Q-OBE: Quick guide

Edition1

Getting Started With Q-OBE

A FastTrack Approach for Doers

Quality Outcome Based Education

"Welcome to Q-OBE Family"

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C.E.O Alfoze Technologies

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1. Getting Started

Welcome to Q-OBE family! This chapter will provide you brief overview of Q-OBE features and overall working flow. Detail of discussed features and modules in this chapter are discussed in later chapters.

1.1   Q-OBE Quick Intro: How it works?

Q-OBE is a **"software service"** just like your favorite social media platform, your trusted email server or your cloud hosted Microsoft 360. Like Gmail you don't install anything on your devices and simply use it through your browser using your username and password. Getting more technical! This kind of usage is called software as service or precisely, **SaaS**. Q-OBE is hosted on **AWS world's No.1 cloud** infrastructure. To use Q-OBE all you need is internet connectivity a browser and valid username & password. You can access Q-OBE through following URL.

https://qualityobe.com/

If everything goes right you will see following web page on visiting above mentioned URL.
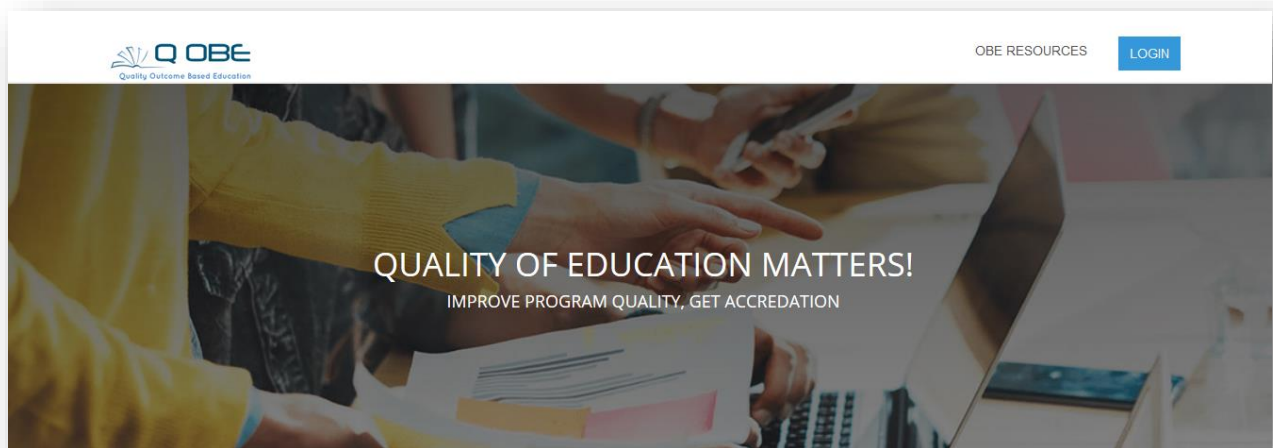
Q-OBE is an OBE based LMS tailored to meet OBE and requirements while keeping it aligned to academia routines. Q-OBE offers range of excellent features to help you in executing your daily academic tasks and end objectives. In root Q-OBE targets OBE but good news is that it fully supports GPA system as well.

We will discuss it briefly in later sections regarding its many useful features but to just give you a flavor there are:

- Range of reports from course section up to PEO levels
- Institute hierarchy management
- CLO distribution, rubrics
- Marks breakdown, course planning
- 3-level CQI

- Student management
- OBE & GPA transcript

Many more...

In short Q-OBE features helps its users by covering complete academic cycle.

All of your data is securely saved and maintained on cloud which means you don't need to worry about corrupt files, hardware failures, data theft and power failures. Folks at Alfoze take care of it. Your data is 24/7 readily available, just log in to the system from anywhere at any time.

⚠️ *Q-OBE service is sometimes unavailable for maintenance. Good news is that a prior notification is send and also it is usually not more than two hours. Making Q-OBE service 99% available.*

1.2   Menus: Drama of buttons & windows

Before we get our hands dirty let's understand how software is organized. Options are organized in menus and data is displayed in window panels. Buttons & menus with same function are consistent across the software. So never get lost or face difficulty in performing operations. So let's explore!

1.2.1 Buttons

Function	Button	Description
Create	Create	Create button is used to create different types of data entities e.g. courses, users, departments ,etc.
Update	Update	Update button is used to update the contents e.g. course, users, department etc
Delete	Delete	Delete button is used to delete different data entities within system e.g. courses, users, departments, etc.
Manage	Manage	Manage button is used to go back to the list
Button panel	🔍 ✏️ ✖️	Button panel hosts buttons for search, edit and delete. They are explicitly associated with single data entity present in the list. They are discussed in later sections
Import	Import	Import button is used to import records in excel format

| Export	Export	Export result / list in Excel format

1.2.2 Menus & Windows

As discussed earlier, each menu serves different purpose composed of different options. Some of the menus are visible to all the users and some are specific to particular roles. Yeah! We don't pollute you screen with unnecessary content. You see what you need.

1.2.2.1 Top menu
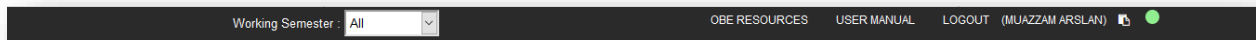
Top menu is something you will least use to perform operations rather it has more facilitation role. But wait it have something very valuable for you. We can actually divide in two logical divisions. Right side has logout and resources options. The document you are reading actually came out of this menu if someone else has downloaded for you, friends with benefits. While the left menu of **working semester** menu filters data semester wise for you. It means that sections and other stuff related to selected semester will only show.

Here we look at the example. We selected **fall 2014 semester** from the top menu and all the sections are now shown are from fall 2014.
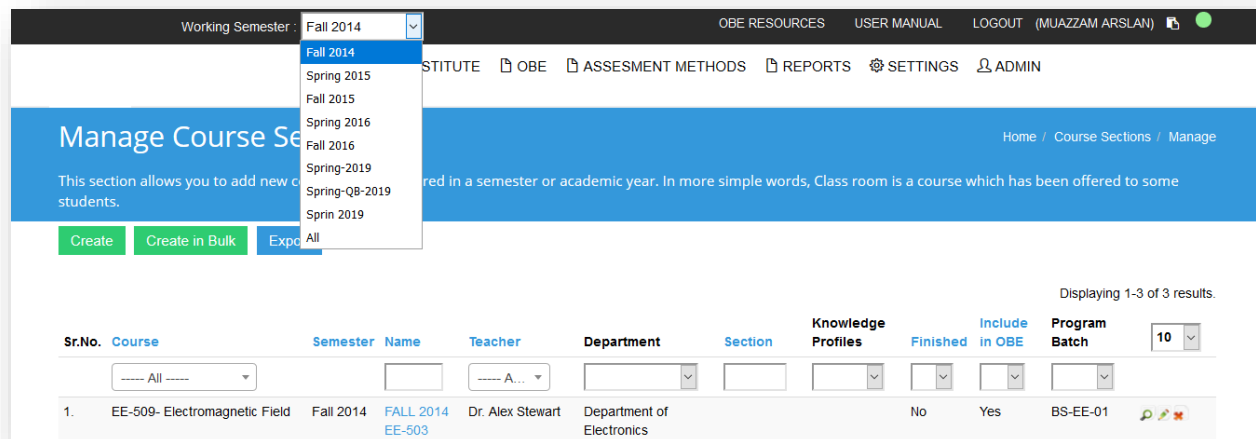
We will discuss **semester management** in later chapters.

1.2.2.2 Operations menu

Operations menu is the master control of Q-OBE you can access all modules of the software from operations menu. All the tabs hosts drop down menus with extended functionalities. Like institute tab has options to manage campus, departments, faculties etc. If you're department admin reading this menu believe me this menu is your best friend.

1.2.2.3 Context Menu

Context menu facilitates you to navigate back and also helps you in determining which part of the application you are visiting. This is generic menu which will be shown to all users of the system in contrast to previous menus.

1.2.2.4 Task Menu

Task menu is one of the most useful menu as it provides you contextual options. Due to its contextual nature you don't need consult other menus to perform related functions. In above screen short task menu displays tabs for checking which program batches are studying the course, which CLO's are defined for the course, etc. All of this information is contextual and provided right under same hood.

1.2.3 Data Panels

1.2.3.1 Data Management Panel

Data management panels display data aggregate with powerful search and management features. They are especially useful when you need to do perform bulk operations. In up screen shot this data panel is for managing academic programs. All the Meta information for a program is present with edit delete options. You can search program through using any attributes like name, short name etc.

1.3.1   Washington Accord & OBE

1.3.1.1 Washington Accord

The Washington Accord is an international accreditation agreement for professional engineering academic degrees between the bodies responsible for accreditation in its signatory countries. Established in 1989, the full signatories as of 2018 are Australia, Canada, China, Hong Kong, India, Ireland, Japan, Korea, Malaysia, New Zealand, Pakistan, Peru, Philippines, Russia, Singapore, South Africa, Sri Lanka, Taiwan, Turkey, the United Kingdom and the United States. Washington accord is OBE based. We will talk about it in upcoming section

1.3.1.2 PEC Accreditation

PEC is the accreditation body for engineering programs which evaluates engineering program compliance to outcome based education (OBE) along its other responsibilities.

1.3.1.3 OBE

Outcome-based education (OBE) is an educational theory that bases each part of an educational system around goals (outcomes). By the end of the educational experience, each student should have achieved the goal. These goals are evaluated and measured.

1.3.1.4 PEO : Program Education Objectives

Program educational objectives describe the career and professional accomplishments that programs are preparing graduates to attain within a few years of graduation

1.3.1.5 PLO: Program Learning Outcomes

Course Learning Outcomes (CLOs) for an academic program are defined as the knowledge, skills, or behaviors that a program's students should be able to demonstrate upon program completion.

There are 12 PLOs defined by PEC.

1.3.1.6 CLO: Course Learning Outcomes

Course learning outcomes are statements that describe significant and essential learning that learners have achieved, and can reliably demonstrate at the end of a course

1.3.2 Blooms Taxonomy: Glue Of The Methodology

Bloom's Taxonomy was created in 1956 under the leadership of educational psychologist Dr Benjamin Bloom in order to promote higher forms of thinking in education, such as analyzing and evaluating concepts, processes, procedures, and principles, rather than just remembering facts (rote learning). It is most often used when designing educational, training, and learning processes.

The Three Domains of Learning

- **Cognitive**: mental skills (*knowledge*)
- **Affective**: growth in feelings or emotional areas (*attitude or self*)

- **Psychomotor**: manual or physical skills (*skills*)

1.3.3 Data Exchange: Excel Sheets integration

Excel is de-facto data processing tool for academia and its use is widespread. Whether its student's marks sheet, result break down, etc. excel is the preferred tool for managing data. Q-OBE comes with some unique and handy features which enables you to directly import your excel sheets into Q-OBE system or export data from Q-OBE in form excel sheets. Import and export buttons are displayed where data import and export is required

Above screen shows buttons for import and export at different sites of application.

For importing data Q-OBE offers a powerful Excel based **template system.** This system let you by pass forms for data entries. All you need is to download excel and populate it with your data. We know you! Once your data is populated simply upload the sheet back to the system. We will see utility of this feature in different scenarios in later chapters.

The overall process is as following
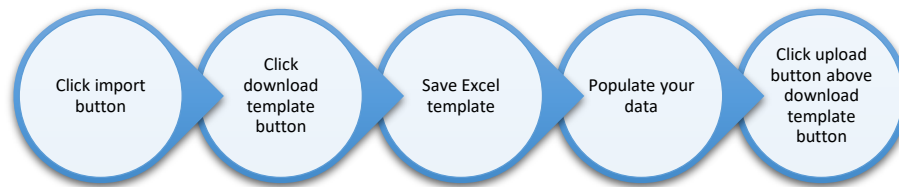
For demonstration we take example of adding a courses using template system.

