Module Title	Computer Programming I		Module Delivery	
Module Type	Support or related learning activity		☒ Theory	
Module Code	UOWA101		☐ Lecture	
ECTS Credits	5		☒ Lab	
SWL (hr/sem)	125		☐ Tutorial	
			☐ Practical	
			☐ Seminar	
Module Level	UGI	Semester of Delivery	1	
Administering Department	OGE	College	Engineering	
Module Leader	الاء اكرم جواد	e-mail	alaa.ak@uowa.edu.iq	
Module Leader's Acad. Title		Module Leader's Qualification	MS.c	
Module Tutor	ON	e-mail	E-mail	
Peer Reviewer Name	Name	e-mail	E-mail	
Scientific Committee Approval Date	01/11/2023	Version Number	1.0	

Relation with other Modules
Relationship with other subjects

Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents
Course objectives, learning outcomes and instructional contents

Module Aims Course Objectives	is an inevitable part of commerce education. The course is aiming to equip all the commerce aspirants to have basic skills as well as hands on experience on word processing, for creating excel spreadsheets, for building databases through the use of Microsoft Office Word, Excel, and VBA .

Module Learning Outcomes **Learning outcomes of the course**	1- To familiarize students with the use of Microsoft Word 2- To familiarize students with the use of MS Excel 3- To familiarize students with the use of Excel Visual basic application
Indicative Contents **Indicative Contents**	Indicative content includes the following: Part I: fundamentals of Microsoft word In Part 1 we will provide students with the skills to create documents using Microsoft Word. It will also provide knowledge of how to create your own document for work, college, or home. Students will learn the basics, creating documents, formatting text, adding graphics, images, Word chart, and many other features available. You will see a full list of course content below. You'll also cover charts and tables, as well as using forms and mail merge. Part II: fundamentals of Microsoft Excel this part provides all the tools necessary to create and use basic spreadsheets. Participants will receive an overview of the interface and learn the various methods for entering and editing data. Additionally, participants will learn the various ways to write formulas, Create Worksheets and Workbooks, data analysis, create charts. Apply Custom Data Formats and Layouts, and others which will used to streamline reporting, turn raw data into presentation-ready graphs or chart. where One of the most common uses of Excel in petroleum engineering is for organizing and analyzing data related to well production data. Part III: Visual basic Application In Part 3 we will provide students with the skills to create & develop vb applications, where that allow Engineers to develop engineering applications that run in the Windows environment. VB provides the engineer a programming tool to write simple programs quickly that meet their needs. Example programs written using VB include gas and oil fluid correlations, interpolation software, gas well bottom hole pressure from surface conditions, volumetric reserve calculations, simple log analysis, water pattern analysis and bottom hole pressure analysis.

Learning and Teaching Strategies **Learning and Teaching Strategies**	
Strategies	The main strategy that will be adopted in delivering this module is to Encourage students to ask and answer questions, as well as training students to implement many practical exercises in the laboratory (which covers most of what is studied in theoretical lectures), which in turn gives students the ability to carry out the work required of them in the future in their practical life.

	Student Workload (SWL)	
The student's academic load is calculated for 15 weeks		
Structured SWL (h/sem) **Regular academic load of the student during the semester**	75	**Structured SWL (h/w)** **Regular student load per week**	5
Unstructured SWL (h/sem) **Irregular academic load of the student during the semester**	47	**Unstructured SWL (h/w)** **Irregular student academic load per week**	3
Total SWL (h/wk) **The student's total academic load during the semester**	125		

Module Evaluation

Course Evaluation

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

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

	Material Covered
Week 1	Microsoft Word Create and Manage Documents: Create a Document, Navigate Through Document, Format a Document, Customize Options and Views for Documents, Print and save documents.

Week 2	Format Text, Paragraphs, and Sections: Insert Text and Paragraphs, Format Text and Paragraphs, Order and Group Text and Paragraphs
Week 3	Create Tables and Lists: Create a Table, modify a Table, Create and Modify a List.
Week 4	Insert and Format Graphic Element: Insert Graphic Elements, Format Graphic Elements, Insert and Format SmartArt Graphics
Week 5	**Microsoft Excel** : Manage Workbook Options and Setting: Create Worksheets and Workbooks, Navigate in Worksheets and Workbooks, Format Worksheets and Workbooks, Customize Options and Views for Worksheets and Workbook, Configure Worksheets and Workbooks for Distribution
Week 6	Apply Custom Data Formats and Layouts: Apply Custom Data Formats and Validation, Apply Advanced Conditional Formatting and Filtering, Create and Modify Custom Workbook Elements,Create Table: Create and Manage Table, Manage Table Styles and Options, Filter and Sort a Table
Week 7	Perform Operations with Formulas and Functions: Summarize Data by using Function, . Perform Conditional Operations by using Functions, Format and Modify Text by using Functions
Week 8	Create Charts and Objects: Create Charts, Format Charts, . Insert and Format Object,Manage Workbook Options and Settings
Week 9	**Excel VBA:**Introducing Visual Basic for Applications Displaying the Developer Tab in the Ribbon Recording a Macro
Week 10	Working with Procedures and Functions: Understanding ModulesCreating a Standard Module,Understanding Procedures,Creating a Sub ProcedureCalling Procedures,Using the Immediate Window to Call ProceduresCreating a Function Procedure
Week 11	Understanding Objects: Understanding Objects,Navigating the Excel Object HierarchyUnderstanding Collections,Using the Object Browser,Working with Properties Using the With Statement,Working with Methods
Week 12	Using Expressions, Variables, and Intrinsic Functions: Understanding Expressions and Statements,Declaring,Variables,UnderstandingDataTypes,Working with Variable Scope
Week 13	Controlling Program Execution: Understanding Control-of-Flow Structures Workingwith Boolean Expressions,Using the If... End If Decision Structures,Using the Select Case... End Select Structure
Week 14	,Using the Do... Loop Structure,Using the For... To... Next Structure,Using the For Each... Next Structure

