

Outcome Based Education (OBE) Platform

Standard Operating Procedure (SOP)

1. Open the internet browser and type the URL: <https://obeconsulting.in/index.php>
2. Do the registration (if not already registered). Enter the following details as given in Figure below. Code : cupb

Outcome Based Education (CO-PO Attainment Software)

Pillars of OBE

OBE is about What Students Learn (Outcome) **NOT** What we Teach (Objective)

Clarity of Focus
Designing Down
High Expectations
Expanded Opportunities

Prof. William Spady (1994), Faculty of Education and Arts, University of Newcastle, Australia

Registration

Code: cupb
User Email: gurdyal.singh@chitkara.edu.in
Institute/University URL: chitkara.edu.in

REGISTER

How to Use OBCon

Head/Program In-charge Capacity

- Register using the defined process.
- Add program and POs
- Add Courses/Subjects to program and batch.

3. Login with registered Email at OBE platform. password not required as of now. Image attached for reference.

Outcome Based Education (CO-PO Attainment Software)

Pillars of OBE

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Login

Code: cupb
User Email: gurdyal.singh@chitkara.edu.in
Password:

Download Manual LOGIN

How to Use OBCon

Head/Program In-charge Capacity

- Register using the defined process.
- Add program and POs
- Add Courses/Subjects to program and batch.

4. On OBE platform homepage, select the programme of teaching i.e. Bachelor of Engineering (ME) and batch (2018 or 2019 or 2020) for which Course coordinator want to have CO-PO attainment.

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OBECon Program Settings Course Settings CO Attainment PO Attainment Feedback

Welcome to CO/PO Attainment Module

Set Working Parameters

Programme
 Bachelor of Engineering(ME)

Batch 4
 2018

Exit

5. Select the **Program Setting** tab from Top Menu bar. Under this Explore the following on left side pane of window. Nothing to be done here by Course co-coordinator. Just explore.
 - 5.1. Manage Programme (Already done by Program Incharge)
 - 5.2. Program Outcomes (Already done by Program Incharge)
 - 5.3. Manage Subjects (Already done by Program Incharge)
 - 5.4. Manage Students (Already done by Program Incharge)

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Program Settings Course Settings CO Attainment PO Attainment

Program Settings

- Manage Programme
- Program Outcome
- Manage Subject
- Manage Students
- Manage Employer
- Manage Alumni

#	Code	Program Name	Program Abbri	Sp Name	Sp Abbri	Duration	Sem/Tri	
1		Bachelor of Engineering	BE	Mechanical Engineering	ME	0	0	

6. Select the **Course Setting** tab from Top Menu bar.
 - 6.1. From the left-side pane of window, Select the **Update Cos.**
 - 6.2. Select the subjects allocated to you for CO-PO attainment for the selected batch and programme. (Contact Program Incharge of your Department in case of any mismatch.)

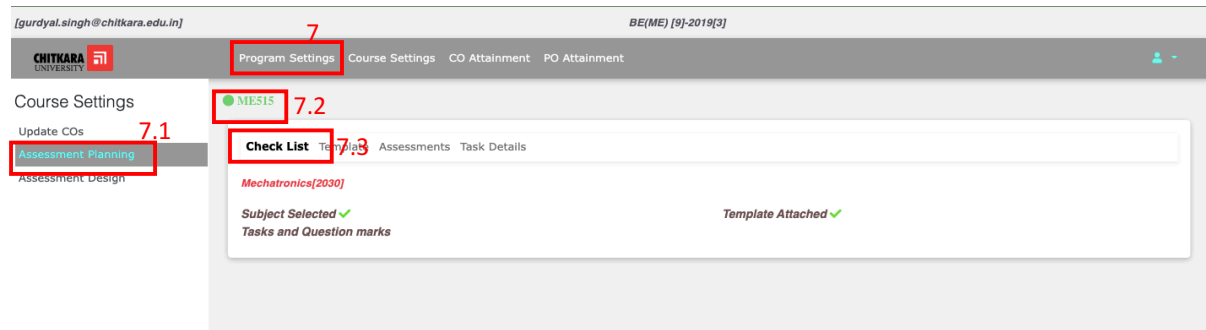
[illegible][illegible]

