Module Information
معلومات المادة الدراسية

Module Title	Engineering Statistics	**Module Delivery**	
Module Type	Elective learning activity (E)		☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**
Module Code	UOMU023035		
ECTS Credits	**4**		
SWL (hr/sem)	**120**		

Module Level	**UGII**	**Semester of Delivery**	4
Administering Department	Engineering Building and Construction Technique	**College**	Al-Mustaqbal university
Module Leader	**Tamar Maitham Al-Asedi**	**e-mail**	Tamar.Maitham.Abdulwahabb@uomus.edu.iq
Module Leader's Acad. Title	**Assistant Lecturer**	**Module Leader's Qualification**	
Module Tutor	Name (if available)	**e-mail**	E-mail
Peer Reviewer Name		**e-mail**	
Scientific Committee Approval Date		**Version Number**	1.0

Relation with other Modules
العلاقة مع المواد الدراسية الأخرى

Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Aims أهداف المادة الدراسية	This course description provides a brief summary of the most important characteristics of the course and the expected learning outcomes of students to demonstrate whether they have made the most of the available learning opportunities. It must be linked to the description of the program.

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	upon completion of this course the students will: 1- distinguish types of studies and their limitations and strengths, Describe a data set including both categorical and quantitative variables to support or refute a statement. 2- Apply laws of probability to concrete problems. 3- Perform statistical inference in several circumstances and interpret the results in an applied context. 4- Use mathematical tools, including calculus and linear algebra. 5- study probability and mathematical statistics and in the description and development of statistical procedures. 6- Use a statistical software package for computations with data. 7- Use a computer for the purpose of simulation in probability and statistical inference. 8- Communicate concepts in probability and statistics using both technical and non-technical language.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. Statistics-Types of Statistics [2hr] Data-Population-Sample-Variable[2hr] Frequency Distribution [2hr] Class boundaries-Class Width-Class Mark[2hr] Relative and Percentage Frequency[2hr] Graphical Presentation I[2hr] Graphical Presentation II[2hr] Statistical Notations I[2hr] Statistical Notations II[2hr] Measures of Central Tendency I[2hr] Measures of Central Tendency II[2hr] Measures of Variation I[2hr] Measures of Variation II[2hr] Measures of Skewed [2hr] Correlation[2hr]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Assessment is based on 1- **Quizzes** 2- Student feedback. 3- Seminars

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	59	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	61	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	120		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	10% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.				
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	**Midterm Exam**	2 hr	20% (10)	7	LO # 1-7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Statistics-Types of Statistics
Week 2	Data-Population-Sample-Variable
Week 3	Frequency Distribution
Week 4	Class boundaries-Class Width-Class Mark
Week 5	Relative and Percentage Frequency
Week 6	Graphical Presentation I
Week 7	Graphical Presentation II
Week 8	Statistical Notations I

Week 9	Statistical Notations II
Week 10	Measures of Central Tendency I
Week 11	Measures of Central Tendency II
Week 12	Measures of Variation I
Week 13	Measures of Variation II
Week 14	Measures of Skewed. Correlation
Week 15	**Preparatory week before the final Exam**

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	**Available in the Library?**
Required Texts		Yes
Recommended Texts	1-Elementary Statistics, Author Allan G. Bluman, Printed by McGraw-Hill, 1997. 2- المدخل الى الاحصاء- تأليف د.خاشع محمود الراوي- طباعة جامعة الموصل	No
Websites		

Grading Scheme
مخطط الدرجات

Group	**Grade**	التقدير	**Marks (%)**	**Definition**
Success Group (50 - 100)	**A** - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.