# **Course File**

A useful tool for content delivery by Faculty of Engineering Colleges in India

(Contents Recommended by EQUATE that satisfies accreditation requirements)

Faculty may adopt the contents with appropriate modifications



Effective Quality Upgradation Assistance for Technical Education

(EQUATE), New Delhi

# **Course File**

	Course Title/Number		
	Semester	Year	
Name of the Faculty:			
Internet Homepage:			
E-mail id:			
Class Schedule			
Lecture: Days	and Timings		
Hours for meeting	ng students:	or by appointment	
i) Course Objective			
ii) Course Outcomes			
After completion knowledge, skills	of this course the students a and attitudes	re expected to be able to demonstrate	e following

The student will be able to:

1.	 _
2.	 
3.	_
4.	
5.	_
6.	_

ii) Once the student has successfully complete this course, he/she must be able to answer the following questions or perform/demonstrate the following:



9.	
10.	
11.	

# iii) Topic/Unit/Chapter Layout

Topic/Unit/Chapter	Lecture Hours	Laboratory hours

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# iv)Textbooks

Reference books

### (v) Evaluation Scheme

# 1) Theory

Evaluation Criteria	Marks
Sessional Exam 1	
Sessional Exam 2	
Quiz Exam	
Term project/paper	
Student Presentation	
Attendance	
University Exam/External	
Exam	
Total	

# 2) Laboratory

Evaluation Number	Subject	Schedule	Marks

### (vi) Mapping of Course Outcomes and Program Outcomes:

Course		Program Outcomes												
Outcomes	1	2	3	4	5	6	7	8	9	10	11	12	PSO1	PSO2

Course Outcome aligned the PO	to	Attributes and Elements	Level of Bloom's Taxonomy to be met	Target for Achievement*
		1		
		2		
		3		
		4		
		5		
		6		

\* Should be based on previous performance of students in the course.

### (vii - A) Delivery Methodology - Course Outcome (for example see vii - B as given below)

Course Outcome	Method	Supporting Tools	Demonstration

# (vii - B) Delivery Methodology Program Outcome

Program Outcome	Method	Supporting Tools	Demonstration

#### Example: DATA WAREHOUSE

Program Outcome	Method	Supporting Tools	Demonstration
2: demonstrate an ability to identify, formulate and solve	Semi Structured	Open problems from real life situations.	Finding DW solution to given problems
engineering problems		Discussions using PPT, whiteboard etc.	
3: demonstrate an ability to design a system, component or process as per needs and specifications.	Semi Structured	Whiteboard, Handouts /PPT	Formulation of star schema and obtaining information from these.
10: Able to communicate effectively in both verbal & written form	Presentations and written assignments	PPT based presentations	Through written and oral work
12: Develop confidence for self education & ability for life-long learning	Self Learning, searching internet, library work etc.	Internet and printed material	Term paper

### (viii) Course Outcome Assessment Methodology (Direct Assessment)

Please give brief description of Direct Assessment Methodology to be used:

Course Outcome	Assessment Tool	Specific Question/activity aligned to the
		Outcome*
	Test 1,2,3	<b>Instruction:</b> Keep copies of the question paper marked with COs covered with Bloom's Taxonomy level
	Assignment 1,2,3,4,5	Instruction: Keep copies of the Assignment sheets marked with COs covered with Bloom's Taxonomy level

Rubric	<b>Instruction:</b> Keep copies of the Rubrics prepared for assessment of specific COs covered
Quiz	Instruction: Keep copies of the Quiz questions marked with COs covered with Bloom's Taxonomy level
Project (Minor & Major)	<b>Instruction:</b> Keep details of the methodology adopted to cover COs and POs separately for each project
Laboratory	Instruction: Keep practical record of the experiments conducted marked with COs covered with Bloom's Taxonomy level
End of Semester Test	<b>Instruction: 1.</b> University exam question paper is to be kept as part of the course file marked with COs covered with Bloom's Taxonomy level.
	<b>2.</b> Analysis of University exam is to be done only by Tier I institution in details whereas Tier II institutions only indicate results based on whether overall course target is achieve or not

\* For some items advance preparation can be made but some others may require documentation after the method is completed i.e. for example Test question papers need to be prepared just before the test

