



Ministry of Higher Education and  
Scientific Research - Iraq  
Al-Naji University  
College of Engineering  
Department of Computer Engineering



## MODULE DESCRIPTOR FORM

### نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	INTRODUCTION TO COMPUTER ENGINEERING		Module Delivery
Module Type	CORE LEARNING ACTIVITY		Lab
Module Code	COE102		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level	1	Semester of Delivery	
Administering Department	Computer Engineering	College	Engineering
Module Leader	Mohammed Jafar	e-mail	m.alshammaa@coeng.uobaghdad.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	PhD
Module Tutor	Mohammed Jafar	e-mail	m.alshammaa@coeng.uobaghdad.edu.iq
Peer Reviewer Name		e-mail	
Review Committee Approval		Version Number	

Relation With Other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module		Semester	
Co-requisites module		Semester	

## Module Aims, Learning Outcomes and Indicative Contents

### أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<b>Module Aims</b> أهداف المادة الدراسية	<ul style="list-style-type: none"> <li>• This course is intended for first-class students. These students typically will know how a computer works, how to assemble and disassemble the computer, and how to troubleshoot hardware and software issues.</li> <li>• The students will enhance the capability of using computer skills in Microsoft Word, Excel, and PowerPoint, because of the wide uses of these applications in education, scientific research, and the preparation of research reports.</li> </ul>
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	<p>Upon the completion of this course, the students will be able to:</p> <ul style="list-style-type: none"> <li>• 1) Understand the history and development of the computer system.</li> <li>• 2) Identify the purposes and operation of the power supply of the personal computer.</li> <li>• 3) Identify the CPU's names, purposes, and characteristics and how to Install and troubleshoot the CPU. And learn the internal structure and operation of the microprocessor.</li> <li>• 4) Identify the names, purposes, and characteristics of motherboard and adapter cards. and how to Install and troubleshoot the motherboard. And learn the development and structure of the motherboard.</li> <li>• 5) Identifying the BIOS and CMOS settings. And understand the purpose of the operating system and how to Install an operating system and MS applications.</li> <li>• 6) Identify the names, purposes, characteristics, and types of memory. And how to Install and troubleshoot memory.</li> <li>• 7) Identify the names, purposes, characteristics, and types of storage devices and how to install and troubleshoot the storage devices.</li> <li>• 8) Identify serial and parallel ports that have been standard on PCs since the beginning and the universal serial bus and IEEE 1394 or (FireWire) interfaces.</li> <li>• 9) Identify the purpose and components of laptops and other portable devices. and troubleshoot laptops.</li> <li>• 10) Identify the names, purposes, and characteristics of input and output devices and their operation.</li> <li>• 11) Learn the principles of networking, the basic networking concepts, and technologies.</li> </ul>
<b>Indicative Contents</b> المحتويات الإرشادية	<ul style="list-style-type: none"> <li>- Explain the Basic Structure of the Computer and the interaction with I/O devices this includes Input devices, Output devices, I /O Ports, CPU, Memory, and Storage</li> <li>- Explain the role of the Operating system and software for computer work.</li> <li>- The principle of networking.</li> </ul>

	- Portable Devices.
<b>Learning and Teaching Strategies</b> استراتيجيات التعلم والتعليم	
<b>Strategies</b>	<ul style="list-style-type: none"> <li>- Lectures.</li> <li>- Homework and Assignments.</li> <li>- Tests and Exams.</li> <li>- In-class questions and Discussions.</li> <li>- Extracurricular Activities.</li> <li>- Individual / Group Projects</li> <li>- In- and Out-Class conversations.</li> </ul>

<b>Student Workload (SWL)</b> الحمل الدراسي للطالب			
<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	62	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	4
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	63	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	4
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	125		

<b>Module Evaluation</b> تقييم المادة الدراسية				
	Time/ Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>				

<b>Summative assessment</b>	<b>Mid Exam</b>	1	10% (10)		
	<b>Final Exam</b>	3 hrs.	50% (50)		
<b>Total assessment</b>			100% (100 Marks)		

<b>Delivery Plan (Weekly Syllabus)</b> المنهاج الاسبوعي النظري	
	<b>Material Covered</b>

## Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	The Development of the Personal Computer
Week 2	Processor Types
Week 3	Memory (ROM, RAM)
Week 4	Motherboards and Bios
Week 5	External I/O Interface
Week 6	Laptop and Portable Devices
Week 7	Midterm Exam
Week 8	Windows: part 1
Week 9	Windows: part 2
Week 10	Microsoft Word
Week 11	Microsoft Excel
Week 12	Microsoft PowerPoint
Week 13	Network: part 1
Week 14	Network: part 2
Week 15	Microprocessor Structure

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts		
Recommended Texts		
Websites		

**APPENDIX:**

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	مقبول بقرار	(45-49)	More work is required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				

NB 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.