |



➤ Question paper has generated.

➤ To edit questions, click on edit option at the right side of the question.


➤ To take printout of the question paper, click on print button.


➤ Choose **✓Select & Upload Marks** to upload marks without generating question paper.


[Home](#) > [My Classes](#) > [EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING](#) > [Outcome Assessment](#) > [CO based exams](#) > [series exam1](#)

☰

CO based Question Paper

 mark upload

 Generate Question Paper

 Cut-Off Criteria

|              |                      |
|--------------|----------------------|
| Exam Name    | series exam1         |
| Batch        | 2K18                 |
| Subject Name | COMPUTER PROGRAMMING |
| Total Mark   | 20                   |
| Total Time   | 1 hr                 |

| Question No          | Q Name | Question             | Type                 |
|----------------------|--------|----------------------|----------------------|
| <input type="text"/> |        | <input type="text"/> | <input type="text"/> |

➤ Choose ** mark upload**

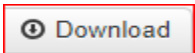
**Important :** You can upload the marks using the CSV format downloaded from the button "Download Format" available in the top right corner. Only downloaded CSV file will be accepted. All other file format will leads to wrong result in end semester calculation. Please skip empty field as it is(If output is not there you can keep the field as empty). Do not modify/re-arrange any data in the downloaded file.

No file chosen

---

Sub-Q Mark Split Upload ☒ Combined Mark Upload

| Roll Nos | Name            |        | Q 1(Multiple CO)     |                      | Q 1 Total (5.00)     | Q2 (5.00).CO3        | Total out of 10      |
|----------|-----------------|--------|----------------------|----------------------|----------------------|----------------------|----------------------|
|          |                 | PART A | a(2.5).CO1           | b(2.5).CO2           |                      |                      |                      |
| 101      | SAI PRASANTH N  |        | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 102      | JISHNU S        |        | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 103      | JITHIN P        |        | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 104      | NOVIN ANTONY    |        | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 105      | RAJEESH M       |        | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 106      | SANAL KUMAR A R |        | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 107      | SREERAG K R     |        | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 108      | MUHAMMED ALI N  |        | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

- Enter marks and click on save button.
- Multiple co question's mark can be added either total mark or can add separately. To add total mark / splitted mark of multiple co based question. Click on blue button present in-between Sub-Q Mark split upload and Combined Mark Upload.
- To download marks, click on  button.
- Marks can be uploaded as csv file. Staff can edit the downloaded file and upload by clicking on choose file button.

## To calculate cut off marks

➤ choose ↑ Cut-Off Criteria

The screenshot shows the 'etlab' interface with the 'Cut Off Criteria' form. The form is titled 'Cut Off Criteria' and has a 'Download Report' button. The form contains the following fields:

| Qn.No                   | Q1  | Q2  | Q3  | Q4  |
|-------------------------|-----|-----|-----|-----|
| CO                      | CO1 | CO2 | CO3 | CO4 |
| Max Mark                | 5.0 | 5.0 | 5.0 | 5.0 |
| Cut off criteria %      | 60  | 50  | 80  | 90  |
| Cut off Marks           |     |     |     |     |
| No of Students Attended | 46  | 44  | 45  | 46  |
| No Above Cut Off        |     |     |     |     |
| % Above Cut Off         |     |     |     |     |
| CO attained Qn Wise     |     |     |     |     |

At the bottom right, there is a table for 'Attainment' and 'Benchmark(%)':

| Attainment | Benchmark(%) |
|------------|--------------|
| 1          | 50 or above  |
| 2          | 70 or above  |
| 3          | 90 or above  |

At the bottom, there are two buttons: 'Save' and 'Finish'.

➤ Enter cut off criteria of each question and click on save button.

Dashboard | Home > My Classes > EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING > Outcome Assessment > CO based exams > series exam 1 > Cut Off Criteria

**Cut Off Criteria** [Download Report](#)

| Qn.No                   | Q1    | Q2    | Q3  | Q4    |
|-------------------------|-------|-------|-----|-------|
| CO                      | CO1   | CO2   | CO3 | CO4   |
| Max Mark                | 5.0   | 5.0   | 5.0 | 5.0   |
| Cut off criteria %      | 60    | 50    | 40  | 30    |
| Cut off Marks           | 3     | 2.5   | 2   | 1.5   |
| No of Students Attended | 46    | 44    | 45  | 46    |
| No Above Cut Off        | 25    | 30    | 36  | 41    |
| % Above Cut Off         | 54.35 | 68.18 | 80  | 89.13 |
| CO attained Qn Wise     | 1     | 1     | 2   | 2     |

| Attainment | Benchmark(%) |
|------------|--------------|
| 1          | 50 or above  |
| 2          | 70 or above  |
| 3          | 80 or above  |

[Save](#) [Finish](#)

- CO attained question wise has calculated.
- Click on finish button.