1) We navigate to institute menu and click courses. This takes us to manage courses data panel.
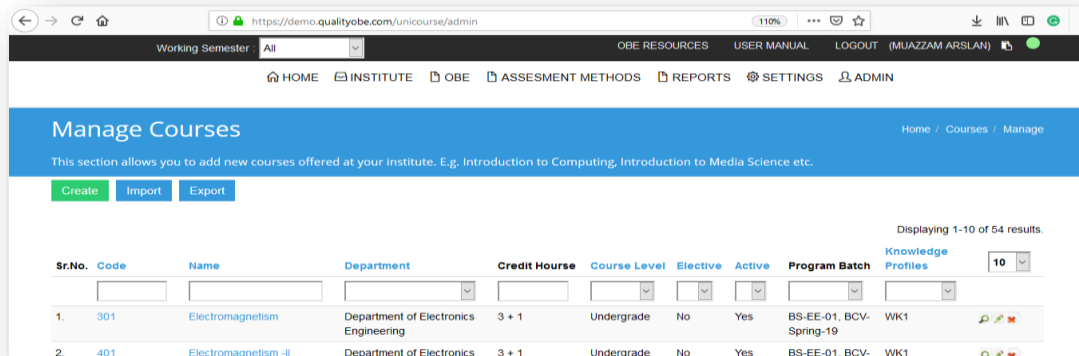
2) Click import button. This will open an overly window.
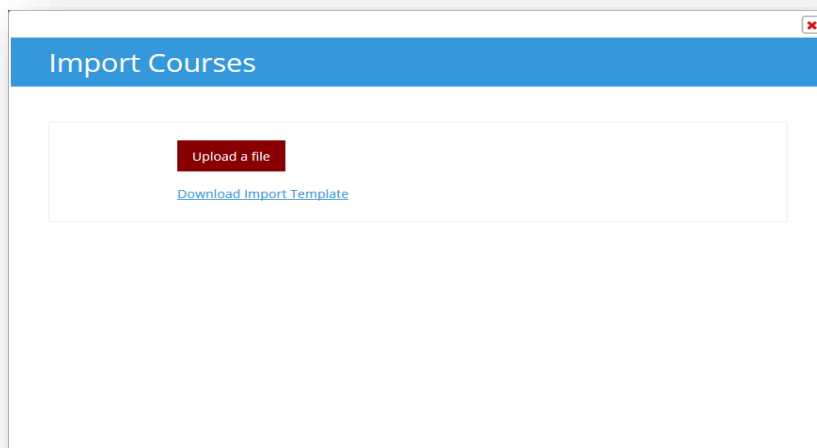
3) Download the template by clicking download template. An excel sheet will be downloaded to your local system.

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4) Open the excel sheet. It should look like this.

5) Populate fields as above. Fields with red color are essential to be filled while with blue can be skipped.
6) If everything goes right following success message will appear with total number of courses added to the program.

If the any field has in valid value the success message will show **0 entries eg. 0 courses.**

1.4   Users & Roles

To enter a house, you need a door, to open a lock you need a key and to access Q-OBE you need be a valid user of the system. Just like your organization where every department has different role and a person within that department has assigned a designation the very same concept is endorsed in Q-OBE through Identity and access management system, Yeah a fancy term. But don't be afraid it's as easy as rest of the system.

A user need an active account to be part of the system and valid credentials to use the system. An access to different section eg institute, departments, settings are privileged according to the assigned role.

Users & role management can be accessed through admin tab in operation menu. This is how it looks
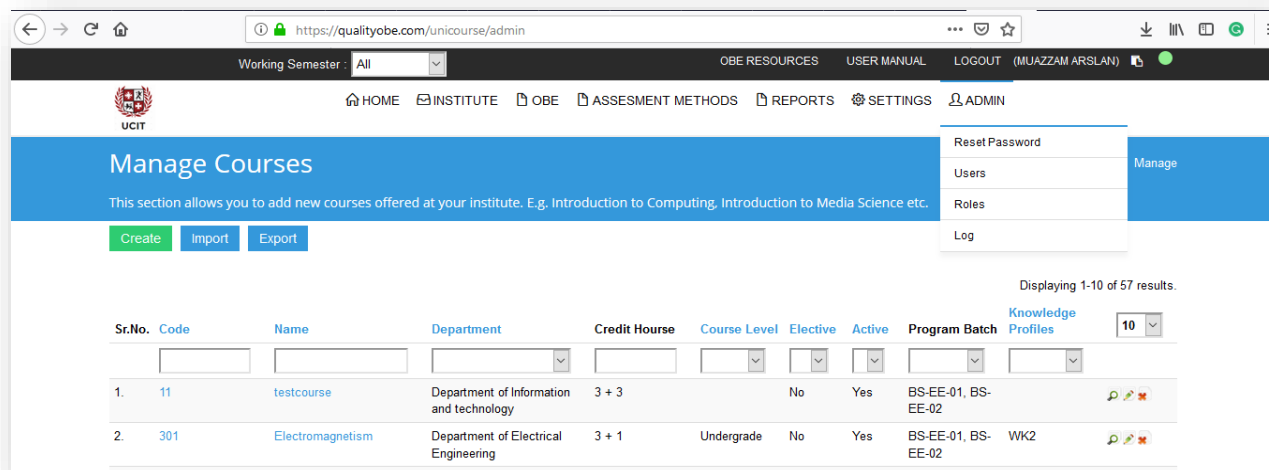
1.4.1 User management data panel
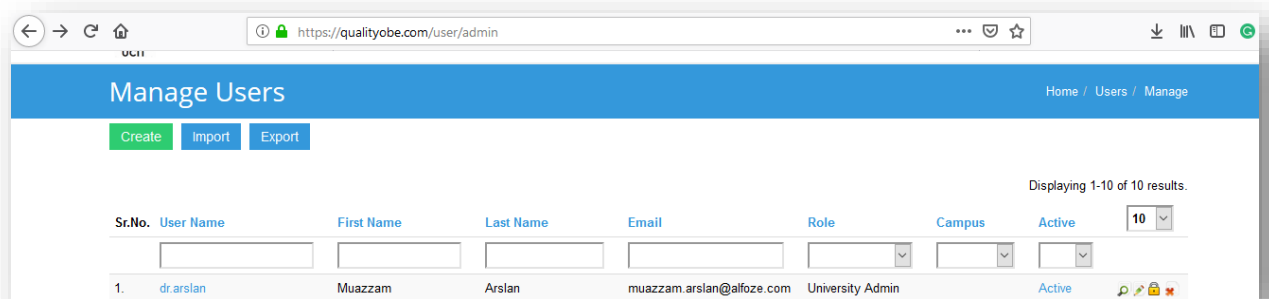
1.4.2 Role management data panel
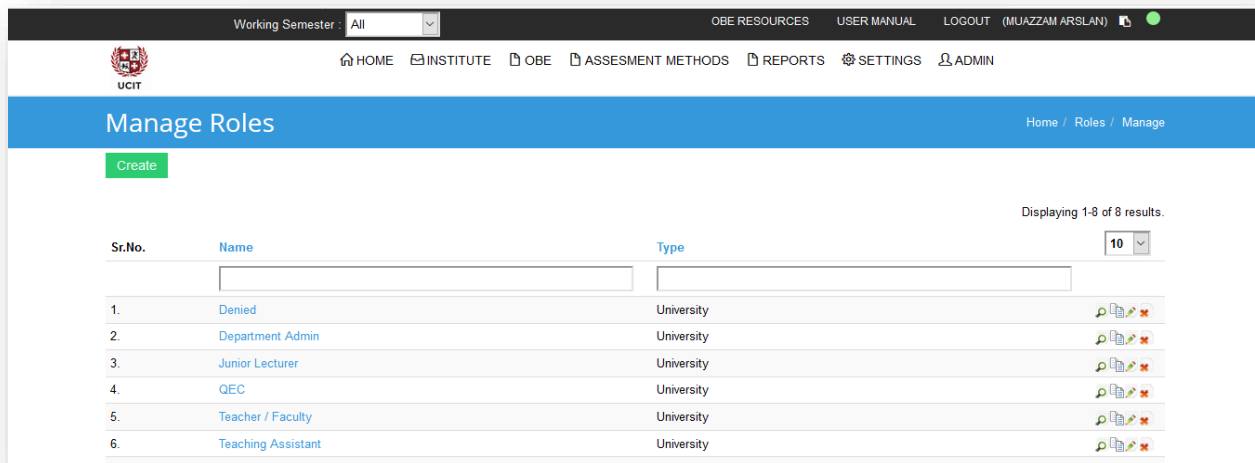
1.4.3 Roles: Mastering privacy

As discussed in previous sections user roles manage a user's access to data. Roles are manifestation of permissions assigned to a role which can be privileged or revoked. I know I am getting techy and hard to swallow but don't worry your IT big boys will love this, we know each other. If you are not concerned with this section just get "Fascinated". Some big boys at Alfoze have already created user roles to facilitate you. These systems defined roles are fixed and cannot be changed. Oh! That feeling of being chained, good news is that you can create custom roles or clone an already exiting role as much as you can. Through simple example lets understand how these permissions work by using faculty role.

1) Click Teacher / Faculty role in roles management data panel
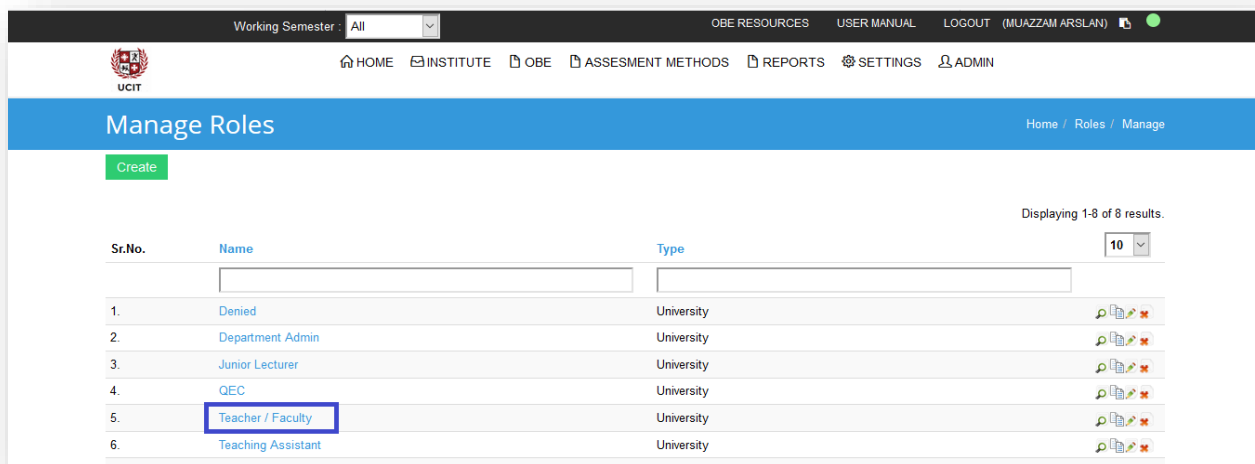
2) If things gone well following screen will be shown.

2015-19 © All Rights Reserved. Alfoze Technologies (Pvt) Ltd
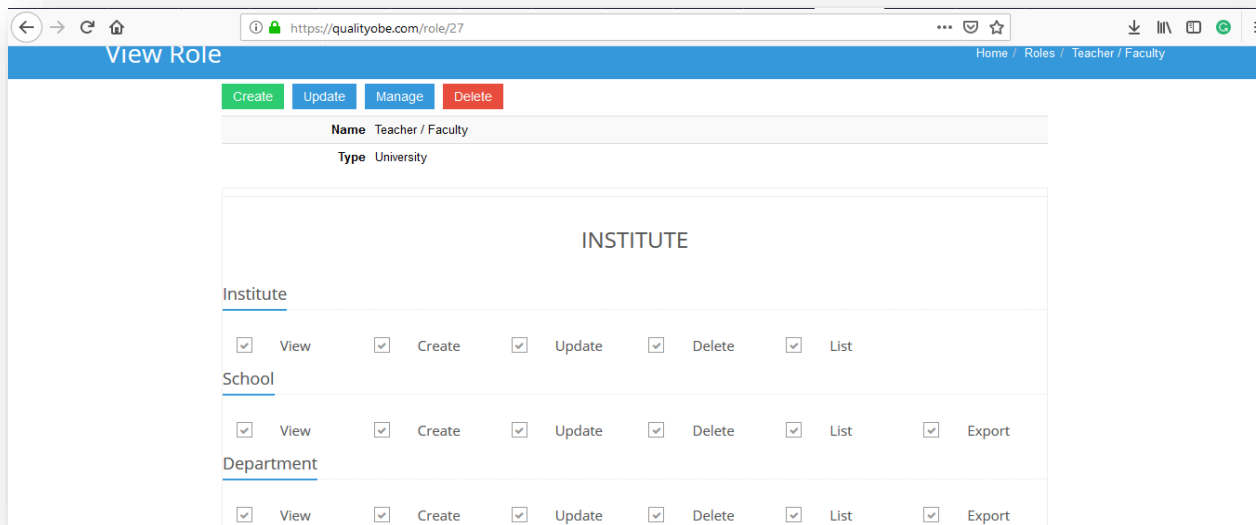
3) These permissions work in Denial Mode. Which the check box represents that permission is denied not granted. Here we recall our legendary Operations Menu because whole permission data management panel controls operations, after all we are controlling access to portions of the system.

