

**DEPARTMENT OF CIVIL ENGINEERING**  
**NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI - 620 015**

<b>COURSE PLAN</b>			
<b>Course Title</b>	<b>Engineering Graphics</b>		
<b>Course Code</b>	MEIR12	No. of credits	03
<b>Department</b>	Civil Engineering I <sup>st</sup> year / (Section - B)	<b>Faculty</b>	Mrs. R. Arachelvi
<b>Pre-requisites Course Code</b>	Nil		
<b>Course Coordinator(s) (if, applicable)</b>			
<b>Contact details</b>	chelvi@nitt.edu, 9150005044		
<b>Course Type</b>	Core course	✓	Elective course
<b>Course overview</b>			
The student is expected to possess the efficient drafting skill depending on the operational function in order to perform day to day activity by providing neat structure of the industrial drawing.			
<b>Course objectives</b>			
<ul style="list-style-type: none"> <li>• To enable the students to understand various concepts like dimensioning, conventions, and standards followed by the engineers.</li> <li>• To practise construction methods of various geometric curves.</li> <li>• To understand orthographic Projection and orthographic views.</li> <li>• To construct isometric views for corresponding orthographic views.</li> </ul>			
<b>Course outcome</b>			
<ul style="list-style-type: none"> <li>• Students would be proficient in using the engineering drawing apparatus, materials and techniques.</li> <li>• The students would be matured to visualize the engineering components by solving many components used in the industry.</li> </ul>			

<b>COURSE TEACHING AND LEARNING ACTIVITIES</b>			
<b>S. No.</b>	<b>Week</b>	<b>Topics</b>	<b>Mode of Delivery</b>
1.	2 <sup>nd</sup> Week of August	Introduction - Drawing standard - BIS, dimensioning, type of lines, scaling-conventions.	Chalk - board, PPT, and practical sessions
2.	4 <sup>th</sup> Week of August	Lettering practice.	
3.	5 <sup>th</sup> Week of August	Geometric construction	
4.	1 <sup>st</sup> Week of September	Conic sections	
5.	2 <sup>nd</sup> Week of September	Introduction to orthographic projections	
6.	3 <sup>rd</sup> Week of September	Projection of points, lines and planes	
7.	4 <sup>th</sup> Week of September	Projection of simple solids	
8.	1 <sup>st</sup> Week of October	Sectioning of solids	
9.	2 <sup>nd</sup> Week of October	Intersection of surfaces	
10.	4 <sup>th</sup> Week of October	Development of surfaces	
11.	5 <sup>th</sup> Week of October	Isometric and prospective projections	
12.	2 <sup>nd</sup> Week of November	Intro to CAD.	

<b>COURSE ASSESSMENT METHODS</b>				
<b>S.No.</b>	<b>Mode of Assessment</b>	<b>Week/Date</b>	<b>Duration</b>	<b>% Weightage</b>
1.	Continuous assessment	Every week	4 hours	60
2.	End semester(written)	Last week of November (or) 1 <sup>st</sup> Week of December	1hour	15
3.	End Semester (practical)	Last week of November (or) 1 <sup>st</sup> Week of December	2 hours	25
<b>Total</b>				<b>100</b>



**ESSENTIAL READINGS : Textbooks, reference books and journals.**

**Text Books**

1. Bhatt, N. D. and Panchal, V.M., 'Engineering Drawing', Pub.: Charotar Publishing House, 2010.
2. Natarajan, K. V., 'A text book of Engineering Graphics', Pub.: Dhanalakshmi Publishers, Chennai, 2006.

**Reference Books**

1. Venugopal, K. and Prabhu Raja, V., 'Engineering Drawing and Graphics + AutoCAD', Pub.: New Age International, 2009.
2. Jolhe, D. A., 'Engineering drawing', Pub.: Tata McGraw Hill, 2008
3. Shah, M. B. and Rana, B. C., 'Engineering Drawing', Pub.: Pearson Education, 2009.
4. Trymbaka Murthy, S., 'Computer Aided Engineering Drawing', Pub.: I.K. International Publishing House, 2009.

**COURSE EXIT SURVEY**

(mention the ways in which the feedback about the course is assessed and indicate the attainment also)

1. Class committee meetings.
2. Online - Feedback forms submission through MIS.

**COURSE POLICY (including plagiarism, academic honesty, attendance, etc.)**

- Minimum 75% attendance is compulsory for attending the final examination.
- Students with less than 60% attendance will be awarded "F" grade and directed to REDO the course.
- There is no formative assessment for this course.

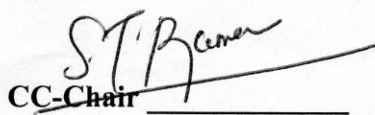
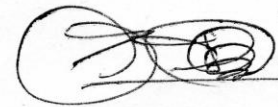
**ADDITIONAL COURSE INFORMATION**

- The Course Coordinator is available for consultation during office hours.
- Queries may also be emailed to the Course Coordinator at [chelvi@nitt.edu](mailto:chelvi@nitt.edu)

**FOR SENATE'S CONSIDERATION**



Course Faculty: Mrs.R.Arachelvi

  
CC-Chair

HOD