Dashboard | Home > My Classes > EE 2K18 - IIIrd Semester - COMPUTER PROGRAMMING > Outcome Assessment > CO based exams > series exam 1 > Final attainment

| Qn.No                   | Q1    | Q2    | Q3  | Q4    |
|-------------------------|-------|-------|-----|-------|
| CO                      | CO1   | CO2   | CO3 | CO4   |
| Max Mark                | 5.0   | 5.0   | 5.0 | 5.0   |
| Cut off criteria %      | 60    | 50    | 40  | 30    |
| Cut off Marks           | 3     | 2.5   | 2   | 1.5   |
| No of Students Attended | 46    | 44    | 45  | 46    |
| No Above Cut Off        | 25    | 30    | 36  | 41    |
| % Above Cut Off         | 54.35 | 68.18 | 80  | 89.13 |
| CO attained Qn Wise     | 1     | 1     | 2   | 2     |

**CO attainment in series exam 1**

| CO         | CO1 | CO2 | CO3 | CO4 |
|------------|-----|-----|-----|-----|
| Attainment | 1   | 1   | 2   | 2   |

- CO attainment for this exam are generated here.



**Note:**

- ❖ Do the same process for all created exams.
- After calculating co attainment of all exams, we have to find overall attainment.
- Choose + Overall attainment

My Classes

My Timetable

Substitutions

Reports

|                              | CO1                             | CO2                             | CO3                             | CO4                              |
|------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|
| CO attainment- series exam 1 | <input type="text" value="1"/>  | <input type="text" value="1"/>  | <input type="text" value="2"/>  | <input type="text" value="2"/>   |
| Weightage                    | <input type="text" value="60"/> | <input type="text" value="50"/> | <input type="text" value="60"/> | <input type="text" value="100"/> |
| CO attainment- module test 1 | <input type="text" value="1"/>  | <input type="text" value="2"/>  | <input type="text" value="1"/>  | <input type="text"/>             |
| Weightage                    | <input type="text" value="40"/> | <input type="text" value="50"/> | <input type="text" value="40"/> | <input type="text"/>             |

✓ Calculate

- Click on edit button to enter weightage.
- Give weightage for each co.
- The sum of weightage should be 100.
- Then click on calculate button.

**CO Attainment**

**CO - Attainment**

|  | External Attainment | Benchmark(%) |
|--|---------------------|--------------|
| (For external CO attainment calculation) | 1                   | 60 or above  |
| A+                                       | 2                   | 65 or above  |
|  | 3                   | 70 or above  |

Submit

- Cutoff grade and benchmark can be edit from here.
- Cutoff grade can be decided with class average grade.
- This value will take for indirect attainment.

**CO - Attainment**

Edit

| CO  | Internal<br>% | 30.0 | External<br>% | 70 | Direct Attainment<br>80.0 % | Indirect Assessment<br>20 % | Overall<br>Attainment |
|-----|---------------|------|---------------|----|-----------------------------|-----------------------------|-----------------------|
| CO1 | 1             |      | 2             |    | 1.70                        | 3                           | 1.96                  |
| CO2 | 1.5           |      | 3             |    | 2.55                        | 2                           | 2.44                  |
| CO3 | 1.6           |      | 1             |    | 1.18                        | 1                           | 1.14                  |
| CO4 | 2             |      | 2             |    | 2.00                        | 1                           | 1.80                  |

- Click on edit button
- Give weightage for internal and external assessment, direct and indirect assessment.
- Click on Calculate button to calculate overall attainment.

**CO - Attainment**

Calculate
Save
Cancel

| CO  | Internal<br>% | 30.0 | External<br>% | 70 | Direct Attainment<br>80.0 % | Indirect Assessment<br>20 % | Overall<br>Attainment |
|-----|---------------|------|---------------|----|-----------------------------|-----------------------------|-----------------------|
| CO1 | 1             |      | 2             |    | 1.70                        | 3                           | 1.96                  |
| CO2 | 1.5           |      | 3             |    | 2.55                        | 2                           | 2.44                  |
| CO3 | 1.6           |      | 1             |    | 1.18                        | 1                           | 1.14                  |
| CO4 | 2             |      | 2             |    | 2.00                        | 1                           | 1.80                  |

- Attainment has calculated here.
- Click on save button.