4) Let's explore institute tab in operations menu and maps some of its options it to permissions data management panel.

Operations Menu	Permissions Data Panel
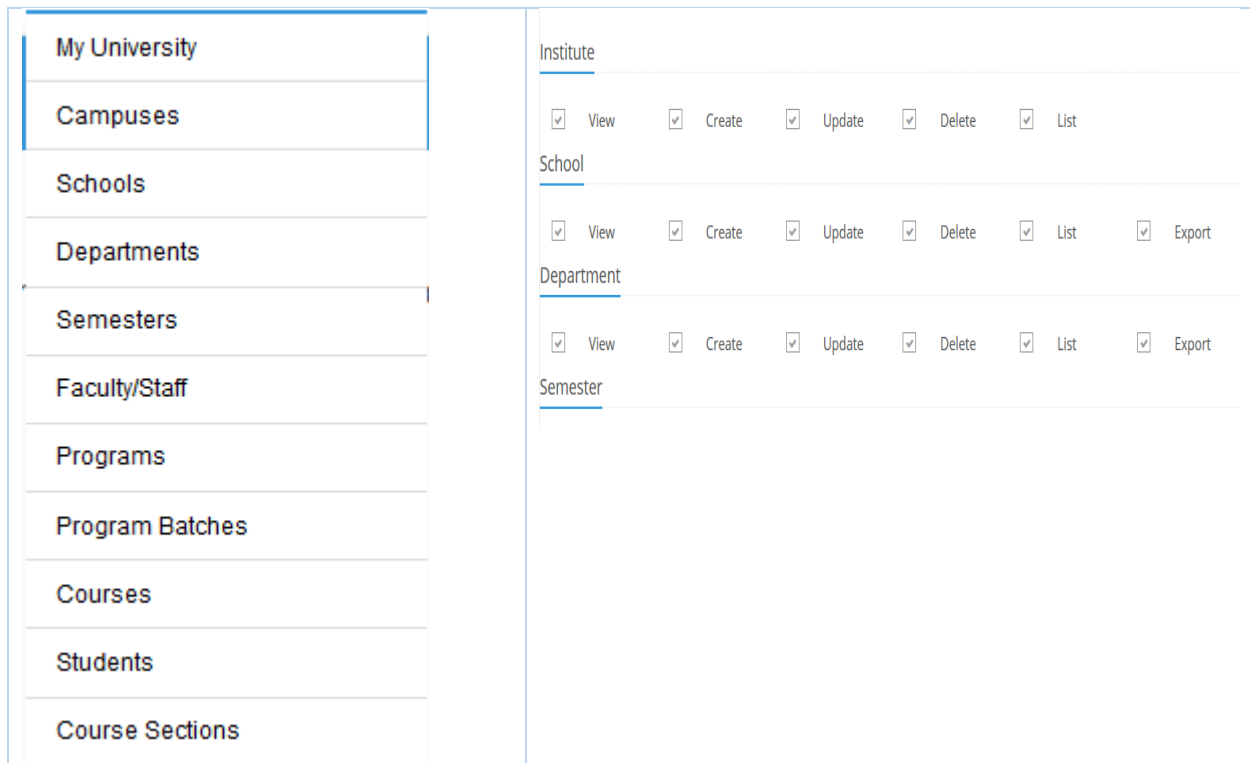
5) So by comparing both the pictures become clear that how through granting and revoking permission you can manage desired access for a role.
6) Permissions control operations for View, Create, Update, Delete, List, Import and Export
7) List controls menus as well data management panels for a role.
8) For example, if we uncheck view check box we can permit faculty role to view institute menu as well information.

2.   Main Menu

2.1   Institute Hierarchy

Each and every organization, Institute or firm has a hierarchy. When it comes to higher education institutes there is very common hierarchy exists with difference of some naming conventions. This hierarchy enforces separation of concerns as well privacy with different functioning units of an institute.

Q-OBE does it very efficiently by organizing the hierarchy of an institute in coherent manner yet keeping data encapsulated. Following diagram shows how an institute is modeled in Q-OBE.
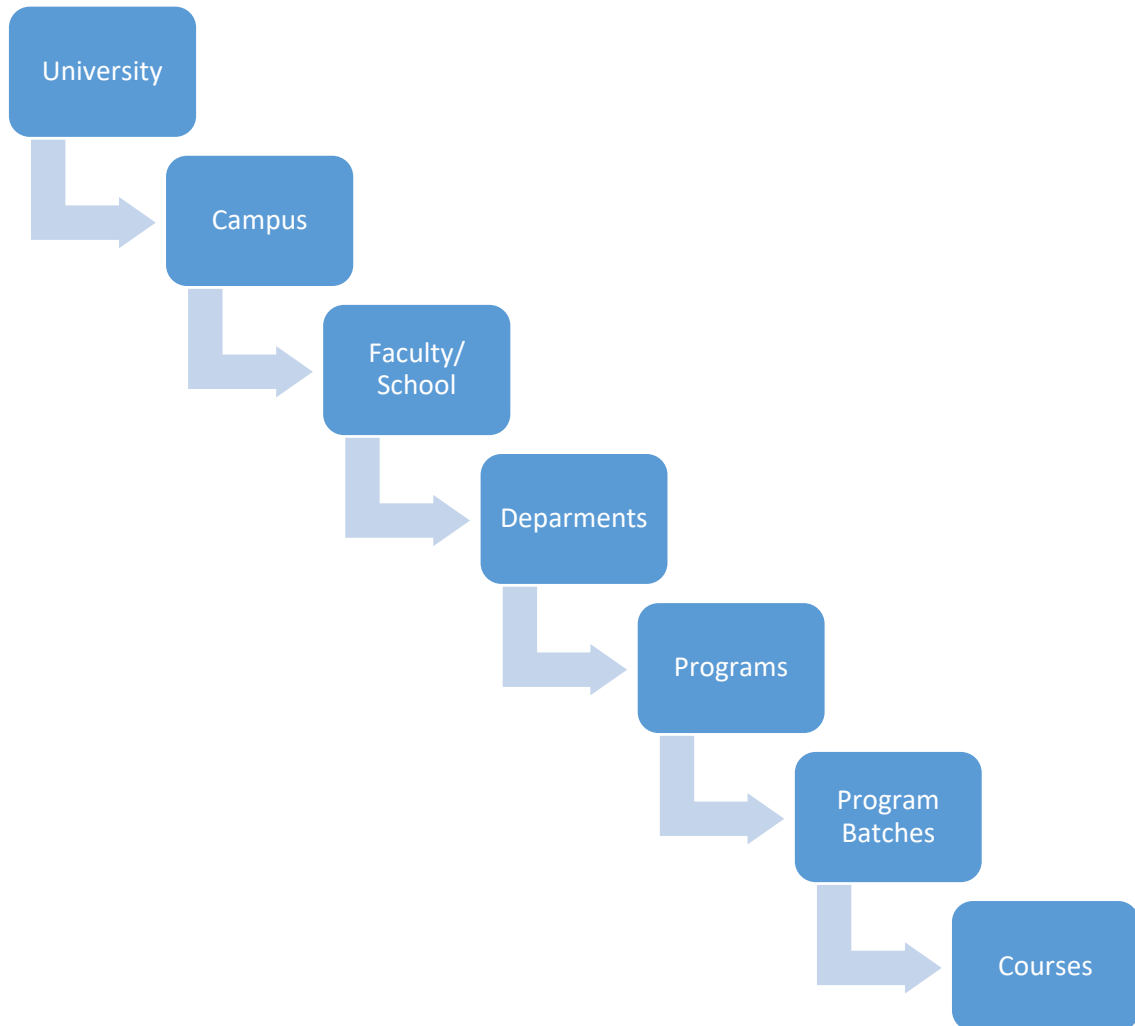
While this is the simples modeling of institute there are much more flexible options available for managing hierarchy. For example, a course can be for multiple program and batches. So this actually open cyclic approach rather than purely linear.

2.2 Semester

We love semester! Because that's where we actually work and translates our dreams to realities. There are three possible semesters within an academic year

1) Spring
2) Summer
3) Fall

Students of different batches enroll courses according to course offering and their academic road map if applicable. That's how a semester manages course offering. We will discuss courses and course section in more detail in upcoming section. This how a semester and course interacts.
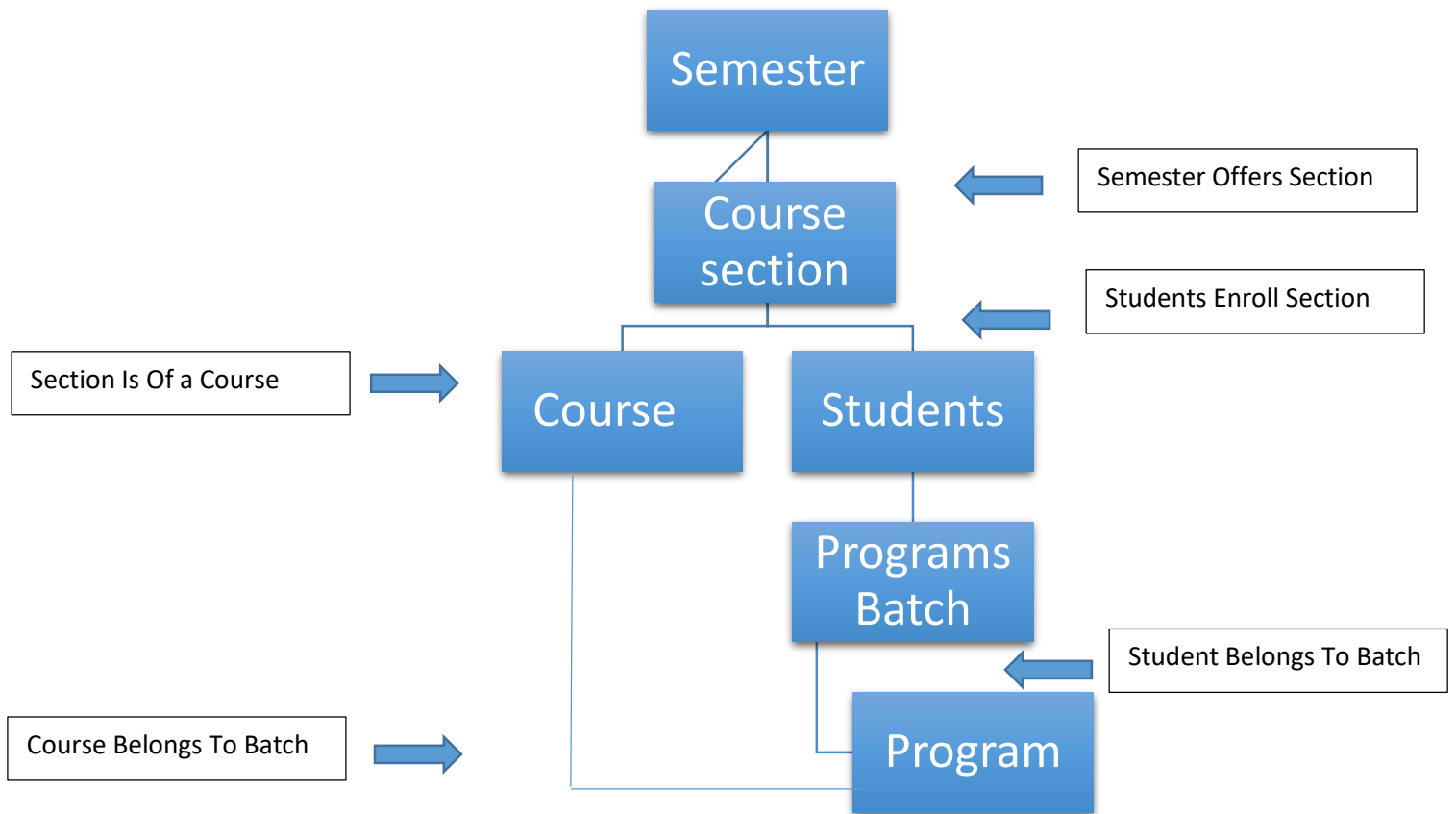
Semester's management data panel is accessed from operation panel by clicking institute and its sub menu tab semesters.

