



## Module (Course Syllabus) Catalogue 2022-2023

College/ Institute	College of Erbil Technical Engineering	
Department	Department of Information System Engineering	
Module Name	Engineering drawing	
Module Code	END106	
Degree	Technical Diploma <input type="checkbox"/> Bachelor <input checked="" type="checkbox"/> High Diploma <input type="checkbox"/> Master <input type="checkbox"/> PhD <input type="checkbox"/>	
Semester	First	
Qualification	Master degree	
Scientific Title	Lecturer	
Credits	8	
Module type	Prerequisite <input type="checkbox"/> Core <input checked="" type="checkbox"/> Assist. <input type="checkbox"/>	
Weekly hours		Total Workload=(216) hrs
Weekly hours (Theory)	( 2 )hr Class	( 70 )hr Workload
Weekly hours (Practical)	( 4 )hr Class	( 146 )hr Workload
Lecturer (Theory)	Farah sami khoshaba	
E-Mail & Mobile NO.	<a href="mailto:farah.xoshihi@epu.edu.iq">farah.xoshihi@epu.edu.iq</a>	
Lecturer (Practical)	1- (Lecturer) Farah sami khoshaba	
E-Mail & Mobile NO.	<a href="mailto:farah.xoshihi@epu.edu.iq">farah.xoshihi@epu.edu.iq</a>	

# Course Book

<b>Course Description</b>	This subject is listed in the first course class syllabus as a fundamental term that gives the students the important skills in drawing.
<b>Course objectives</b>	1- For this semester the students going to learn about drawing instruments and their uses, types of lines and their applications, graphic geometry lettering, extension and dimension lines, multi types of drawing views, how to find the missing views, orthographic and isometric drawing.
<b>Student's obligation</b>	<p>1- The students must attend the theoretical and practical lectures.</p> <p>2- The practical part will include class and homework; students will submit class work sheets at the end of each practical lecture.</p> <p>2- The students must complete of all tests, exams.</p>
<b>Required Learning Materials</b>	<p>1- The first course will consists of two parts, theoretical part &amp; practical one. The theoretical part will depend on lecture method. The practical part will include class and homework, as well as instruction about drawing skills. So the students need the important drawing instruments such as:(Drawing board/table, Drawing sheet/paper, Drafting tape, Pencils, Eraser, Sharpener, T-square, Set-squares/triangles, Protractor, Erasing Shield &amp; Drawing Compass).</p> <p>2- Present the theoretical lecture by PowerPoint slides using data show.</p> <p>3- Use White board for extra examples.</p>
<b>Assessment scheme</b>	<p>40% (class work &amp; homework)</p> <p>4% Quiz</p> <p>16% Mid term</p> <p>40% Final</p>
<b>Specific learning outcome:</b>	<p>1- Teach the students how to understand the term drawing.</p> <p>2- Produce basic line types, the skills to a straight line,</p>

	<p>arc and angle, draw arcs tangent to two lines, etc.</p> <p>3- Teach them how to understand dimensions and their use in engineering graphics.</p> <p>4- Make them understand what sectional views are and many other skills.</p>	
<b>Course References:</b>	<p>1- كتاب الرسم الهندسي للمؤلف عبد الرسول الخفاف</p> <p>2- Fundamentals of Engineering Drawing -by French &amp; Vierck.</p> <p>3- “Introduction to Engineering”, by Paul Wright.</p> <p>4- Internet.</p>	
<b>Course topics (Theory)+ (Practical)</b>	<b>Week</b>	<b>Learning Outcome</b>
Introduction to course materials, basic drawing practice and what is meant by engineering drawing.	1	Give the students a brief introduction about the subject of Engineering Drawing.
The instruments and basic equipment, how we prepare our sheet for drawing (border, title box, etc.)	2	Make the students familiar with the necessary Engineering Drawing equipment.
Types of lines (visible, invisible, center, dimension line, etc), types of pencils (H, HB, 2H, 4H, etc) +Exercise 1(types of lines) class and home work.	3	Teach the students how to use different types of lines & pencils.
Exercise 2(Common mistakes that occur when drawing different types of lines) class and home work.	4&5	Teach them how to avoid making mistakes during the drawing.
Exercise 3(Dimensions and their common mistakes, how we put different types of dimensions on the drawings) class and home work.	6&7	Teach the students the correct way to fix dimensions on their drawing figure.
Exercise 4(Lettering) class and home work.	8	Improve their knowledge about lettering
Exercise 5 and 6(Introduction to different types of	9&10&11	Teach them how to convert 3D to 2D.

