

## Faculty of Engineering & Technology

### Graphics 2

**Information :**

**Course Code :** GRA 142

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

**Department :** Faculty of Engineering & Technology

**Instructor Information :**

Title	Name	Office hours
Lecturer	Maha Fathy Abdallah Elsangary	2
Assistant Lecturer	Mostafa Mohamed Reda Salah Eldin Rashed	
Teaching Assistant	Amr Hassan Mohamed Mohamed Moussa Elgharbawy	
Teaching Assistant	Omar Magdy Gamal Eldin Mahmoud	
Teaching Assistant	Mohamed Hassan Abdel Ghany Elashqer	
Teaching Assistant	Amira Khaled Hasan Mohamed El Kodama	
Teaching Assistant	Amira Khaled Hasan Mohamed El Kodama	
Engineer	Cinderella Mohamed Okasha El Said Mostafa	

**Area Of Study :**

- 1- Build students' awareness of structural and architectural engineering drawings terms, methods, and techniques.
- 2- Train students to express 3D forms into 2D media.

**Description :**

Development, Sectioning, drawing and joining of steel Frames, Fasteners, Assembly drawing of some mechanical parts, Computer applications, Introduction to civil and architectural drawing.

**Course outcomes :**

**a.Knowledge and Understanding: :**

- |     |  |
|-----|--|
| 1 - | a.1. List the fundamentals and components of structural and architectural engineering drawing. |
| 2 - | a.2. List sketching technique to describe structural and architectural buildings.              |
| 3 - | a.3. List different types of 3D isometric drawings.  |

**b.Intellectual Skills: :**

- |     |  |
|-----|--|
| 1 - | b.1. Predict 2D projections into 3D forms. |
| 2 - | b.2. Think imaginarily and creatively.     |

**c.Professional and Practical Skills: :**

- |     |   |
|-----|---|
| 1 - | c.1. Draw orthographic projection of structural and architectural engineering drawings.           |
| 2 - | c.2. Apply drafting techniques to differentiate between drawing elements (section and elevation). |

**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
Construction of both the third view and isometric.	4	1	3
Sectional views	16	4	12
Architectural Drawing	16	4	12
Application in civil engineering drawings	16	2	14
Steel structures	16	4	12

**Teaching And Learning Methodologies :**

Lectures
- Practical sections.
- Assignments and homework
- Working models.

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
11th week evaluation	25.00		
6th week evaluation	25.00		
Final-term examination	40.00		-term examination
Semester performance (Participation +Assignment +quizzes)	10.00		

**Books :**

Book	Author	Publisher
Engineering Graphics	Frederick E.	Pearson

**Course Notes :**

Course and instructor notes.
------------------------------

**Recommended books :**

- Earle, J.H., " ENGINEERING DESIGN GRAPHICS", Pearson Prentice–Hall, 11th edition, 2004.
- Bertoline, G.R., and Wiebe, E.N. " FUNDAMENTALS OF GRAPHIGS COMMUNICATION" Mc Graw- Hill, 5th ed., 2007

**Periodicals :**

<a href="http://www.prenhall.com/giesecke">www.prenhall.com/giesecke</a>
--

**Web Sites :**

--