2.2.1 Semester Data Panel

Semester data panel displays all the semesters created till date. Here it's worth to mention that semesters are independent of batches. Which means you will only create one semester as per academic session eg. Spring 2019 not batch wise like BS-EE-19 because batches are automatically assigned to a semester once a student from a batch enrolls a course for a particular semester.

So let's see how this concept actually works. For example, we take Fall 2014 semester (The first in the list). By clicking on its name in the blue it will take us to the semester. Which looks like below

Well here it provides options for creation of new semester, updating it, etc. but our main interest here is in course sections. So let's click on course section.

Take a deep look at the above image. It shows which courses are offered in the selected semester and the third column shows name of the section offered of the course. Program batch column marked with blue shows which program batch has enrolled the course.

2.3   Courses & Sections

Courses are part of academic road map which may or may not varies with program batches. So may a batch of BS electrical engineering have may have same course outline for intake of 2015, 2016, 2017, 2018 has some courses or has minor change. Well realistically speaking because scheme studies are governed by PEC a change is very rare to occur so usually courses are consistent on program level.

Courses can be explored through course management data panel but we will navigate to courses through program batches. So lets consult our operation menu.

1) Click institute in operations panel.
2) Click program batches in sub menu.
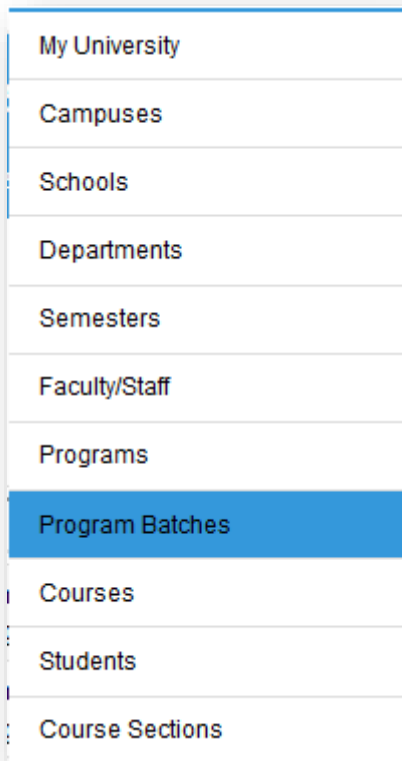
3) This will take you the program management data panel. It will show data according to the program batches in the system. For sake example take BS-EE-01 2010 intake.

4) Click on selected program batch. This will take you to the aggregate information of this program batch. Task menu at the left show tons of the option but we will stick to the courses.

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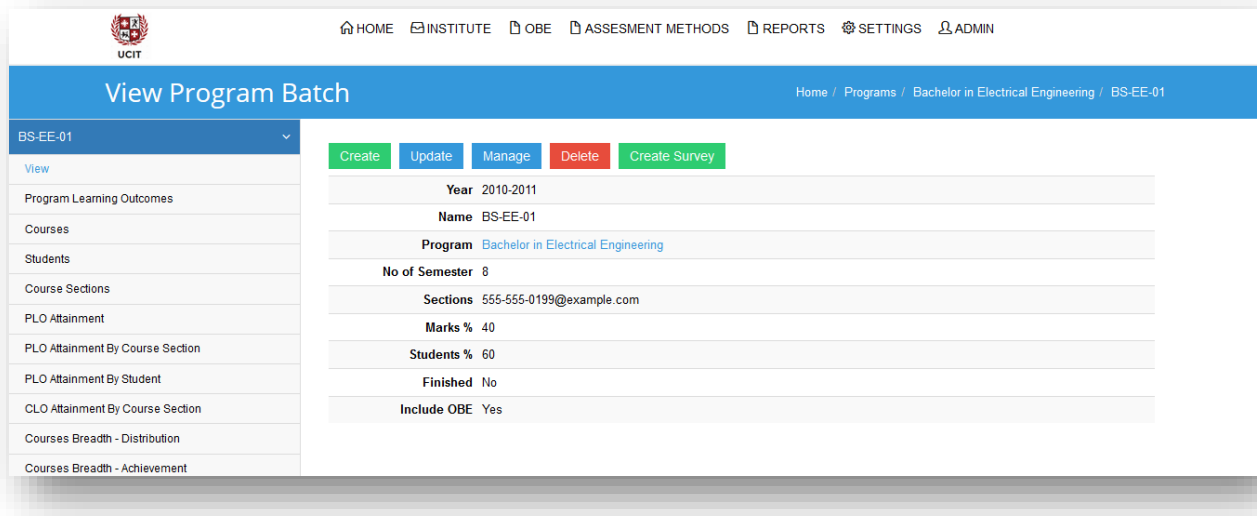
5) Click on the courses tab in task menu. This will show all the courses within batch and also offers different options for managing courses

3.   Faulty Dashboard

After login, users with faculty role will see a Dashboard

Left menu show list of course/s assigned to faculty member. Please click the course to view the options available.

3.1   View CLOs

Please click the highlighted menu under selected course and you will view list of all CLOs associated with this course. Emphasis Level, Learning types and mapping of each CLO with PLO/s is also shown in list. CLO type and Date of creation is also available.

IF the department policy allows, then faculty member can also create CLO. The CLO created by faculty member is marked as **Custom type**

3.2   Section Teaching Plan

Please click the highlighted menu under selected course section and you can add teaching plan of whole semester. Map CLOs with class activities.

This will give you the overview of complete semester. You can also export teaching plan in Excel format.

3.3 Activity Weights (GPA)

When you select the highlighted menu under the selected course section. You can add activity weight for the GPA calculations of particular course section.

3.4   Activity Weight (OBE)

Please click the highlighted men under selected course and you will view list of all activities created selected for CLO attainment for this particular course section. Each CLO is assigned to a particular Academic activity (like Assignment) OR Sub Activity (Question level) when activity/sub activity is created. Weight of each activity / sub activity can be edited to adjust attainment results.

If you click on **Even weights** each activity is assigned equal weight, regardless of what their actual weight is. So each activity will be contributing equally in that particular CLO.

3.5 Managing Class Activities

3.5.1 How to Add new class activity

Please select the highlighted menu and then select the Highlighted button "Add Class activity"

After this, a Pop-up window will open like following.

1. Please select the related activity type like Quiz, Assignment
2. In Name field, name for the Activity automatically selected like Quiz #1, Assignment #2. However you can edit the name.
3. In Date field, by default current date will be selected however you can change it.
4. In Total Marks field, Marks of all the sub activities automatically sums up and it is noneditable.
5. In GPA weight field, assign the GPA weightage of that particular class activity.
6. You can also assign upload start and upload end date for that activity. And for this you need to select the check box with caption "Allow student upload".
7. In Sub Activity section, we can add multiple questions under this activity type
8. Add at least one Sub Activity. e.g. Question #1, Assign the Total Marks for this particular question. Also assign the Weight which will be used in CLO attainment (if this sub activity is assigned to a CLO)
9. In case you do not want this sub activity to be included in OBE Assessment, please check the Box with caption "Do Not Include in OBE Calculation"
10. In Question Field, you may write actual Question / statement.
11. In Answer filed, you can also add the answer to that question.
12. From List of CLOs, please select the CLO which needs to be assigned to this Sub Activity
13. Press "Add" to add a new sub activity / question, if needed.
14. Press Save to complete.
15. A single question can be assigned to multiple CLOs (if institutional policy allows it).
16. Once finished, you will see the new activity in the list of all activities with current date.

3.5.2 Import Class Activities

Class activities can be created using import option. You may create all activities planned for course using a template given in MS Excel format.

To do this, please select class activities from left menu and then select the highlighted Button.

Following Pop-up Window will appear

You can download the template from link "**Download Import Template**" given under Upload file button and then edit offline.

	A	B	C	D	E	F	G	H	I	J
1	Section Name	Activity	Name	Date	Total Marks	Sub Activity Name	Sub Activity Max Marks	Sub Activity Weight	CLO	Question
2		Quiz	Quiz 1		10	Q1	10	10	CLO1,CLO2	
3		Quiz	Quiz 1		10	Q2	10	20	CLO3	
4		Quiz	Quiz 2		10	Q1	10	10	CLO3	
5		Assignment	Assignment 1		20	A1	20	30	CLO2	
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										

You may use this template sheet to generate major class activities; later sub activities

(Questions) can be added later from Dashboard. This is how you can fill in the template

1. In Section Name Write Course Name or leave it blank
2. In Activity, Main Activity type like Quiz or Assignment will appear. For this please use exact word.
3. In Date, date of activity to be mentioned
4. In Total Marks, please add total marks for Activity
5. In Sub Activity, write name of Sub Activity like Question #1 (at least one sub activity /question is mandatory)
6. Then in Sub Activity Max Marks please write max marks for this sub activity
7. In sub Activity Weight, please assign the weight that will contribute to CLO assessment
8. In CLO, right the CLO short name whatever is given in course
9. In Question, you may write description or statement of sub activity like detail of Question#1

3.5.3 Export Class Activities

You can export list of all activities related to a course. Please press highlighted button.

All Activities will be exported in MS Excel format like this

3.5.4 Import Activities Outcome

This features given you option to import results/outcome of all activities planned / defined for this course. Please select the highlighted button.

A Pop-up window will appear, with multiple template. This template is generated dynamically and is based on present set of activities and their sub activates.

NOTE: It may vary from course to course based on class activities, please use this downloaded template only for this course.

3.5.5 Import using Template

Please do not edit the column headers / order. Only fill in the marks obtained for each student in each activity. After completing this please use the same upload button on pop-up widow and results will be uploaded.

		Quiz 1	Final	Final	Final	Final	Quiz 2	Assignm ent 1	Assignm ent 2	Mid Term / Sessional Exam 3	Assignm ent 3	
3		Q1 (10)	Q2 (40)	Q1 (20)	Q3 (20)	Q4 (20)	Q2 (10)	A1 (10)	A2 (10)	Q1 (10)	A2 (30)	
4	Registration No. Name	CLO-1	CLO-1	CLO-2			CLO-1	CLO-2	CLO-1	CLO-1	CLO-2	
5	2012-BEE001-00 Hassan Abdullah											
6	2012-BEE001-00 Khalid Hussain											
7	2012-BEE001-00 Abdu Rehman											
8	2012-BEE001-00 Usama Ali											
9	2012-BEE001-00 Najwa Harris											
10	2012-BEE001-00 Ain Adam											
11	2012-BEE001-00 Abram Alexander											
12	2012-BEE001-00 Saqeef Nurshah											
13	2012-BEE001-00 Deema Alhamwi											
14	2012-BEE001-00 Peter McDonald											
15	2012-BEE001-00 Tom Nash											
16	2012-BEE001-00 Nancy John											
17	2012-BEE001-00 Bob woo											
18	2012-BEE001-00 Steve Albert											
19	2012-BEE001-00 Ravi Shankar											
20	2012-BEE001-00 David Deckham											

3.5.6 Import using Advance Template

Download the advance template. This excel file will create activities and sub-activities for you. With student's marks. Once completed, upload that file using **"Upload file button".**

New Activities with marks will be added to the system.