7. Under the **Course Setting** tab from Top Menu bar.

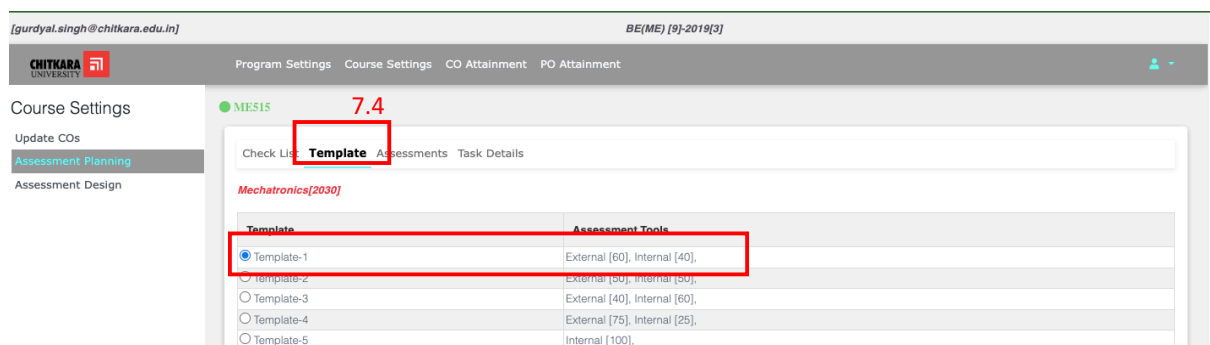
7.1. From the left-side pane of window, Select the Assessment Planning.

7.2. Select the subject from top bar.

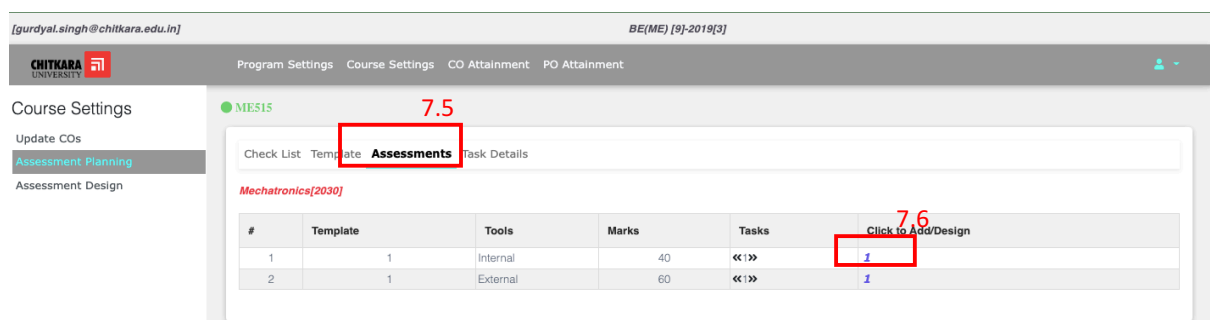
7.3. See the checklist for selected subject and requirements.



7.4. Select the appropriate template as per evaluation criteria for chosen subject



7.5. After the template selection, enter the no. of tasks or evaluation components by <<1>> button to increase (>>) or decrease (<<) the count of tasks designed for assessment. As of now we take internal as 1 assessment (combined effect of all internal component like assignments and STs).



7.6. Now click the Design task number (1) under Design column to enter the task details and marks (for example internals). Ignore the message like no marks found initially that appears by clicking OK.

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BE(ME) [9]-2019[3]

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Program Settings Course Settings CO Attainment PO Attainment

Course Settings

Update COs

Assessment Planning

Assessment Design

ME515

7.7

Check List

Template

Assessment

Task Details

Mechatronics[2030]

Weightage of marks is 100% if we are considering marks as it is for evaluation. It is 50% if we are allotting double.

#	Tools	Temp-Id	Task	Task-Id	Marks	Wt (%)	Questions	Publish Date	Submission Date	
1	Internal	1	1	2573	40	100	1	dd/mm/yyyy	dd/mm/yyyy	
2	External	1	1	2574	60	100	1	dd/mm/yyyy	dd/mm/yyyy	

7.8.1. Select the Question-Map tab. Add the QNo (Just 1 question is considered as whole internal assessment) and add marks (Internal marks 40 as per template selected), select the difficult level as whole for assessment (Easy, Medium or difficult) and Blooms Taxonomy (BT) Level as “Understanding” or “Applying”. Then “Save” . It will be reflected in below pane.

