

Baghdad College of Economic Sciences University – Department of cyber security



MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية							
Module Title		Workshops		Module Delivery			
Module Type		Support			☐ Theory		
Module Code		WORSH11			☐ Lecture		
ECTS Credits		4			□ Lab □ Tutorial		
SWL (hr/sem)	100				☑ Practical □ Seminar		
Module Level		1	Semester of I	Deliver	elivery 1,2		
Module Leader	Zahraa mohammed saleh		e-mail	dr.zahraamohammed@baghdadcollege .edu.iq			
Module Leader's	Acad. Title	Lecturer	Module Lead	er's Qu	Qualification PhD		
Module Tutor Zahraa mohammed saleh		e-mail	dr.zahraamohammed@baghdadcollege .edu.iq		@baghdadcollege		
Peer Reviewer Name		Dr.Atheel sabeeh shake	e-mail	Athee	Atheel.sabih@baghdadcollege.edu.iq		
Scientific Committee Approval Date		1/11/2024	Version Num	ber	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				
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Module Aims أهداف المادة الدر اسية	 1-Preparing applied engineers in the field of engineering sciences who are distinguished by a high level of knowledge and technological creativity, in line with the strict standards adopted globally in quality assurance and academic accreditation of the corresponding engineering programs, while adhering to the ethics of the engineering profession. 2. Enable the student to know and understand work systems, risks, and the factors surrounding them. 3. Enable the student to know and understand theoretical principles in handicrafts and measurements 			
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	 To familiarize the student with the vocabulary of occupational safety and its importance in the field of work. Acquisition of the student's manual operation skills, for example (Filings and Tinsmith workshops), and mechanical operation skills, for example (Turning). Acquisition of the student's mechanical forming skills, for example (Casting and Blacksmithing). The student acquires basic engineering skills such as Welding, Carpentry, and Electrical installations that serve him in the professional field. 			
	operations and formation.			
Indicative Contents المحتويات الإرشادية	 Cooperative learning by working collectively Introducing the student to the basics of the art of turning and milling, types of cold working machines, the skill of dealing with them, choosing metals, operational tools, and methods of measurement and standardization Introducing the student to the basics of the art of casting, hot forming, metal selection, method of working on casting furnaces and tools, and manufacturing casting molds Familiarize students with the basics of cars and the systems they use, as well as maintenance, disassembly, and assembly processes. Introducing students to the basics of household and industrial electrical appliances, the skill of using tools, and designing electrical circuits and control panels 			

5.	Introducing the student to the basics of the art of plumbing, leveling surfaces,
	the skill of using tools, manufacturing and installing geometric shapes, and
	methods of measurement and standardization

- 6. Introducing the student to the basics of the art of blacksmithing, cold and hot forming of metals, the method of hardening them, and the skills of dealing with hand tools, forming machines, and heating furnaces
- 7. Introducing the student to the basics of the art of filing and manual operation of metals with the help of manual, electrical, and mechanical tools, the skills of dealing with them, and the methods of measurement and standardization
- 8. Introducing the student to the basics of the art of welding, the installation and assembly of metals, the types of welding machines, the skills of dealing with them, the types of welding, and the methods of measurement and standardization

Introducing the student to the basics of the art of carpentry and woodworking with the help of manual, electrical, and mechanical tools, the skills of dealing with them, and methods of measurement and standardization

Learning and Teaching Strategies						
	استراتيجيات التعلم والتعليم					
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through labs, interactive tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.					

Student Workload (SWL)					
الحمل الدراسي للطالب موزع على 15 اسبوع					
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	46.5	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	3		
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	3.5	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	0.23		
Structured SWL (h/year)	93	Structured SWL (h/w)	3.00		
Unstructured SWL (h/year)	7	Unstructured SWL (h/w)	0.23		
Total SWL (h/year)	100				

Module Evaluation

تقييم المادة الدراسية

		Time/Nu mber	Weight (Marks)	Week Due	Relevant Learning Outcome
	Quizzes				
Formative	Assignments				All
assessment	Projects / Lab.	Every 3 weeks	60%	Continuous	
	Report				
Summative	Midterm Exam				
assessment	Final Exam	Every 3 weeks	40%	Continuous	All
Total assessment			100% (100 Marks)		

Delivery Pl	an (Weekly Syllabus)
	Materials Covered
Week 1	Welding workshop.
	-Occupational safety and its importance in welding workshops.
	-Introduction to the basics of welding.
	-Electric arc exercise.
	-An exercise for welding straight lines in a circular motion (helical).
Week 2	Welding workshop
	- An exercise for welding straight lines with a crescent movement and other
	welding methods
	-Construction welding exercise.
Week 3	Welding workshop.
	-Welding two pieces together.
	-Written exam in practical exercises.
Week 4	Casting workshop
	-Occupational safety and its importance in plumbing workshops.
	-Introduction to the basics of metal casting.
	-Simple wooden disc exercise.
	Half workout.
Week 5	Casting workshop
	Wheel exercise.
	Pushing arm exercise.
Week 6	Casting workshop.