## CO-PO Mapping

| CO - PO Mapping      |                    |      |      |      |      |      |      |      |      |      |      |      |               |
|----------------------|--------------------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| Edit                 |                    |      |      |      |      |      |      |      |      |      |      |      | View Detailed |
| CO                   | Overall Attainment | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PEO1 | PEO2 | PEO3 | PSO1 | PSO2 | PSO3          |
| CO1                  |                    |      |      |      |      |      |      |      |      |      |      |      |               |
| CO2                  |                    |      |      |      |      |      |      |      |      |      |      |      |               |
| CO3                  |                    |      |      |      |      |      |      |      |      |      |      |      |               |
| CO4                  |                    |      |      |      |      |      |      |      |      |      |      |      |               |
| Direct Attainment    |                    | 2.75 | 2.50 | 2.25 | 2.00 | 2.75 | 2.25 | 2.50 | 1.50 | 2.25 | 2.50 | 3.25 | 1.50          |
| Course PO attainment |                    | 1.71 | 1.56 | 1.40 | 1.25 | 1.71 | 1.40 | 1.56 | 0.94 | 1.40 | 1.56 | 2.03 | 0.94          |

- Click on edit button to enter co-po mapping values (0,1,2,3)
- Enter co-po mapping values and click on calculate button.

| CO - PO Mapping      |                    |        |      |      |      |      |      |      |      |      |      |      |               |
|----------------------|--------------------|--------|------|------|------|------|------|------|------|------|------|------|---------------|
| Calculate            | Save               | Cancel |      |      |      |      |      |      |      |      |      |      | View Detailed |
| CO                   | Overall Attainment | PO1    | PO2  | PO3  | PO4  | PO5  | PO6  | PEO1 | PEO2 | PEO3 | PSO1 | PSO2 | PSO3          |
| CO1                  |                    | 1      | 2    | 3    |      | 1    | 2    | 3    |      | 3    | 2    | 2    | 1             |
| CO2                  |                    | 1      | 1    | 2    | 2    |      | 3    |      | 3    | 3    |      | 1    | 2             |
| CO3                  |                    |        | 2    | 3    |      | 1    | 2    |      | 3    | 2    | 1    |      | 2             |
| CO4                  |                    | 3      | 2    | 1    | 2    | 1    |      | 2    | 1    | 2    | 3    | 2    | 1             |
| Direct Attainment    |                    | 1.09   | 1.02 | 1.33 | 1.41 | 0.54 | 1.50 | 1.58 | 1.39 | 1.59 | 1.16 | 1.11 | 0.91          |
| Course PO attainment |                    | 1.27   | 1.22 | 1.47 | 1.53 | 0.84 | 1.60 | 1.66 | 1.51 | 1.67 | 1.33 | 1.29 | 1.13          |

- Direct attainment and course-po attainment are calculated here.

➤ Click on [View Detailed](#) to view course - po attainment

| CO - PO Mapping      |                    |        |      |      |      |      |      |      |      |      |      |      |             |
|----------------------|--------------------|--------|------|------|------|------|------|------|------|------|------|------|-------------|
| Calculate            | Save               | Cancel |      |      |      |      |      |      |      |      |      |      | View Normal |
| CO                   | Overall Attainment | PO1    | PO2  | PO3  | PO4  | PO5  | PO6  | PEO1 | PEO2 | PEO3 | PSO1 | PSO2 | PSO3        |
| CO1                  |                    | 0.65   | 1.31 | 1.96 | -    | 0.65 | 1.31 | 1.96 | -    | 1.96 | 1.31 | 1.31 | 0.65        |
| CO2                  |                    | 0.81   | 0.81 | 1.63 | 1.63 | -    | 2.44 | -    | 2.44 | 2.44 | -    | 0.81 | 1.63        |
| CO3                  |                    | -      | 0.76 | 1.14 | -    | 0.38 | 0.76 | -    | 1.14 | 0.76 | 0.38 | -    | 0.76        |
| CO4                  |                    | 1.80   | 1.20 | 0.60 | 1.20 | 0.60 | -    | 1.20 | 0.60 | 1.20 | 1.80 | 1.20 | 0.60        |
| Direct Attainment    |                    | 1.09   | 1.02 | 1.33 | 1.41 | 0.54 | 1.50 | 1.58 | 1.39 | 1.59 | 1.16 | 1.11 | 0.91        |
| Course PO attainment |                    | 1.27   | 1.22 | 1.47 | 1.53 | 0.84 | 1.60 | 1.66 | 1.51 | 1.67 | 1.33 | 1.29 | 1.13        |