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Program Settings Course Settings CO Attainment PO Attainment

Course Settings

Update COs

Assessment Planning

Assessment Design

ME515

7.8.1

Question Map

Show/Upload Marks Task Template Rubric

Mechatronics[2030]

Assessment Tool - Internal

Task Number - 1

QNo	Marks	Difficulty Level (DL)	BT Level (BTL)
1	40	Medium	Applying

QNo	Statement	Marks	DL/BTL	CO								
1	--	40	Average Applying	<div>7.8.2</div> <table border="1"> <thead> <tr> <th>CO1</th> <th>CO2</th> <th>CO3</th> <th>CO4</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>35</td> <td>15</td> <td>30</td> </tr> </tbody> </table>	CO1	CO2	CO3	CO4	20	35	15	30
CO1	CO2	CO3	CO4									
20	35	15	30									

Only highset BT Level must be added.

7.8.4. Take care of checks. It must be ok. otherwise marks will not be uploaded.

7.8.3

7.8.4

UPLOAD MARKS

7.8.5. Choose the file and upload the marks for internals. Marks file must be an .csv file and must contained only selected columns as per format.

7.8.5

Choose file No file chosen

First Row is header row

Data from Row 2

- Column A - SNo
- Column B - Roll Number
- Column C - Q1-Marks
- Column D - Q2-Marks
- Column E - Q3-Marks
- so on...

UPLOAD MARKS CLOSE

7.8.6. Marks will be uploaded and displayed on screen.

7.8.6

UPLOAD MARKS

#	RollNo	Marks
1	1910990869	32
2	1910992306	35
3	1910992306	36
4	1910992311	36
5	1910992314	33

Note: As the marks file downloaded from Chalkpad contains both internal as well as external marks along with percentage columns, suggestion is to remove unnecessary columns (percentage) and rows and save it in two files containing internal and external marks separately.

8. The same procedure (From step 7.6 step to step 7.8.6) is to be repeated for External marks entry and QCO mapping by selecting external marks task design in point 7.6.

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Program Settings Course Settings CO Attainment PO Attainment

Course Settings

Update COS
Assessment Planning
Assessment Design

MEIS15

Question Map Show/Upload Marks Task Template Rubric

Mechanics[2030] Assessment Tool - External Task Number - 1

QNo	Marks	Difficulty Level (DL)	BT Level (BTL)
1	60	Medium	Applying

QNo	Statement	Marks	DL/BTL	CO								
1	--	60	Average Applying	<table border="1"> <thead> <tr> <th>CO1</th> <th>CO2</th> <th>CO3</th> <th>CO4</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>35</td> <td>15</td> <td>30</td> </tr> </tbody> </table>	CO1	CO2	CO3	CO4	20	35	15	30
CO1	CO2	CO3	CO4									
20	35	15	30									

Only highest BT Level must be added.

9. Select the CO Attainment Tab from TOP menu bar
 - 9.1. Select the CO Attainment Report from Left Bar menu.
 - 9.2. Select the subject code from radio button from mid-pane.
 - 9.3. Course Outcome Attainment report will be displayed for the chosen course. Report will display the summary of CO, CO-PO Map, assessment and CO-wise attainment by students. The overall attainment for the course on the attainment scale of 3 as well as percentage attainment is displayed at the end of report.
 - 9.4. Take the print-out of CO attainment report by saving as pdf.

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Program Settings Course Settings CO Attainment PO Attainment

Course Attainment

CO Attainment Report

MEIS15

Course Outcome Attainment Report

Programme BE (Mechanical Engineering)
Subject Mechanics
Batch 2019
Code MEIS15
Semester 5

Subject Assessment: Mechanics

#	Tools	Task	Task-Id	Marks	Wt (%)	Weighted Marks (%)
1	Internal	1	2573	40	100	40
2	External	1	2574	60	100	60

Course Outcome: Mechanics

SNo	Course Outcome	Wt(%)
CO1	Identify the problem design and optimize integrated solutions adopting new directions.	20
CO2	Involve interact and solve electro mechanical systems.	35
CO3	Develop and evaluate alternate solutions to real world problems.	15
CO4	Design and implement the sensor technology to basic problems.	30

CO-PO Map: Mechanics

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Identify the problem design and optimize integrated solutions adopting new directions.	H	M	H	-	-	-	-	-	-	-	-	-
Involve interact and solve electro mechanical systems.	-	-	H	-	M	-	-	-	-	-	-	-

- 9.5. Select the Course Closure Report from Left Bar menu. CO attainment score and PO Map on scale of 3 will be displayed. Take the printout of Course Closure Report. Write the analysis of Course attainment and Action plan at the space provided on the Course Closure Report. Take the recommendations from Subject Expert and DAAC members/Coordinator. Lastly, filed the signed Course Closure Report along with CO attainment report into Course File and scanned copy into Department Office file.