	-Complete pulley exercise.
	-Circular pole exercise.
	-Written exam in practical exercises.
Week 7	Blacksmith Workshop
	-Occupational safety and its importance in blacksmithing workshops.
	-Introduction to the Basics of Blacksmithing.
	- Barbell adjustment exercise.
	-Eight-star exercise.
	- Exercise forming the number eight in English.
	-Six formation exercises in English.
Week 8	Blacksmith Workshop
	-An exercise forming the number five in English.
	- Exercise forming the number nine in English.
	An exercise in forming an iron model in the form of a circle
Week 9	Blacksmith Workshop
	- S-shape exercise.
	- Air hammer hot barbell exercise.
	- Exercise to form a circle on an electric bending machine.
	- Exercising cold and hot ornament formation.
	A written exam in practical exercises
Week 10	Automotive Workshop
	-Occupational safety and its importance in car maintenance workshops.
	-An introduction to cars and their basic parts.
	-Parts of the engine, how it works, types of engines, and methods of
	classification.
Week 11	Automotive Workshop
	- Open the engine and identify the parts
	-Lubrication system
	-Cooling system.
Week 12	Automotive Workshop
	-The fuel system.
	-The old and new ignition circuits.
	-Written exam in practical exercises.
Week 13	Turning Workshop
	-Introduction to lathe machines and identifying their parts
	-Measuring tools and the use of an oven measuring instrument
	-Circular column lathing exercise on different diameters.
Week 14	Turning Workshop

	-Exercise using the pen (semicircular R) brackets.
	An exercise in making different angles using a pen (square + angle pen 55).
Week 15	Turning Workshop
	- Making shaft with different diameter exercises using (left and right pen)
	- Workout (Tube Connection).
	-Written exam in practical exercises.
Week 16	Fitting workshop
	Occupational safety and its importance in filing workshops
	-An introduction to the basics of filing
	-Pen holder exercise "preparation and preparation"
Week 17	Fitting workshop
	Pencil holder exercises finishing and assembling.
Week 18	Fitting workshop
	-The catcher exercise.
	- Clamping exercise.
	Written exam in practical exercises.
Week 19	Carpentry workshop
	-Occupational safety and its importance in carpentry workshops.
	- An introduction to carpentry, its types, types of wood, tools used, and
	preparation Preparing the tools used
	Face modification exercise using the reindeer
Week 20	Carpentry workshop
	Garden fence work and how to connect its parts, the eight-star exercise
Week 21	Carpentry workshop
	- Wood smoothing exercise using smoothing paper
	- Wood dyeing exercise in three stages
	Final smoothing and varnishing exercise
	Written exam in practical exercises
Week 22	
	The tinsmith workshop
	Occupational safety and its importance in plumbing workshops
	An introduction to plumbing, its tools, and plumbing stages
	Planning and marking exercise on metal plates
Week 23	The tinsmith workshop
	Geometric shapes
	Types of individuals and methods of individuals
	Geometric shape individuals exercise on a metal board

Week 24	The tinsmith workshop
	Cone members exercise
	- Exercise of cylinders with an oblique cut
	Roll forming operations
	Connection without the use of an intermediary
	Written exam in practical exercises
Week 25	Electric Workshop
	Occupational Safety and its importance in electrical workshops
	An introduction to the basics of electrical installations
	- Linking a simple circuit consisting of a lamp to the control of a single-way
	switch.
	Connect two lamps in series with one-way switch control.
	Connecting two lamps in parallel with the control of a single road switch.
	Connect two lights with one-way dual switch control.
Week 26	electric Workshop
	Connect a fluorescent lamp circuit to a one-way switch control
	Connecting an electric supply socket circuit to the control of a separate or
	combined one-way switch
	Written exam in practical exercises
Week 27	electric Workshop
	Occupational Safety and its importance in blacksmithing workshops
	Introduction to the basics of Blacksmithing
	- Barbell adjustment exercise
	Eight-star exercise
	- Exercise forming the number eight in English
	Exercise forming the number six in English
Week 28	supplementary training curriculum
	Welding workshop
	Plumbing workshop
	Blacksmith's workshop
Week 29	supplementary training curriculum
	- Automotive workshop
	- Turning workshop
	Fitting workshop
Week 30	supplementary training curriculum
	Carpentry workshop
	The plumbing workshop
	electric Workshop

Learning and Teaching Resources				
مصادر التعلم والتدريس				
	Text	Available in the Library?		
Required Texts	Workshop technology and measurements, Ahmed Salem Al-Sabbagh	Yes / online		
Recommended Texts		No		
Websites				