	A	B	C	D	E	F	G
1	Activity Type		Quiz	Quiz	Quiz	Assignment	
2	Activity Name		Quiz 1	Quiz 1	Quiz 2	Assignment 1	
3	Sub Activity Name		Q1	Q2	Q1	A1	
4	Max Marks		10	10	10	10	
5	Weight		10	10	10	10	
6	CLOs		CLO1	CLO2	CLO3	CLO2	
7	Reg No	Name					
8	2015BEE7F00001	Student 1	9.17	5	0	0	
9	2015BEE7F00002	Student 2	0	8.5	5.67	5.67	
10	2015BEE7F00003	Student 3	7.5	10	0	0	
11	2015BEE7F00004	Student 4	7.5	1.5	0	0	
12	2015BEE7F00005	Student 5	9.17	0	2	2	
13							
14							
15							
16							

3.5.7 Single Class Activity

Each activity is represented as a separate row having information about Date of creation, Name, Total marks and GPA percentage. Following options can be exercised on each activity:

Assignment	03-10-2016	Assignment 2	10	6%	
Assignment	27-03-2019	Assignment 3	30	6%	
Final Exam	03-10-2016	Final	100	30%	

i.   Edit Activity Info

ii.   Delete Activity

iii.   Add/Update Activity Outcome

Directly Update the Student Marks

iv.   Download Excel Template for Outcome

(for Import)

v.   Import Activity Outcome / All students

vi.   Export Class Sub Activities
(MS Excel format)

vii.   Add/Update remarks for students and
see their uploads.

viii.   Download PDF question paper

ix.   Download MS word question paper
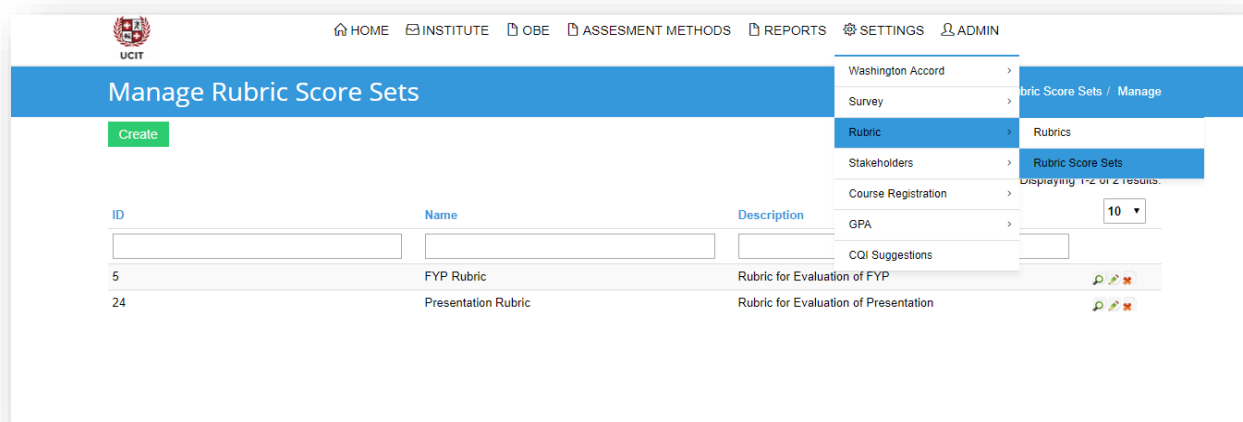
x.   Add attachment

3.6   Rubric

Rubric is a scoring guide used to evaluate the quality of students. Rubrics usually contain evaluation criteria, quality definitions for those criteria at particular levels of achievement, and a scoring strategy.

3.6.1   Rubric Score Set

Please select the highlighted menu and create the score set of your rubric by clicking on create button.

STEP #1

When you click on create button, following forms displays

1. Provide the Name e.g Presentation rubric
2. Provide The description.

STEP #2

Once the rubric is created, you need to add the score set for that specific rubric. To add the score set, select the rubric.

Click on the button with caption "Add rubric Score"

After this a pop-up window will open like following.

1. Add Name for the score set e.g Excellent
2. Specify the short name.
3. Set the score to see the strengths and weakness of the student.

3.6.2 Manage Rubric

Step #3

Please select the highlighted menu and to create the rubric click on create button.

When you click on create button, following window will open

1. Select the school e.g Main campus
2. In Name field, add the name for your rubric
3. Select the rubric score set.

4. Add question for your rubric, the number of question can be increase/ decrease.
5. Add weightage for each question.
6. Click on save button and your rubric is created.

3.6.3 Create Rubric Based Activity

Step #4

Go back to your course section, Click on the highlighted menu

Following pop-window will open like following

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Create Class Activity(Rubric)

Fields marked with * are required.

Activity/Assesment Method *   **Rubric ***   **Date ***

Final Lab Paper   EE-FYP-Rubric   28-03-2019

CLOs *

CLO-1 - Memorize and Understand the theories and concepts related to Electrostatics and Magnetostatics.

Save

1. Select the Assessment/Activity method.
2. Select the rubric that you've created in Step #3.
3. In date field, current date is automatically selected
4. From the list of CLO, please select the CLO which you want to assigned to this rubric.

3.7 Marks OBE

Please click the highlighted menu under selected course and you will see detailed list of marks for each activity along with their contribution to CLO attainment for individual student.

Result can be export in PDF and MS Excel format.

3.8 Marks GPA

Please click the highlighted menu under selected course and you will see the contribution of each activity for the GPA calculation, along with their attainment for every student

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3.9 Course Breadth

In course Breadth, you can see the distribution of your activities on the basis on learning types. Which gives you the idea whether your course is going according to plan or not.
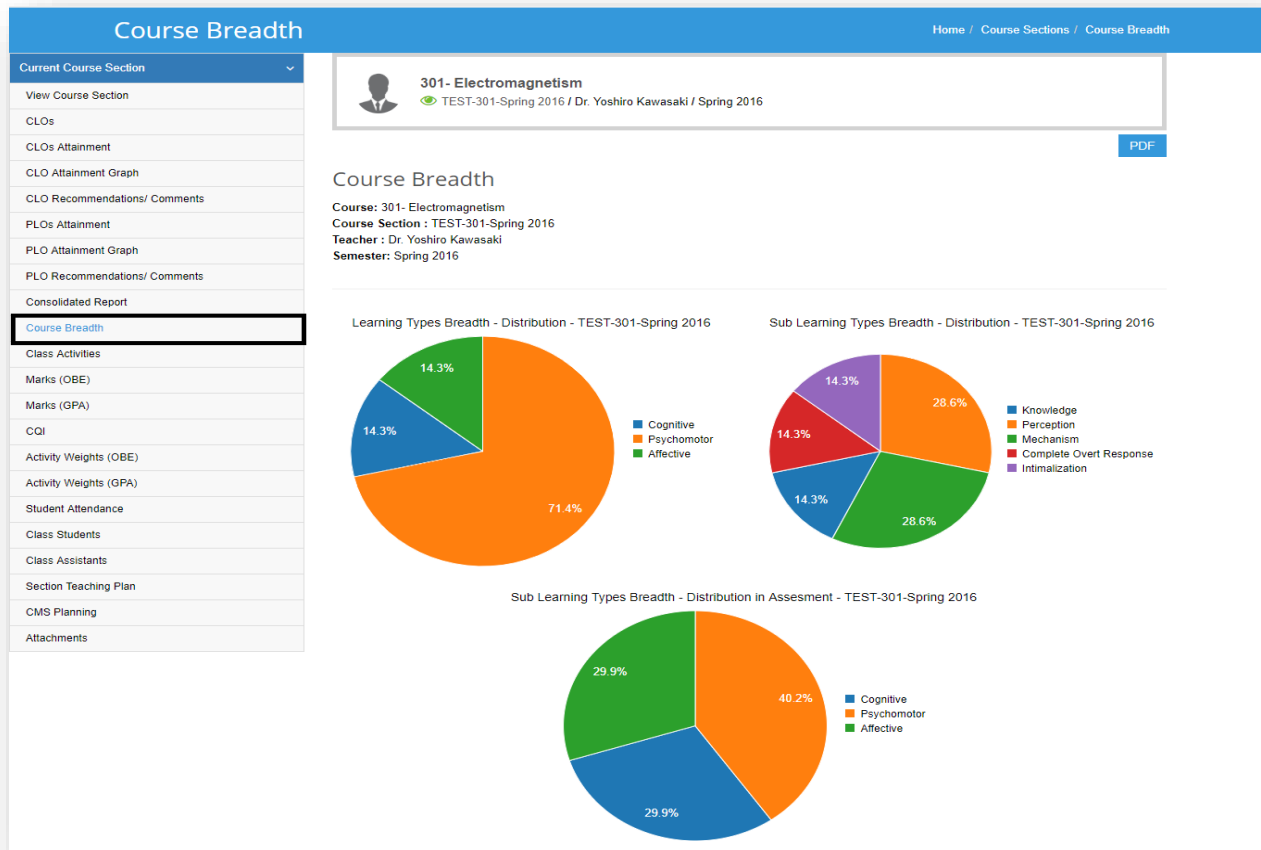
It also shows achievement graphs on the basis of learning and sub learning types

Learning Types Breadth - Achievement - TEST-301-Spring 2016

Sub Learning Types Breadth - Achievement - Cognitive - TEST-301-Spring 2016

Sub Learning Types Breadth - Achievement - Psychomotor - TEST-301-Spring 2016

Sub Learning Types Breadth - Achievement - Affective - TEST-301-Spring 2016
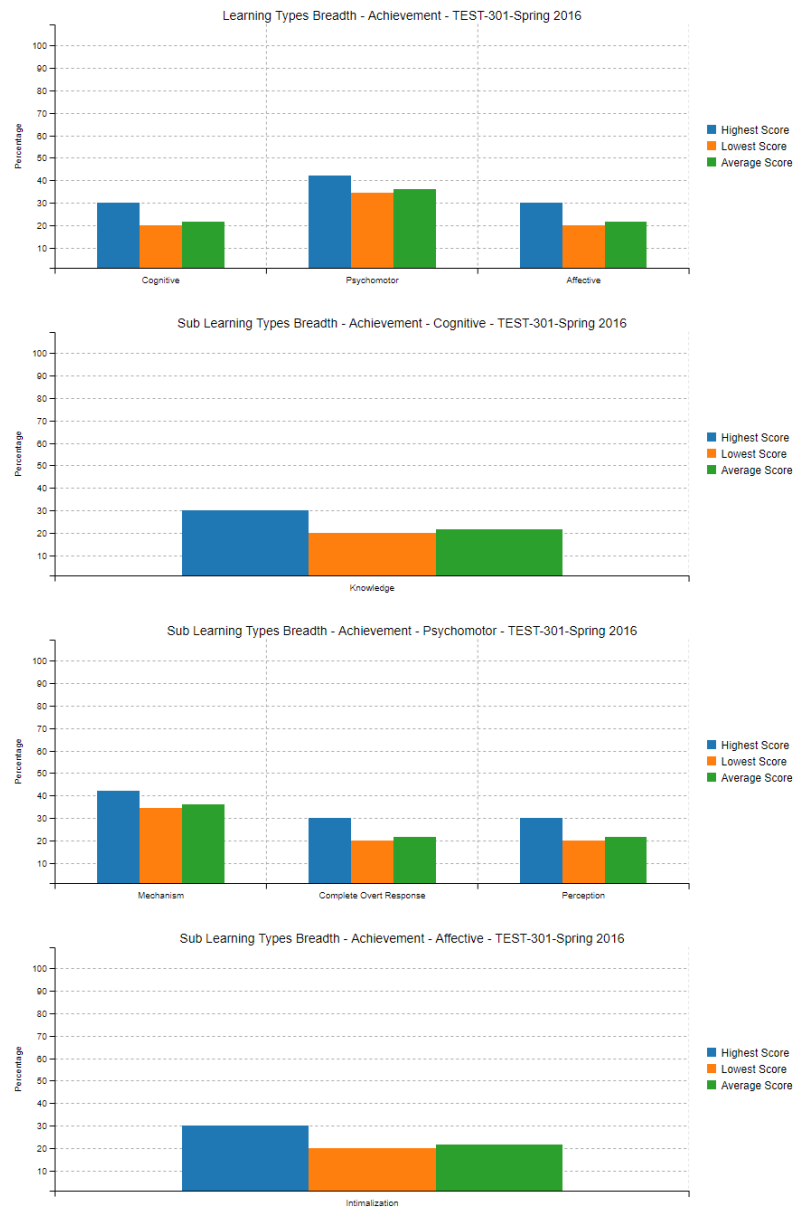
3.10 CLOs attainment

Please click the highlighted menu under selected course section and you will see CLO attainment for individual student. Any red Color means that KPI is not achieved for that particular course.

You can also use following filters to see more results in more detail.

3.11 View CLO Attainment Graph

From selected course options, please click the highlighted menu and CLO attainment graph will appear. Each CLO is marked in different color. A red colored horizontal lines shows the benchmark / attainment criteria. CLO Attainment criteria can be updated using "Update Section" Button given in Course "View" menu.

