## Course Description Form

1. Course Name: **Engineering Drawing** 2. Course Code: **INGR245** 3. Semester / Year: Second semester (spring)/2023-2024 4. Description Preparation Date: 1/2/2024 5. Available Attendance Forms: Combined (Attendance + distance education) 6. Number of Credit Hours (Total) / Number of Units (Total) 45 practical hours / 1.5 units 7. Course administrator's name (mention all, if more than one name) Name: Saleh Sabri Ali Email: ssah69@uomosul.edu.iq 8. Course Objectives Course - Graduating agricultural engineers and researchers to serve the agricultural sector. - Scientific cooperation with agricultural directorates and other parties with the aim of improving Objectives agricultural production in quantity and quality. - Investing in modern technology in the field of engineering drawing in order to develop education, training and research programmes. - Qualifying students to work according to the modern production system that relies on computers and information technology to operate. - Preparing an advanced technical staff in the field of engineering design and drawing to meet the needs of society. 9. Teaching and Learning Strategies Strategy Interactive lecture Brainstorming Dialogue and discussion

Practical exercises

self-education

Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation
		Outcomes		method	method
1	3 Practical	a1:: Identify engineering drawing and its importance to the agricultural sector	An overview of the importance of engineering drawing and its relationship to agriculture	Practical lectures	Class and home assignments
2	3 Practical	b1: Identify the tools used in engineering drawing and the skills to use them practically	Engineering drawing tools and their uses	Practical lectures	Class and home assignments
3	3 Practical	and how to write letters and	Explain the dimensions of the painting And the information key And writing letters and numbers	Practical lectures	Class and home assignments
4	3 Practical	b3: Drawing types of lines And its uses in basic engineering processes	Types of geometric lines and their uses in engineering drawing	Practical lectures	Class and home assignments
5	3 Practical	b3: Drawing applied geometric	Basic engineering processes (arcs and tangents)	Practical lectures	Class and home assignments
6	3 Practical	b3: Providing the student with skills handmade by drawing practical applications	Practical applications on Lines and arcs	Practical lectures	Class and home assignments
7	3 Practical	a2: Recognize the concept engineering projections and their types and its uses	Engineering projections	Engineering drawings that include the previous topics	Class test
8	3 Practical	b3: Providing the student with skills individual drawing of projections isometric engineering	Engineering projections Isometrics	Practical lectures	Class and home assignments
9	3 Practical	b3: Draw and conclude	Conclusion of the third projection in terms of the other two projections	Practical lectures	Class and home assignments
10	3 Practical	b3: Test and determine level the skills acquired by each student	First monthly exam	Engineering drawings Applied	Class test
11	3 Practical	b2: Recognize the concept geometric perspective and its types	Engineering perspective (isometric)		Class and home assignments
12	3 Practical	b3: test the conceptual faculty for the student and its relationship to the subject of drawing geometric perspective	Applied drawings on engineering perspective	Practical lectures	Class and home assignments

13	3 Practical	b3: Tests individual skills for students	Applied drawings on isometric projections and the third projection	Practical lectures	Class and home assignments
14	3 Practical	b3: Drawing perspective isometrics in terms of all three projections	Isometric perspective and the three projections	Practical lectures	Class and home assignments
15	3 Practical	b3: Test and determine level the skills acquired by each student	Second monthly exam	Engineering drawings Applied	Class test

1	. Course Evaluation		ا (الله الموصل ا	
Seq.	Evaluating style	date	marks	Relative weight
1	Home works	Practical: week 1-14	(1)	10%
2	Monthly test 1	Week:7	10	10%
3	Monthly test 2	Week:15	iv. 10	10%
4	Class assignments	Week:1-14	Towns 10	10%
5	practical test	The week of the practical exam	20	20%
6	Final practical test	The week of the Practical exam	40	40%
	the total		100	100%

11. Learning and Teaching Resources		
Required textbooks (curricular books, if a	Engineering drawing for agricultural college students, Dr. Nateq Sabri Hassan, 1990	
Main references (sources)	Engineering drawing, Abdul Rasul Al Khafaf 1990	
Recommended books and references (scientific journals, reports)		
Electronic References, Websites	https://www.youtube.com	

Instructor of theoritical part

Salih sabri ali

Chairman of the scientific committee

Head of the department of Food science

Prof. Dr. Moafak mahmood ahmed Prof. Dr. Sumyia kalaf badawi