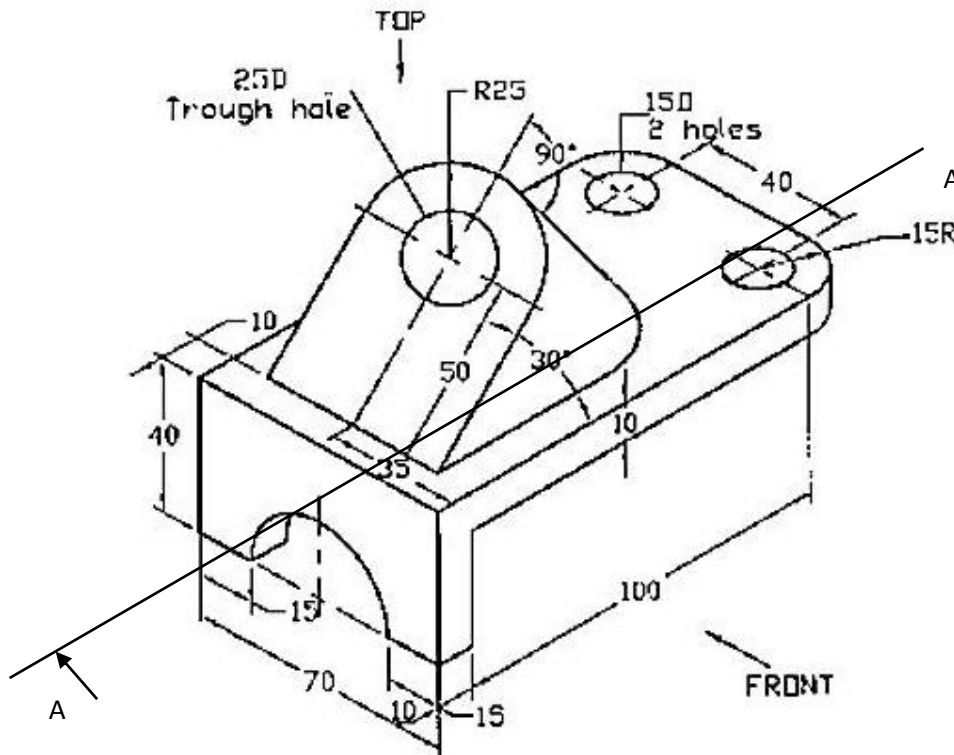
views (front, side, top)) class and home work.		
Exercise 7 and 8(The missing views, first and third angle of projections) class and home work.	12&13&14	Be able to find any missing view for any 3D figure.
Exercise 9 and 10(How to draw isometric) class and home work.	15 &16	Be able to convert any 2D figure to 3D one.

## Questions Example Design

### Examination for engineering drawing:

Q1/ For the figure below, use the first angle of projection to draw the following:

- 1- Top view. (30 marks).
  - 2- Sectional Front view through the line A- A. (30 marks).
  - 3- Side view. (30 marks).
- (Note: Put 5 dimensions only) (10 marks).



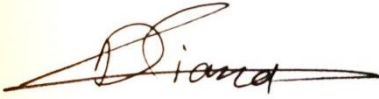
Extra notes:

**External Evaluator:**

I confirm that the syllabus and content of this course book is sufficient and fulfilment for the lesson of “Engineering drawing” for the first stage of department “Information System Engineering” students, and it covers the requirements of students to have enough knowledge in this field.

**Signature**

*Diana Hayder Hussein*

A handwritten signature in black ink, appearing to read "Diana", with a long horizontal stroke extending to the right.