It also shows average attainment of students for each CLO. Which gives the idea how students are performing in each CLO.

View Course Section

Current Course Section

- View Course Section
- CLOs
- CLOs Attainment
- **CLO Attainment Graph**
- CLO Recommendations/ Comments
- PLOs Attainment
- PLO Attainment Graph
- PLO Recommendations/ Comments
- Consolidated Report
- Course Breadth
- Class Activities
- Marks (OBE)
- Marks (GPA)
- CQI
- Activity Weights (OBE)
- Activity Weights (GPA)
- Student Attendance
- Class Students
- Class Assistants
- Section Teaching Plan
- CMS Planning
- Attachments

PDF

EE-509- Electromagnetic Field
FALL 2014 EE-503 / Dr. Alex Stewart, Dr. Asma Al-Turkastani / Fall 2014

○ Actual Weights   ☑ Include CQI Activity   ● Both ○ Male ○ Female   Show Graph
○ Normalized Weights

Course Learning Outcomes Attainment

CLO Attainment criteria in graph, 60% of Students , 50% of Marks for this Course Section

CLOs	Total Students	Number of Student Attained CLO above 50%	Percentage	Average
CLO-1	29	27	93.1	68.75
CLO-2	29	21	72.41	60.97
CLO-3	29	22	75.86	62.47
CLO-4	29	23	79.31	64.76

3.12 PLO attainment

Please click the highlighted menu under selected course section and you will see PLO attainment for individual student. Any red Color means that KPI is not achieved.

3.13 Perform CQI

STEP #1

To run the CQI, please select the highlighted menu under selected course section. It will show you list of only those students, whose CLO is not met. So system will generate corrective action request only for deficient students.

To generate the CQI for these 2 students, click on the button with caption **"Generate Corrective Action Request"**

Step #2

After step #1 CAR has been generated, now you've to create an activity for deficient student. So that student can achieve CLO.

Click the button with caption **"Add Class Activities"**

Step #3

Following window will pop-up after clicking on **Add Class Activity.** Fill the fields as discussed above in **"Class Activities"** Section.

In class activities, activity will be added with CQI tag.

4. OBE Menu

4.1 Course Learning Outcomes

Please select the Course Learning outcomes menu from Main OBE Menu.

4.1.1 Create

Please click Create Button. A window like following will appear

- Please assign a short code in Code filed like CLO1, CourseName_CLO1 etc.
- Please select the course.
- Mark this CLO as Active / In Active, by default it is Active and let it remain Active.Inactive means, we don't use this CLO anymore. Such CLO can be deleted as well.
- Add description of CLO
- Select the type, Usually CLO created by administration is marked as **Standard.** If faculty members add CLO to the specific course, it is marked as **Custom** CLO

4.1.2 Import

Please click the Import Button. A pop-up window like following will appear.

Please download the template which may look like following. Update the Excel sheet with CLO data and upload using same pop-up window.

	A	B	C	D	E	F	G	H	I
				PLO Code	Learning Type Code	Leraning Type Level	Emphisis Level	Program Batch	
1	Couse Code	CLO Code	CLO Description						
2	MATH-105	CLO1	Understanding the concepts of scalar and vector products.	PLO1	C	2	1	BEE-7	
3	MATH-105	CLO2	To be able to use the concept of limits and continuity.	PLO1	A	1	1	BEE-7	
4	MATH-105	CLO3	Applying techniques of differentiation to real world problems.	PLO1	C	3	2	BEE-7	
5	MATH-105	CLO4	Evaluate and carry out the convergence analysis of sequences and series.	PLO1	P	2	1	BEE-7	
6									
7									
8									

4.1.3 CLO-PLO Mapping

SCENARIO #1

Select the CLO and click on the highlighted menu in the left panel

To map the CLO with PLO click on the button with caption "**Add Program Learning Outcome".**

1. Select Program Batch
2. Select PLO
3. Select Learning type
4. Select level

5. Select emphasis level
6. Press save or repeat the process to map more PLO's for the current CLO.
   NOTE: You can add same CLO to multiple program batches by repeating these steps.

SCENARIO #2

Select the Courses menu from institute main menu.

Select any course and following window will open

To map CLO with PLO, click on highlighted menu in the left panel. Following window will appear.

View Course

CS-104 - Data Structures and Algorithms Anlysis

- View
- Program Batches
- Course Learning Outcomes
- Attachments
- Course Sections History
- PLO Recommendations/ Comments
- CLO Recommendations/ Comments

CS-104 - Data Structures and Algorithms Anlysis

Course Learning Outcomes

[Create CLO] [Import CLOs] [Add using Templates CLOs] [Export]

Total 4 results.

Sr.No.	Code	Description	Learning Type/Level	Emphasis Level	PLO	Active	Program Batch	
1.	CLO-1	Choose appropriate data structures and their implementations for a given problem.	C1	3. Low	PLO 1	Yes	BS-EE-02	✏🗐✖
2.	CLO-2	Employ the correct class of algorithms for any given situation.	C1	3. Low	PLO 3	Yes	BS-EE-01	✏🗐✖
3.	CLO-3	Analyze a complex problem, and design and implement solutions for it.				Yes		🗐
4.	CLO-4	Compare various algorithms based on accuracy, time complexity, and memory requirements.				Yes		✏🗐✖

CLO / PLO Weight Relationship

CLO	Program Batches
PLO 1 - Engineering Knowledge	
CLO-1 - Choose appropriate data structures and their implementations for a given problem.	BS-EE-02
PLO 2 - Problem Analysis	
CLO-3 - Analyze a complex problem, and design and implement solutions for it.	BS-EE-02
PLO 3 - Design/Development of Solutions	
CLO-2 - Employ the correct class of algorithms for any given situation.	BS-EE-01
PLO 5 - Modern Tool Usage	
CLO-4 - Compare various algorithms based on accuracy, time complexity, and memory requirements.	BS-EE-01

You can create new CLO, by clicking on the button with caption "**Create CLO"** Or you can map existing CLO with PLO by clicking on the highlighted icon.

A Pop-up window will open like following

Fill the fields as discuss in the **Scenario #1**

NOTE: You can same CLO to multiple program batches by clicking on "ADD" button.

4.2   Continuous Quality Improvement (CQI)

This feature is very handy to figure out CQI actions needed at Student / Course / Batch level for CLO and PLO.

4.2.1 Create New CQI

Under one Such CQI we can create multiple Corrective Action Requests. To create Please click Create button.

Following screen will appear.

Please assign a document number as per your local convention.

- By default, current date will be selected but you may change
- Please select the CQI Type, whether you want to check for PLO or CLO
- User name will be added by default (current logged in)
- School / Department of user will be selected by default however it can be changed.
- Select department, this should help to filter out relevant programs
- Select the relevant semester
- Select the program like BS Software Engineering
- Select Program Batch
- Press Get Results

A result window may appear like following. Red color shows PLO/CLO not met. You can select the check box to include the relevant student(s), add remarks and press proceed.

EE-509 - Electromagnetic Field, FALL 2014 EE-503, Fall 2014, KPI: 50% , Dr. Alex Stewart

Select	Registration No.	Name	CLO-1	CLO-2	CLO-3	CLO-4
☐	2012-BEE001-0001	Hassan Abdullah	70.63	56.00	52.50	47.00
☐	2012-BEE001-0002	Khalid Hussain	50.63	36.00	41.50	34.00
☐	2012-BEE001-0005	Najwa Harris	44.38	44.00	49.50	22.00
☐	2012-BEE001-0008	Saqeef Nurshah	73.13	48.00	59.50	71.00
☐	2012-BEE001-0009	Deema Alhamwi	80.00	44.00	66.00	73.00
☐	2012-BEE001-0016	David Deckham	53.13	52.00	39.00	61.00
☐	2012-BEE001-0017	Mark Taylor	62.50	65.00	43.50	66.00
☐	2012-BEE001-0018	Marry Trueman	54.38	48.00	63.50	62.00
☐	2012-BEE001-0021	Andrew flintoff	46.88	54.00	25.00	18.00
☐	2012-BEE001-0023	Roberto Romario	61.25	49.00	72.00	77.00
☐	2012-BEE001-0027	Ahmed Saeedov	58.75	41.00	41.00	44.00
☐	2012-BEE001-0029	Jack Walsh	63.13	42.00	35.00	37.00

A new corrective action request will be created

4.2.2 Handling Corrective Request

- Basic data is already populated.
- Please select the nature of problem and add description. Content in Nature of Problem
- List can be changed by Administrator from Settings->CQI Suggestion.
- You may add more sections (courses) or students as well.

4.2.3 View Existing CQI

You may select any of the existing CQI documents.

Please click the document from "Document No" Column.

Under this CQI Activity we can create multiple Corrective Action Requests (CAR).

To see the related CAR please click the highlighted menu.

4.3   Corrective Action Request

Corrective action request is an individual activity or set of related activities to improve one more PEOs, PLOS, CLOs or any other process of institution.

Please click the highlighted section in OBE menu.

Click the Create button to create new CAR or you may select any existing CAR to update information / Status.

Please see **section 4.2.2**. Only difference between **Handling Corrective Request** and direct CAR generation is that in this case You will provide the basic information for CAR.

5. Reports

All Reports are available in main Reports menu

Following is brief information

5.1   Alignment of PEOs with Vision & Mission

This report shows all PEOs (Program Education Objectives) of a program and their relationship with university Mission, Vision and program mission.

Sample Report

Select the Program and Press Report Button.

This is sample report generated which can be exported in PDF/Excel

5.2   Assessment of Program Educational Objectives

This report shows all PEOs (Program Education Objectives) of a program and details of assessment strategies / KPIs for these PEOs.

Please select the Program and press report

5.3 Program Education Objective (PEO) & Learning Outcomes (PLO)

This report shows all PEOs (Program Education Objectives) and PLOs (Program Learning Outcomes) of a program.

Please select the Program and press report.

Program Education Objective (PEO) & Learning Outcomes (PLO)

This report shows All the Program Education Objectives of your institute. This relates to ling term vision of institute and purpose of existence.

Filters

Program * : Bachelor in Electrical Engineering

Program Batch * : BS-EE-01

[Report] [PDF] [Excel]

Program Education Objective (PEO) & Learning Outcomes (PLO)

Program Batch : Bachelor in Electrical Engineering (BS-EE-01)

Program Education Objectives

PEO-2	To produce creative engineers equipped with sound analytical and problem solving skills to undertake real world challenges
PEO-3	To produce responsible and ethical professionals with leadership qualities and effective soft skills.
PEO-4	To produce enterprising professionals with a motivation for innovation and life-long learning.
PEO-1	To produce employable graduates with strong concepts in the domain of Electrical Engineering

Program Learning Outcomes

PLO 1	Engineering Knowledge	Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialisation to the solution of complex engineering problems
PLO 1	Engineering Knowledge	Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialisation to the solution of complex engineering problems
PLO 2	Problem Analysis	Identify, formulate, research literature and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences
PLO 2	Problem Analysis	Identify, formulate, research literature and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences
PLO 3	Design/Development of Solutions	Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations
PLO 3	Design/Development of Solutions	Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations
PLO 5	Modern Tool Usage	Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations

5.4   Program Educational Objectives vs. Program Learning Outcomes

This report shows all PEOs (Program Education Objectives) of a program and mapping of PLOs (Program Learning Outcomes) with PEOs of program.

Please select program and press report.

Program Educational Objectives vs. Program Learning Outcomes

This report shows All the Program Education Objectives of your institute and their relationship with university Mission , Vision and program mission

Filters

Program *
Bachelor in Electrical Engineering

Program Batch *
BS-EE-01

Report   PDF   Excel

Program Educational Objectives vs. Program Learning Outcomes

Program : Bachelor in Electrical Engineering (BS-EE-01)

The PEO of the program state that Bachelor in Electrical Engineering graduates will:

PEO-1 - To produce employable graduates with strong concepts in the domain of Electrical Engineering

PEO-2 - To produce creative engineers equipped with sound analytical and problem solving skills to undertake real world challenges

PEO-3 - To produce responsible and ethical professionals with leadership qualities and effective soft skills.

PEO-4 - To produce enterprising professionals with a motivation for innovation and life-long learning.