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Program Settings Course Settings CO Attainment PO Attainment

Course Attainment 9.5

CO Attainment Report

Course Closure Report

ME515

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Course Closure Report

Programme BE (Mechanical Engineering)

Subject Mechatronics

Batch 2019

Code ME515

Semester 5

CO Attainment Score and PO Map on Scale of 3

Course Outcome	AScore	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Identify the problem design and optimize integrated solutions adopting new directions.	2.86	3	2	3	--	--	--	--	--	--	--	--	--
Involve interact and solve electro mechanical systems.	2.86	--	--	3	--	2	--	--	--	--	--	--	--
Develop and evaluate alternate solutions to real world problems.	2.86	--	2	3	1	--	--	--	--	--	--	--	--
Design and implement the sensor technology to basic problems.	2.86	3	--	2	--	--	--	--	--	--	--	--	--

Course Attainment Analysis

10. Similar procedure is to be followed for CO attainment for other courses for same batch and programme.

11. To obtain the PO Attainment report for a programme or Batch (Under preview of Dean/HOD), Select the PO Attainment Tab from TOP menu bar:

11.1. Select the Direct Attainment from Left Bar menu.

11.2. PO Attainment Report by Direct Method of calculation as per academic performance will be displayed. This report summarizes the CO-PO attainment of each subject for a particular batch and programme. The analysis of this report helps in judging the attainment of each PO as per set criteria and formulating the strategies for Outcome Based Education.

← → ↻ oboconsulting.in/module/attainmentPO/ [gurdyal.singh@chitkara.edu.in] 11 BE(ME) [9]-2019[3]

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Program Settings Course Settings CO Attainment PO Attainment

PO Attainment 11.1

Indirect Attainment

Direct Attainment

Overall Attainment

CHITKARA UNIVERSITY

Chitkara University

Programme Outcome Attainment Report (Direct) 11.2

CO Attainment - PO Map: BE Mechanical Engineering

Subject	Course Outcome	Score	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
AM101	Introduce and form matrices to present mathematical solutions in a concise and informative manner. Use matrices to solve the problems of system of linear equations and solve various five problems using matrices	2.11	1	2	-	-	-	-	-	-	-	-	-	3
AM101	Find local extreme values of functions of several variables. Test for saddle points, examine the conditions for the existence of absolute extreme values. Solve constraint problems using Lagrange multipliers and solve related application problems	2.11	1	-	-	-	2	-	-	-	-	2	-	-
AM101	Apply the principles of Integral Calculus to solve a variety of practical problems in Engineering and applied Sciences	2.11	1	-	-	-	2	-	-	-	-	-	-	3

11.3. To obtain the indirect attainment, enter the details and feedback from employer and Alumni as per image attached.

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Program Settings Course Settings CO Attainment PO Attainment

Program Settings

Manage Programme

Program Outcome

Manage Subject

Manage Students 11.3

Manage Employer

Manage Alumni

Program List

#	Code	Program Name	Program Abbri	Sp Name	Sp Abbri	Duration	Sem/Tri
1		Bachelor of Engineering	BE	Mechanical Engineering	ME	0	0

11.4. Overall attainment of program will be combined of direct and indirect attainment.

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Program Settings Course Settings CO Attainment PO Attainment

PO Attainment

Indirect Attainment

Direct Attainment 11.4

Overall Attainment

CHITKARA UNIVERSITY Chitkara University Programme Outcome Attainment Report

PO Attainment [Overall]: BE Mechanical Engineering

PO	Direct PO Attainment	Indirect PO Attainment	PO Attainment	% PO Attainment
Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.	2.86	0	2.29	76.27
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.	2.86	0	2.29	76.27
Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.	2.86	0	2.29	76.27
Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	2.86	0	2.29	76.27
Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.	2.86	0	2.29	76.27
Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	3	0	2.40	80.00

12. To process the attainment for other batch or programme:

12.1. Select OBCon Tab from TOP menu bar

12.2. Select the programme or batch from drop-down list

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OBCon Program Settings Course Settings CO Attainment PO Attainment Feedback

Welcome to CO/PO Attainment Module

Set Working Parameters

Programme

Bachelor of Engineering(ME)

Batch

2019 12.2

Exit

Summery Chart

