

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Workshops		Module Delivery
Module Type	Basic		☐ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☒ Practical ☐ Seminar
Module Code	MECT 109		
ECTS Credits	4		
SWL (hr/sem)	100		
Module Level	UG1 1	Semester of Delivery	1
Administering Department	Mechatronics	College	Technical Engineering college
Module Leader	Roqyah Nasir	e-mail	
Module Leader's Acad. Title	Assist. Lecturer	Module Leader's Qualification	M.Sc.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name		e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	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	The student will be able of getting a hand intelligent by applying machining and industrial operations with using different kinds of hand tools and measuring tools.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	-
-------------------	---

Student Workload (SWL)

الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	87	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	6
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	13	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100		

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.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 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) المناهج الاسبوعي النظري	
	Material Covered
Week 1	Foundry workshop: -
Week 2	Metal casting and its importance, purpose of using casts in industry, casting work shop equipment's, industrial safety regulation in works shop, making sand mold for one piece pattern and cores types, resources of sand and mold properties, additives materials, mixing processes and percentage of quality, using sand mixing, sand treatment and sand handling equipment's, making manual sand mold for one piece cast.
Week 3	Making sand mold for one piece cast with runner and risers, cast cleaning make core and baking it in baking furnace, make sand mold for two pieces pattern with core.
Week 4	Making sand mold with core, melting the metal, pouring the metal. take out the cast from the mold, cleaning the cast,
Week 5	Melting furnaces of metals: types, specifications, its uses (rotary, crucible) heat treatment and cat inspection, visual surface defects and its causes.
Week 6	Measuring cast dimension and insure equal to original dimension.
Week 7	Filing Workshop: -
Week 8	Vernier types, measuring methods , measuring height and depth, sketching process on sheet metal plate, tools used, scratching pointer, strip divider, bended edge divider, 90 degree square ruler, bended rulers,
Week 9	Files, files and filling process: filing types and its specifications, clamp vices types, processes of fixing work piece on it, the uses of different types of fillings, filing cleaning process, filling methods, exercises on scratching method and simple file.
Week 10	Saw cutting, hand saw, saw blade, fixing the saw blade, the saw blade condition available for sawing process, exercises for saw cutting process.
Week 11	Lath Workshop: -
Week 12	Lathe machine, specifications its uses, accessory lathe parts , lathe operation, lathe cutting tools

	types , uses of measuring instruments.
Week 13	Turning Processes: -
Week 14	Facing , simple steps, learning using measuring instruments.
Week 15	Internal and external taper turning, making exercises for both methods.

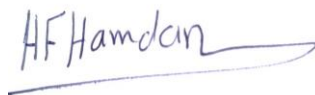
Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts		yes
Recommended Texts	-	-
Websites		

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.


د. ه. أ. هammad

عميد الكلية : أ.د. هارون عبد الكاظم شهد
التاريخ : 2026 / 3 / 26


H. A. Hammad

رئيس القسم : أ.د. حسين فاضل حمدان
التاريخ : 2026 / 3 / 26


H. A. Hammad

اسم التدريسي: م.م. رقية نصر
التاريخ : 2026 / 3 / 26