Program Learning Outcomes	PEO-1	PEO-2	PEO-3	PEO-4
PLO 1 - Engineering Knowledge	✓	✓		
PLO 1 - Engineering Knowledge	✓	✓		
PLO 2 - Problem Analysis	✓	✓		✓
PLO 2 - Problem Analysis	✓	✓		✓
PLO 3 - Design/Development of Solutions		✓		
PLO 3 - Design/Development of Solutions		✓	✓	
PLO 5 - Modern Tool Usage		✓		

5.5 Program Outcome (PLO) - Course Outcome (CLO) Mapping

This report shows Mapping of PLOs (Program Learning Outcomes) and CLOs (Class Learning Outcomes) at Program Level. It includes details of learning types in a Course Learning Outcome with their level are given as well.

Please select the program. You may select a single PLO or All PLO.

You may select a single course or all courses of program.

If you select check Box "Show Mapped PLO only", Report will show only those PLOs which have at least on CLO mapped.

If you select check Box "Format", Report will show same data in a format where course details are given first and then CLO / PLO Mapping details.

Sample Report #1

Sample Report # 2 (Format 2)

5.6 Mapping of Program Learning Outcomes to Courses

This report shows mapping of PLOs (Program Learning Outcome) with courses of a Program

5.7 Program Courses - Program Outcome (PLO) Mapping

This report shows Mapping of PLOs (Program Learning Outcomes) and CLOs (Class Learning Outcomes) for a single Course. Details of learning types in a Course Learning Outcome with their level is given as well.

Sample Report

Program Courses - Program Outcome (PLO) Mapping

This report shows Mapping of Program Learning Outcomes and Class Learning Outcomes for a single Course. Details of learning types in a Course Learning Outcome with their level are given as well.

Filters

Program	Program Batch *	Course *
Bachelor in Electrical Engineering	BS-EE-01	CS-101- Fundamentals of Computers

Report | PDF | Excel

Program Courses - Program Outcome (PLO) Mapping

Program : Bachelor in Electrical Engineering (BS-EE-01)
Course : CS-101 - Fundamentals of Computers

		PLO-1	PLO-2	PLO-3	PLO-5	PLO-9	PLO10	PLO11	PLO12	PLO4	PLO6	PLO7	PLO8
CLO-1	Identify and describe details about the basic components of a computer					A1							P1
CLO-10	Description		C1										
CLO-2	Explain the fundamental concepts related to data processing and storage.	C2											
CLO-3	Explain the fundamental concepts related to operating systems.	P2											
CLO-4	Describe and explain the fundamental concepts related to internet and computer networks.				P3								
CLO-5	Describe the fundamental concepts related to computer programming and databases.		C2										

5.8   Class Room Combined Result (OBE)

This report shows over call combined result of a class/course

This report shows overall result attained of a Course taught. Result can be viewed with following perspectives for each student

- Over All Marks attained in all class activities
- CLO (Class Learning Outcomes) Attainment
- PLO (Program Learning Outcomes) Attainment

5.9 Section consolidated Report

This report shows overall attainment of CLO and PLO attainment of student in tabular and graphical form.

Sample Report

5.10 Class Room Combined Result (GPA)

This report shows overall class-combined result of a class/course. Result can be viewed with following perspectives for each student

- Detailed View
- Summarized View

5.11 Program - Course Learning Outcome (CLO) Attainment

This report shows actual PLOs attainment of all students of a program.

5.12 Student Program Outcome (PLO) Attainment

This report helps to find PLOs attainment of an individual student from any program.

Sample Report

5.13 Student PLO Attainment - Distribution

This report shows PLO attainment distribution of an individual student or multiple.

5.14 Student - Course Learning Outcome (CLO) Attainment

This report helps to find CLOs attainment of an individual student from any program, course wise.

Sample Report

5.15 Student wise Course Learning Outcome (CLO) Attainment

This report shows actual CLOs attainment of all students of a program.

5.16 Outcome Based Education Transcript

This report generates OBE based transcript semester wise for individual and for all/specific student of Batch.

5.17 Transcript GPA

This report generates GPA transcript of all the semesters for an individual student

This report helps to find PLOs attainment of an individual student from any program.

Filters

School	**Program**	**Program Batch ***
Main Faculty	Bachelor in Electrical Engineering	BS-EE-01

Student *

2012-BEE001-0002 - Khalid Hussain   ▼   ☑ Show Percentage

Report   PDF

University of Computer and Information Technology

Department of Electrical Engineering

Main Faculty

UCIT

Transcript

Name: Khalid Hussain
Father's Name:
Date of Birth:
Registration No: 2012-BEE001-0002

Sr.No	Code	Courses	Credits	Percentage Attained	Grade	Score
Spring 2016						
1.	301	Electromagnetism	4	97.6100	A	4.00
2.	301	Electromagnetism	4	0.0000		
3.	EE-512	Digital Signal Processing Systems	4	0.0000		
4.	EE-518	Control Systems Concepts	4	0.0000		
5.	HU222	Professional Ethics	2	0.0000		
6.	MGT271	Entrepreneurship	2	0.0000		
			GPA	0.8	**CGPA**	1
Fall 2014						

5.18 Complex Engineering Problems Report

5.19 Course wise Program Outcome (PLO) Attainment

This report shows course wise actual attainment of Program Learning Outcome for a program

5.20 Student wise Program Outcome (PLO) Attainment

This report shows actual PLOs attainment of all students of a program.

Marks of students are clickable, you can drill down to more detailed reports by clicking on marks of any student.

Sample   Report

5.21 Course Assessment Summary

This report shows over all course assessment summary of a recent course taught. Observations are recorded for overall improvement, remedial (if needed) and then post remedial review.

5.22 Semester – Course learning Outcome Attainment

This report generates CLO attainment summary in tabulated and graphic form for particular semester and department.
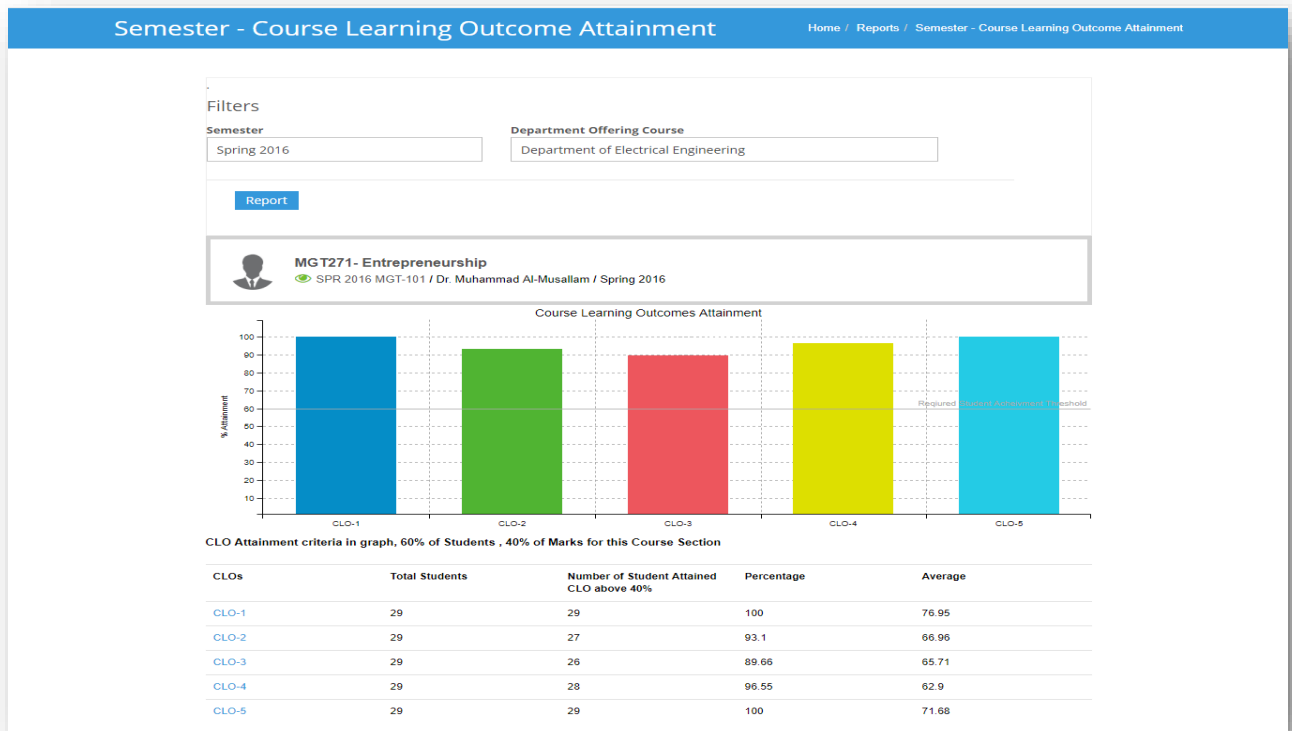
5.23 Program Batch - Course wise PLO Attainment

This report shows course wise actual attainment of Program Learning Outcome for a program batch
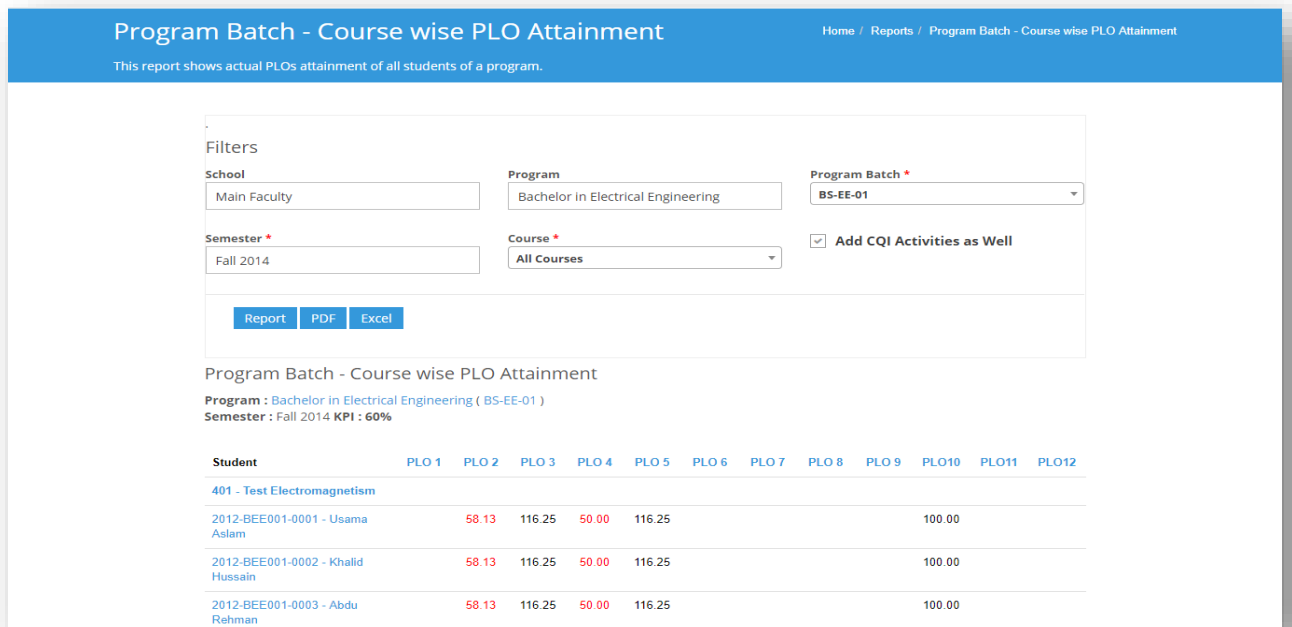
5.24 Course comparison Report