## Calculation

Course – PO Attainment = (mapping value/3\* Overall Attainment)

Eg:

$$\text{CO1 – PO1 attainment} = 1/3 * 1.96 = 0.65$$

$$\text{CO2 – PO1 attainment} = 1/3 * 2.44 = 0.81$$

$$\text{CO3 – PO1 attainment} = 0/3 * 1.14 = -$$

$$\text{CO4 – PO1 attainment} = 3/3 * 1.80 = 1.80$$

Direct Attainment = average (Course - PO attainment)

$$\begin{aligned}\text{Eg: co - po1 attainment} &= (0.65+0.81+1.80)/3 \\ &= 1.09\end{aligned}$$

Table 1

| CO Based Evaluations        |     |     |     |     |     |
|-----------------------------|-----|-----|-----|-----|-----|
|                             | CO1 | CO2 | CO3 | CO4 | CO5 |
| CO attainment- assignment 2 | 1   | 3   | 1   | 3   | 2   |
| Weightage                   | 30  | 30  | 40  | 40  | 30  |
| CO attainment- series exam1 | 2   | 2   | 0   | 0   | 2   |
| Weightage                   | 40  | 30  | 30  | 30  | 40  |
| CO attainment- assignment1  | 2   | 4   | 2   | 3   | 2   |
| Weightage                   | 30  | 40  | 30  | 30  | 30  |

Calculate

- Sum of weightage of each co should be 100

Table 2

| CO - Attainment |                  |                  |        |                           |                             |                       |
|-----------------|------------------|------------------|--------|---------------------------|-----------------------------|-----------------------|
|                 | Calculate        | Save             | Cancel |                           |                             |                       |
| CO              | Internal<br>80 % | External<br>20 % |        | Direct Attainment<br>70 % | Indirect Assessment<br>30 % | Overall<br>Attainment |
| CO1             | 1.7              | 1.00             |        | 1.56                      | 2.00                        | 1.69                  |
| CO2             | 3.1              | 1.00             |        | 2.68                      | 2.00                        | 2.48                  |
| CO3             | 1                | 2.00             |        | 1.20                      | 2.00                        | 1.44                  |
| CO4             | 2.1              | 3.00             |        | 2.28                      | 3.00                        | 2.50                  |
| CO5             | 2                | 3.00             |        | 2.20                      | 1.00                        | 1.84                  |
| Overall CO      |                  |                  |        |                           | 1.990                       |                       |

- Internal value is the weighted average of table 1

$$\begin{aligned}\text{Eg: CO1} &= 1 \times 30 / 100 + 2 \times 40 / 100 + 2 \times 30 / 100 \\ &= 1.7\end{aligned}$$



- Direct attainment = weightage (internal value of co) + weightage (external value of co)

Eg: Direct attainment =  $1.7 \times 80 / 100 + 1 \times 20 / 100$   
 $= 1.56$

- Overall attainment = weightage (direct attainment) + weightage (indirect attainment)

Eg: Overall attainment =  $1.56 \times 70 / 100 + 2 \times 30 / 100$   
 $= 1.69$

- Overall CO = average (overall attainment)

Eg: overall CO =  $(1.69 + 2.48 + 1.44 + 2.50 + 1.84) / 5$   
 $= 1.990$

Table3 - CO PO mapping

| CO - PO Mapping   |                    |        |      |      |      |      |      |      |      |      |      |      |               |
|-------------------|--------------------|--------|------|------|------|------|------|------|------|------|------|------|---------------|
| Calculate         | Save               | Cancel |      |      |      |      |      |      |      |      |      |      | View Detailed |
| CO                | Overall Attainment | PO1    | PO2  | PO3  | PO4  | PO5  | PO6  | PEO1 | PEO2 | PEO3 | PSO1 | PSO2 | PSO3          |
| CO1               |                    | 1      | 3    | 1    | 3    | 2    | 3    | 2    | 3    | 1    | 1    | 2    | 1             |
| CO2               |                    | 1      | 1    | 1    | 2    | 2    | 1    | 1    | 3    | 3    | 1    | 3    | 2             |
| CO3               |                    | 1      | 2    | 1    | 1    | 3    | 3    | 1    | 3    | 3    | 1    | 1    | 3             |
| CO4               |                    | 1      | 1    | 3    | 3    | 2    | 1    | 1    | 3    | 3    | 1    | 3    | 2             |
| CO5               |                    | 1      | 1    | 3    | 3    | 1    | 2    | 1    | 2    | 3    | 2    | 1    | 3             |
| Direct Attainment |                    | 0.66   | 0.98 | 1.24 | 1.63 | 1.30 | 1.20 | 0.78 | 1.87 | 1.76 | 0.79 | 1.44 | 1.43          |