Week 15	Working with Forms and Controls: Understanding UserForms,Using the ToolboxWorking with UserForm Properties, Events, and Methods,, Understanding Controls
Week 16	**Final Exam**

	Delivery Plan (Weekly Lab. Syllabus) **Weekly Curriculum of the Laboratory**
	Material Covered
Week 1	practical exercises to Create and Manage Documents: Save & open document, Format a Document, Customize Options and Views for Documents, Print and save as documents.
Week 2	practical exercises about the Format Text, Paragraphs, and Sections: Insert Text and Paragraphs, Format Text and Paragraphs, Order and Group Text and Paragraphs
Week 3	practical exercises to Create Tables and Lists: Create a Table, modify a Table, Create and Modify a List.
Week 4	Insert and Format Graphic Element: Insert Graphic Elements, Format Graphic Elements, Insert and Format SmartArt Graphics (practical exercises + homework)
Week 5	(practical exercises + homework) about Microsoft Excel :introduction to interface , Create Worksheets and Workbooks, Import data from a delimited text file ▪ Add a worksheet to an existing workbook ▪ Copy and move a worksheet
Week 6	practical exercises to :▪ Change worksheet tab color ▪ Rename a worksheet ▪ Change worksheet order ▪ Insert and delete columns or rows ▪ Change workbook themes ▪ Adjust row height and column width ▪ Insert headers and footers
Week 7	practical exercises with homework about Customize Options and Views for Worksheets and Workbooks:▪ Hide or unhide worksheets ▪ Hide or unhide columns and rows ▪ Customize the Quick Access toolbar ▪ Modify document properties ▪ Display formulas
Week8	(practical exercises + homework) to Create Charts and Objects: Create Charts, Format Charts, . Insert and Format Object,Manage Workbook Options and Settings
Week9	Excel VBA:Introducing Visual Basic for Applications Displaying the Developer Tab in the Ribbon Recording a Macro (practical)

Week10	(practical exercises + homework): about Working with Procedures and Functions: Creating a Sub ProcedureCalling Procedures, Creating a Function Procedure
Week11	Using Expressions, Variables, and Intrinsic Functions: Understanding Expressions and Statements,Declaring,Variables,UnderstandingDataTypes,Working with Variable Scope(practical exercises + homework)
Week12	Working with Boolean Expressions, Using the If... End If Decision Structures, Using the Select Case... End Select Structure(practical exercises + homework):
Week13	Working with Do... Loop Structure,Using the For... To... Next Stru Working with Boolean Expressions, Using the If... End If Decision Structures, Using the Select Case... End Select Structure Working with Boolean Expressions, Using the If... End If Decision Structures, Using the Select Case... End Select Structure cture,Using the For Each... Next Structure(practical exercises + homework)
Week14	Working with Forms and Controls: How insert data to Worksheets and Workbooks, create function, perform arithmetic operation using VBA (practical exercises + homework)
Week15	**Preparatory week before the final Exam**

Learning and Teaching Resources		
Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	• Microsoft Office for Beginners,by , M.L. Humphrey, 2020. • MICROSOFT WORD & POWERPOINT FOR BEGINNERS & POWER USERS 2021: The Concise Microsoft Word & PowerPoint A-Z Mastery Guide for All Users Paperback by Tech Demystified,2021. • Microsoft Excel 2019 VBA and Macros ,By Bill Jelen, Tracy Syrstad · 2019	Yes No No
Recommended Texts		
Websites		

Grading Scheme				
Grading chart				
Group	**Grade**	Appreciation	**Marks (%)**	**Definition**
Success Group (50 - 100)	**A** - Excellent	**privilege**	90 - 100	Outstanding Performance
	B - Very Good	**Very good**	80 - 89	Above average with some errors
	C - Good	**Good**	70 - 79	Sound work with notable errors
	D - Satisfactory	**medium**	60 - 69	Fair but with major shortcomings
	E - Sufficient	**popular**	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – File	**Deposit (in processing)**	(45-49)	More work required but credit awarded
	F – File	**Failure**	(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.