

استمارة وصف البرنامج الأكاديمي للكليات والمعاهد للعام الدراسي

الجامعة : جامعة شط العرب الأهلية
الكلية /المعهد : التقنية الهندسية
القسم العلمي : هندسة تقنيات الحاسوب
تاريخ ملء الملف : 2026 /7/6



التوقيع :

اسم المعاون العلمي : م. عصام خليل ابراهيم

التاريخ :



التوقيع

اسم رئيس القسم : م. د مظهر عبد الزهرة عبدعلي

التاريخ :



دقق الملف من قبل

شعبة ضمان الجودة والأداء الجامعي

اسم مدير شعبة ضمان الجودة والأداء الجامعي :

التاريخ / /

التوقيع

الصفحة 1

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	single variables calculus		Module Delivery	
Module Type	core		☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	ATU12013			
ECTS Credits	5			
SWL (hr/sem)	125			
Module Level	1	Semester of Delivery		1
Administering Department	ATU12	College	PMTE	
Module Leader	Fatima Obaid Salman		e-mail	fatima.obaid@atu.edu.iq
Module Aims, Learning Outcomes				
ج التعلم والمحتويات الإرشادية				
Module Objectives	1. To introduce the student to the concept of integrations and its various applications. 2. To develop his mental ability in solving problems. 3. Linking data with information and using them in other subjects.		of calculus and benefit from	
Module Learning Outcomes	1. Define the determinant. 2. Recognize trigonometric functions. 3. Assistant teacher is more responsible for the learning process. 4. Discuss the Limit and Continuity. 5. Describe derivative theorems. 6. Define Chain rule. 7. Identify the inverse functions. 8. Discuss Derivative of implicit functions. 9. Discuss the definite and indefinite integrals. 10. Explain the Retail integration. 11. Identify the Integration techniques. 12. Discuss the approximation.		uation Master d projections. Simpsons.	
Indicative Contents				

المحتويات الإرشادية				
Module Leader's Acad. Title				
Module Tutor	None	e-mail		
Peer Reviewer Name	None	e-mail		
Scientific Committee Approval Date	01/06/2023	Version Number	1	

Relation with other Modules				
Student Workload (SWL)				
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا				
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	63	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	4	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	62	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا		
Total SWL (h/sem)	125			
	Time/N			
Formative assessment	Quizzes			
	Assignments			
	Projects / Lab.			
	Report			
Summative assessment	Midterm Exam		2	
	Final Exam		3	
Total assessment				
الحمل الدراسي الكلي للطلاب خلال الفصل				

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Determinants and solution of linear equation by Gramer's rule
Week 2	Trigonometric functions and some applications
Week 3	Vectors, scalar and vector product and projections, mechanical applications to vectors
Week 4	Limit and continuity, and some applications
Week 5	Derivative theory, derivatives of algebraic and implicit functions
Week 6	Chain rule, mechanical applications on the derivative
Week 7	The inverse function and its derivative
Week 8	Derivative of logarithmic and hyperbolic functions
Week 9	Integration, definite and indefinite integral, integration of trigonometric and logarithmic functions
Week 10	Retail integration
Week 11	Integration by division of fractions
Week 12	Integration by trigonometric function method
Week 13	Integration by completing the square
Week 14	Simplified differential equations
Week 15	Approximate area using the trapezoidal rule and Simpsons
Week 16	Preparatory week before the final Exam

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Calculus, R. Mohammed and A. Abdulaali, 2002	
Recommended Texts	Advanced calculus, Murray R. Spiegel, 1962	
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.