## Calculation

Course - PO Attainment = (mapping value/3\* Overall Attainment)

Eg:

CO1 - PO1 attainment =  $1/3 \times 1.69 = 0.56$

CO2 - PO1 attainment =  $1/3 \times 2.48 = 0.83$

CO3 - PO1 attainment =  $1/3 \times 1.44 = 0.48$

CO4 - PO1 attainment =  $1/3 \times 2.5 = 0.83$

CO5 - PO1 attainment =  $1/3 \times 1.84 = 0.61$

- Click on view detailed button to view the mapping values

| CO - PO Mapping   |                    |        |      |      |      |      |      |      |      |      |      |      |             |
|-------------------|--------------------|--------|------|------|------|------|------|------|------|------|------|------|-------------|
| Calculate         | Save               | Cancel |      |      |      |      |      |      |      |      |      |      |             |
|                   |                    |        |      |      |      |      |      |      |      |      |      |      | View Normal |
| CO                | Overall Attainment | PO1    | PO2  | PO3  | PO4  | PO5  | PO6  | PEO1 | PEO2 | PEO3 | PSO1 | PSO2 | PSO3        |
| CO1               |                    | 0.56   | 1.69 | 0.56 | 1.69 | 1.13 | 1.69 | 1.13 | 1.69 | 0.56 | 0.56 | 1.13 | 0.56        |
| CO2               |                    | 0.83   | 0.83 | 0.83 | 1.65 | 1.65 | 0.83 | 0.83 | 2.48 | 2.48 | 0.83 | 2.48 | 1.65        |
| CO3               |                    | 0.48   | 0.96 | 0.48 | 0.48 | 1.44 | 1.44 | 0.48 | 1.44 | 1.44 | 0.48 | 0.48 | 1.44        |
| CO4               |                    | 0.83   | 0.83 | 2.50 | 2.50 | 1.67 | 0.83 | 0.83 | 2.50 | 2.50 | 0.83 | 2.50 | 1.67        |
| CO5               |                    | 0.61   | 0.61 | 1.84 | 1.84 | 0.61 | 1.23 | 0.61 | 1.23 | 1.84 | 1.23 | 0.61 | 1.84        |
| Direct Attainment |                    | 0.66   | 0.98 | 1.24 | 1.63 | 1.30 | 1.20 | 0.78 | 1.87 | 1.76 | 0.79 | 1.44 | 1.43        |

- Direct attainment of PO1 = average (each co - po attainment)

Eg:

$$PO1 = (0.56 + 0.83 + 0.48 + 0.83 + 0.61) / 5$$

$$= 0.66$$

## CUT-OFF CRITERIA OF EACH EXAM

| Qn.No                   | Q1    | Q2   | Q3    | Q4   | Q5    | Q6    | Q7    |
|-------------------------|-------|------|-------|------|-------|-------|-------|
| CO                      | CO1   | CO2  | CO3   | CO2  | CO1   | CO2   | CO3   |
| Max Mark                | 5.00  | 5.00 | 5.00  | 5.00 | 15.00 | 15.00 | 15.00 |
| Cut off criteria %      | 50    | 50   | 50    | 50   | 50    | 50    | 50    |
| Cut off Marks           | 2.5   | 2.5  | 2.5   | 2.5  | 7.5   | 7.5   | 7.5   |
| No of Students Attended | 23    | 25   | 29    | 16   | 17    | 24    | 11    |
| No Above Cut Off        | 8     | 8    | 23    | 4    | 0     | 2     | 1     |
| % Above Cut Off         | 34.78 | 32   | 79.31 | 25   | 0     | 8.33  | 9.09  |
| CO attained Qn Wise     | 0     | 0    | 2     | 0    | 0     | 0     | 0     |

| Disabled by HOD |              |
|-----------------|--------------|
| Attainment      | Benchmark(%) |
| 1               | 50 or above  |
| 2               | 60 or above  |
| 3               | 80 or above  |

Here, the cutoff criteria % referred to the percentage to pass that question.

For example, if the cut off criteria % is 50 , then the student should score more than 2.5/5 .

% above cut-off means how many percentage of students attained 50% or above mark.

Attainment benchmark means if percentage above cutoff is 50% - 59% , then attainment will be 1

if percentage above cutoff is 60% - 79% then attainment will be 2

if percentage above cutoff is 80% - 100% then attainment will be 3