This report shows comparison of CLO/PLO's of a course offered in different course sections
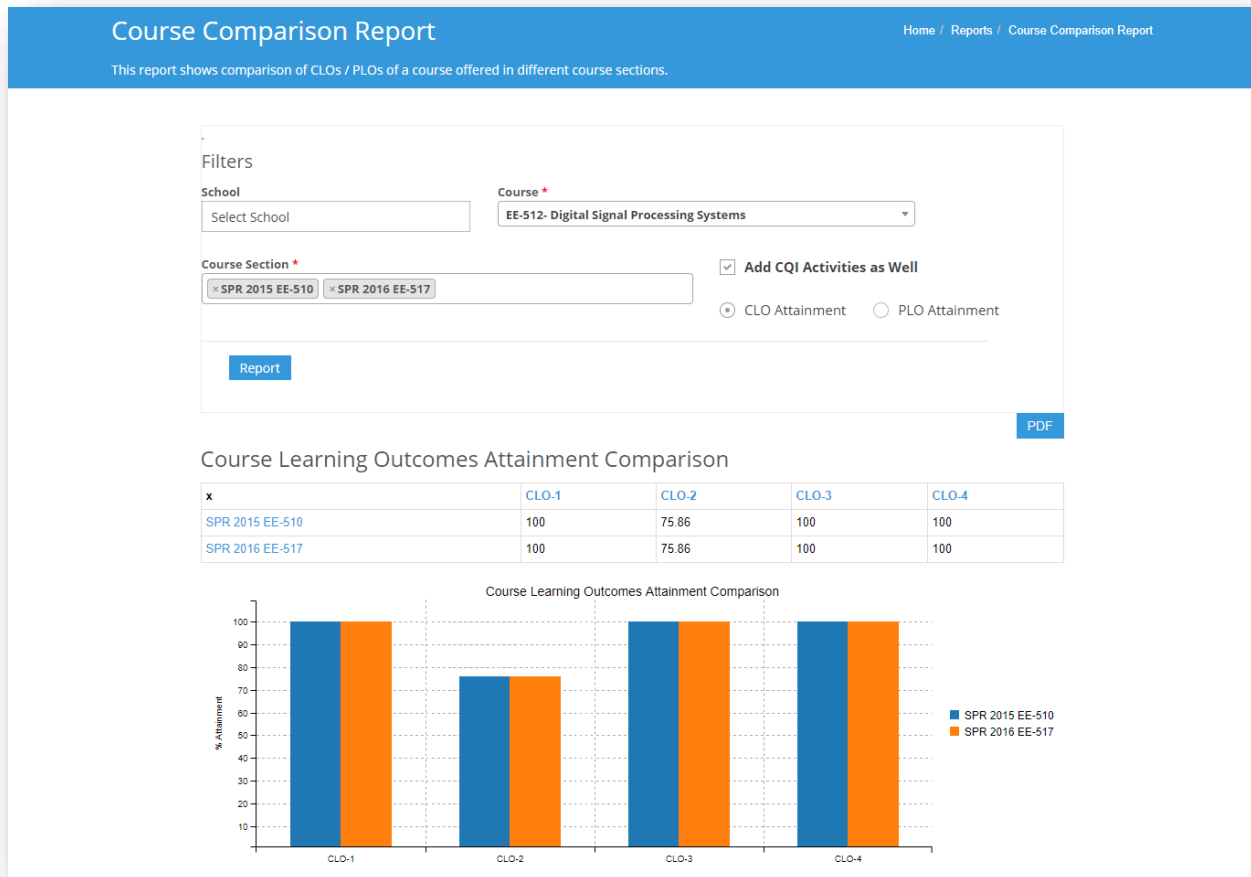
5.25 Program Batch Comparison Report

This report shows comparison of PLOs of a program offered in different batches
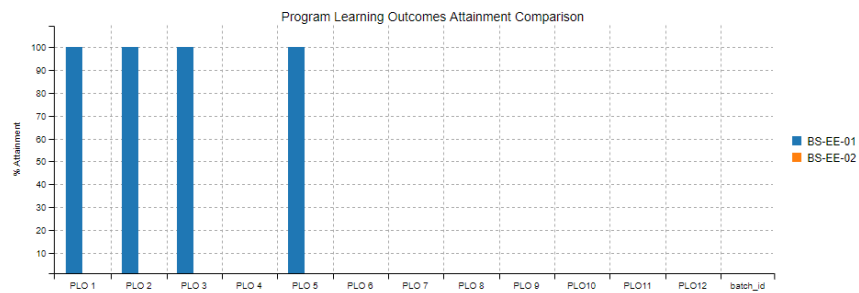
5.26 Survey Result

This section facilitates you to find results of different surveys conducted or interviews arranged.

Sample report
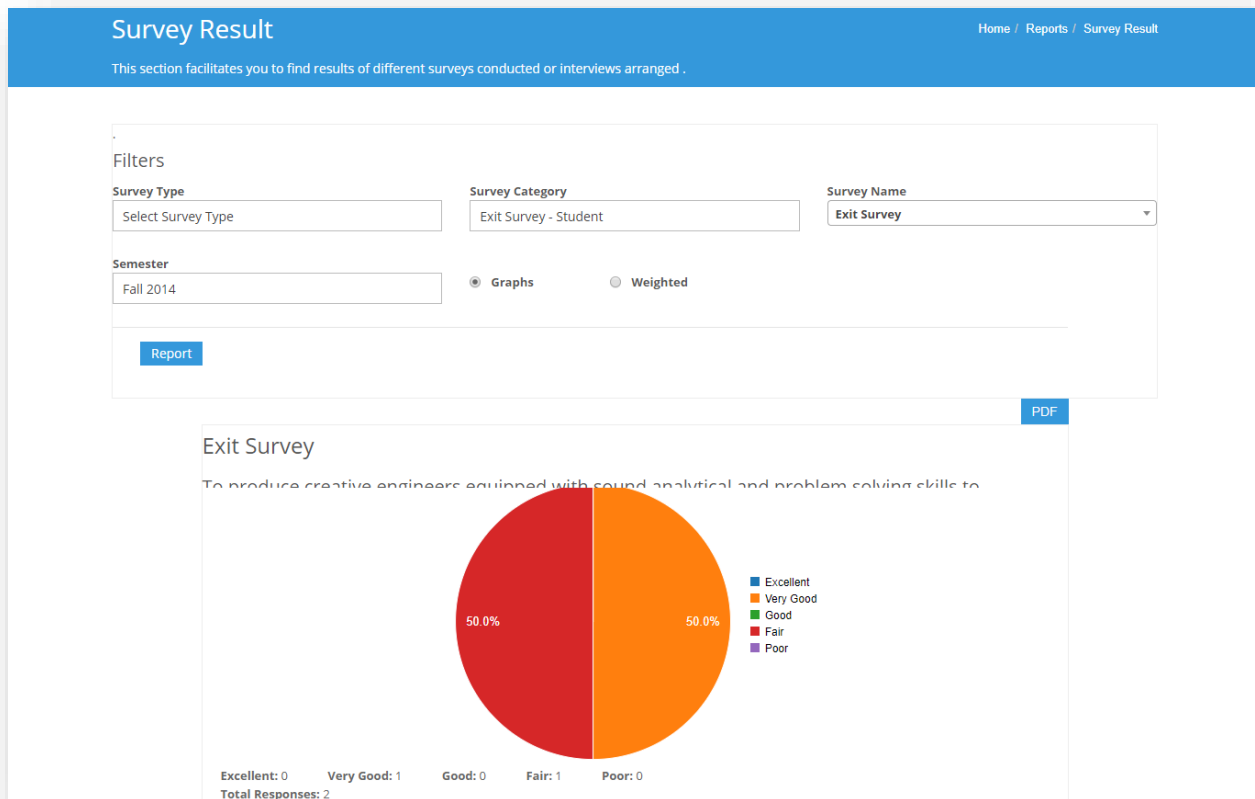
5.27 PEO / PLO / CLO Wise Survey Result

This section facilitates you to find results of different surveys conducted or interviews arranged.

This section facilitates you to find results of different surveys conducted or interviews arranged .

Filters

Select Type

PEO Based

Program

Bachelor in Electrical Engineering

Semester

× Fall 2014   × Spring 2015

◉ PEO / PLO Level   ○ KPI Level

Survey Category

× Exit Survey - Student   × Alumni Survey

Survey Name

× Exit Survey

Report

PDF

PEOs Attainment

Department: Department of Electrical Engineering

Program: Bachelor in Electrical Engineering
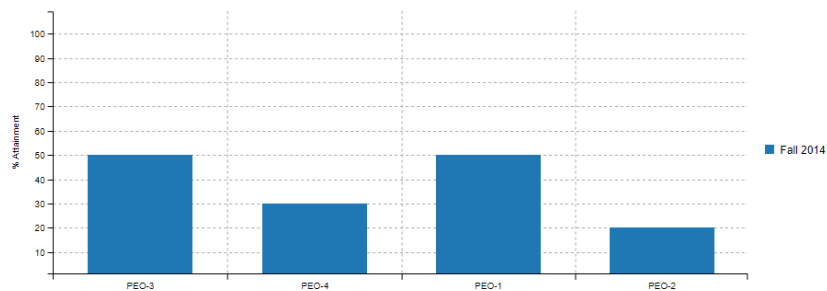
Fall 2014

PEO-3 (W/S = 50)

Question :- To produce creative engineers equipped with sound analytical and problem solving skills to undertake real world challenges

PEO-4 (W/S = 30)

Question :- To produce responsible and ethical professionals with leadership qualities and effective soft skills.

PEO-1 (W/S = 50)

Question :- To produce enterprising professionals with a motivation for innovation and life-long learning.

PEO-2 (W/S = 20)

Question :- To produce employable graduates with strong concepts in the domain of Electrical Engineering

Exit Survey

Total Published : **0**
Total Responses : **0**
Response Percentage : **0%**

5.28 CQI - CAR Status Report

Filters

School	Department	Semester
Main Faculty	Department of Electrical Engineering	Fall 2014

Report   PDF   Excel

Course Section	Code	Course	Intiated	Under Discussion	Implementation Stage	Review Stage	Closed	CAR Ref
Dr. PeterJohnson								
FALL 2014 E-502	EE-510	Electrical Machines Introductions	3	0	0	0	0	CAR/Fall 2014/DEE/0003 , CAR/Fall 2014/DEE/0004 , CAR/Fall 2014/DEE/0005 ,
Dr. AlexStewart								
FALL 2014 EE-503	EE-509	Electromagnetic Field	4	0	0	0	0	CAR/Fall 2014/DEE/0006 , CAR/Fall 2014/DEE/0008 , CAR/Fall 2014/DEE/0009 , CAR/Fall 2014/DEE/0010 ,

6. Offer a course section?

1. Select **Department** from **institute** main menu

   1.1 Adding Programs

      1.1.1 Click button with caption **"Create program"**

      1.1.2 Enter name of the program e.g. Bachelors of Electrical Engineering

      1.1.3 Enter the short name of the program e.g. EE

      1.1.4 Select Department if not selected

      1.1.5 Select Program level e.g. 16 years' bachelors program

      1.1.6 Select No. of Semesters e.g. 8 semesters for 4 years' bachelors program

      1.1.7 Select assessment method as Washington accord/ Blooms taxonomy

      1.1.8 Set marks KPI which represents minimum percentage required for student to clear a CLO/ PLO.

      1.1.9 Set student KPI

   1.2 Add PEO's to that program

   1.3 Add program batches

      1.3.1 Click button with caption "**Create Program Batch**"

      1.3.2 Select Year

      1.3.3 Enter name e.g. BS-EE-01

      1.3.4 Enter number of semesters

      1.3.5 Set marks KPI which represents minimum percentage required for student to clear a CLO/ PLO.

      1.3.6 Set student KPI

1.4 Select created program Batch

1.5 Add Program Learning outcome

1.6 Add Batch Students

1.7 Add courses
    1.7.1   Click button with caption "**Create Course"**
    1.7.2   Add Course Code
    1.7.3   Add Course Name
    1.7.4   Add credit hours for theory and lab.
    1.7.5   Select the course type e.g. CLO based/ PLO based
    1.7.6   Select the check box with respect to course i.e Active, elective, supervised
    1.7.7   Select course level e.g. Undergraduate
    1.7.8   Select the department if not selected.
    1.7.9   Select knowledge profile
    1.7.10 Select program batch if not selected
    1.7.11 Select semester
1.8 Select created Course
1.10 Add Course learning outcome (CLO)
1.11 Map CLO with PLO

2 Select **Semester** from **Institute** main menu
  2.1 Create semester by clicking on **Create** button
    2.1.1   Select year
    2.1.2   Enter name of semester e.g Fall 2019
    2.1.3   Enter start and end date of semester

  2.2 Select the created semester
  2.3 Create course section by clicking on **"Create course section "**Button
    2.3.1   Select school
    2.3.2   Semester will be already selected
    2.3.3   Select course that you want to offer.
    2.3.4   Enter the name of course section
    2.3.5   Select teacher
    2.3.5   Add section name
    2.3.6   Set Marks KPI for students at course section level. Otherwise default KPI will be added.
    2.3.7   Set student KPI