

**Faculty of Engineering & Technology**

**Geo-informatics 1**

**Information :**

**Course Code :** SCM 321

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

**Department :** Department of Structural Engineering & Construction Management

**Instructor Information :**

Title	Name	Office hours
Professor	Ayman Fouad Mohammed Ragab	9
Lecturer	khaled Mahmoud Abdelaziz Mahmoud Boray	1
Teaching Assistant	Sarah Salah Sayed Hussein Aly Elsheshtawy	2
Teaching Assistant	Sarah Salah Sayed Hussein Aly Elsheshtawy	2
Teaching Assistant	Mohamed Yahia Mohamed Abdelkader	

**Area Of Study :**

Upon successful completion of this course, the student should be able to:

- Understand the basic concepts and main principles
- Calculate the values of the essential terms
- Carry out the related tests

Regarding photogrammetry image coordinates flight planning photo orientation ground coordinates from photos VL & HL curves setting out projects

**Description :**

Photogrammetry: Aerial cameras, Vertical photograph, Tilted photograph, Rectification, Photo coordinates refinement, Flight planning, vertical & horizontal curves, setting out of projects

**Course outcomes :**

**a.Knowledge and Understanding: :**

1 -	Define the main terms of photogrammetry
2 -	Explain the principals of flight planning
3 -	Explain the principals of VL & HL curves

**b.Intellectual Skills: :**

1 -	Calculate the values of image coordinates
2 -	Assess issues of flight planning
3 -	Solve problems regarding photo orientation
4 -	Calculate the values of ground coordinates from photos
5 -	Calculate the values of setting out projects

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

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| 1 - | Prepare technical reports for photogrammetry |
| 2 - | Prepare technical reports for VL & HL curves |

**d. General and Transferable Skills: :**

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| 1 - | Cooperate and communicate effectively |
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**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
photogrammetry	4	2	2
image coordinates	8	4	4
flight planning	8	4	4
photo orientation	8	4	4
ground coordinates from photos	12	6	6
VL & HL curves	8	4	4
setting out projects	8	4	4
Revision	4	2	2

**Teaching And Learning Methodologies :**

- Interactive Lec.
- Discussion
- Problem Solving
- Report / Present.

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00		
Mid- Exam I, II	30.00		
Quizzes / Assig.	15.00		
Report / Present.	15.00		

**Course Notes :**

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**Recommended books :**

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**Periodicals :**

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**Web Sites :**

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