# (ix) A. Weekly Lesson Plan

Week	Lectures	Laboratory	Assignment

# B. Daily Lesson Plan (Repeat format for each topic/unit/chapter/module)

TOPIC/UNIT/ CHAPTER/MODULE -
Title
Date:Day:
CONTENTS
TOPIC/UNIT/ CHAPTER/MODULE - Objective(s):
1.
2.
Once the student has completed this topic/chapter/module he/she will be able to answer following
guestions/perform the following (Indicate Bloom's Taxonomy level):
1.
2.
3.
4.
5.
6.
HOME WORK: (mention the topic marked with CO and Bloom's Taxonomy level)
QUIZ: (mention the topic marked with CO and Bloom's Taxonomy level)
PROJECT: (mention the topic marked with CO and Bloom's Taxonomy level)
GROUP ACTIVITY (Collaborative Learning): (mention the topic marked with CO and Bloom's
Taxonomy level)
LABORATORY EXPERIMENT: (mention the topic marked with CO and Bloom's Taxonomy level)
INDUSTRY INSTITUTE INITIATIVES: (mention the topic marked with CO and Bloom's Taxonomy level)
List Topics/Activities Planned that are beyond Syllabus in relation to gap analysis between syllabus and

#### **POs and PSOs**

#### Remarks, if any

#### (x) Innovative Teaching Strategy/Method

Every teacher has his own unique and most appropriate teaching method which is different than others. Such innovative approaches are required to be made popular and shared with other teachers so that these methods could be used extensively by other teachers not only in your institution but in other part of the world as well. If you are using any such innovative teaching method, the same is required to reported below and a brief description of this should be posted as a blog on the institution website for comment by other teachers. There may be one or many such practices that may be reported below.

(x-a) Strategy to support weak students -

i) - Methodology to identify weak student

II) - Details	of the	suppo	ort
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(x-b) Strategy to encourage bright students

i) - Methodology to identify bright student

II) - Details of the support

(x-c) Efforts to keep students engaged

#### (xi) Direct Assessment:

Analysis of Students performance in the course (labs, seminars, tests, assignments, quiz, exam etc)

(xii) Direct Assessment:

Analysis of Students performance in the course (university results)

#### (xiii) Indirect Assessment:

Overall Analysis of Student Feed Back in terms of achievement of course objective and outcomes

(iv) Indirect Assessment:

Overall Teacher Self Assessment (at the completion of course) in terms of course objective and outcomes

(xiv) Recommendations/Suggestions for improvement as may be suggested by yourself



#### **Result Assessment**

#### **Direct Method**

- ★ For the Summative assessment conducted at the end of the semester/year to assess student performance in internals methodology of direct assessment was used for all indicators. The examination results conducted by the affiliating university were also evaluated by the faculty on each performance indicator/criteria. The Summative data information for performance indicator/criteria no 1 the students were given a project requiring them to choose the mathematical model which were appropriate for a specific problem.
- ★ For performance indicator no 2, an internal test was created which required students to apply mathematical principles to model equations to achieve solutions. The student performance in the test were recorded. The university questions at the end of the semester were also evaluated that dealt with performance indicator/criteria no 1 and 2 and specific areas of strength and weakness related to the indicators were noted and documented.
- ✗ For performance indicator/criteria no 3, project report rubric was used to analyze the project report for evidence of consideration of multiple approaches.

#### SESSIONAL RECORD (You may use this format or existing format that you are currently following) Subject with code: Date: Section: Avg of best S.No. Name Roll Attendance Marks in Sessional Test Marks in Total 2 tests No. Total Marks I Ш class performance 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35.

ATTENDANCE SHEET (Lecture) (You may use this format or existing format that you are currently following)																				
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ATTENDANCE SHEET (Practical) (You may use this format or existing format that you are currently following)																		
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ATTENDANCE SHEET (Tutorials) (You may use this format or existing format that you are currently following)																							
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LIST OF PRACTICALS (You may use this format or existing format that you are currently following)								
Subje	ct No							
Subjec	Code							
Somos	er Discipline							
<b>S</b> .	Details of Experiments (s)	Hours to be allotted						
No.	,							

LAB PERFORMANCE RECORD	You may use this format or existing format that you are currently following)
Subject	Code

Semes	ter					D	isc	ipl	ine	و							
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NAME WITH ROLL NO.s OF STUDENT WHOSE ACADEMIC PERFOMANCE IS NOT SATISFACTORY											
(You n	nay use this format or existin	ng format tha	at you are currently following)								
S. No	Name of student	Roll No	Remedial measures taken by teacher								

# **CERTIFICATE**

I, the undersigned, have completed the course allotted to me as shown below,

S.No	Semester	Subject with Code	Total Units/ Chapters	Remarks

Date:

Signature of Faculty

Submitted to HOD

# Certificate by HOD

I, the undersigned, certify that.....has completed the course work allotted to him/ her satisfactorily/ not satisfactorily.

Date:	Signature of HOD	
Submitted to Principal		
Date:	Signature of Principal	