



Ministry of Higher Education and  
Scientific Research - Iraq  
Northern Technical University  
College of Oil & Gas Techniques  
Engineering/Kirkuk  
Department of Fuel and Energy  
Engineering



## MODULE DESCRIPTION FORM

### نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Engineering Workshops</b>		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>FEK 105</b>		
ECTS Credits	6		
SWL (hr/sem)	<b>150</b>		
Module Level	1	Semester of Delivery	2
Administering Department	FEK	College	COGTEK
Module Leader	Mohammed Z. Hasan with a group of technicians		e-mail Mohamop49@ntu.edu.iq
Module Leader's Acad. Title	Assistant Professor		Module Leader's Qualification M.Sc.
Module Tutor	<b>Mohammed Z. Hasan</b>		e-mail mohamop49@ntu.edu.iq
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	17/06/2023	Version Number	1.0

## Relation with other Modules

العلاقة مع المواد الدراسية الأخرى

<b>Prerequisite module</b>	None	<b>Semester</b>	
<b>Co-requisites module</b>	None	<b>Semester</b>	

## Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<b>Module Aims</b> أهداف المادة الدراسية	<p>1-Study Workshop Skills by explaining principles of all workshop skills.</p> <p>2-Explain a basic information about turning, milling, casting, welding, and other skills.</p> <p>3-Use all available possibilities in workshop to explain skills to students.</p> <p>4-Explain workshop skills theoretically and experimentally.</p> <p>5- Show pupils How to manufacture all spare part experimentally.</p>
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	<p>A- Cognitive goals</p> <p>A1- Enhancing the analytical and practical abilities of the students by giving a complete summary of all the skills in the engineering workshops, a theoretical explanation of all the skills in the engineering workshops, which are as follows: engineering measurements, welding, filing, lathing, plumbing, grinding, scraping, milling and electrical installations in addition to their application Practically on the machines and devices in the workshops.</p> <p>B - The soft skills objectives of the course.</p> <p>Study the basic principles of skills for engineering workshops.</p>
<b>Indicative Contents</b> المحتويات الإرشادية	<p>Analyzing the results obtained by the student through conducting practical experiments and reaching the extent of their truth through.</p> <p>1- Observation and perception</p> <p>2- Analysis and interpretation</p> <p>3- Conclusion and evaluation)</p>

## Learning and Teaching Strategies

### استراتيجيات التعلم والتعليم

<b>Strategies</b>	<p>Weekly lectures included</p> <ol style="list-style-type: none"> <li>1. Providing students with the basics and topics related to pre-skills education outcomes to solve practical problems through presentation, lecture or conducting experiments.</li> <li>2. Solving a group of practical and applied examples by the academic staff.</li> <li>3. Through discussion, students participate in solving some practical problems.</li> <li>4. The department's practical laboratories are monitored by the department's academic staff.</li> <li>5. Asking the student to visit the library and the international information network (the Internet) to obtain additional knowledge of the study subjects.</li> </ol> <p>Presenting a seminar (Seminar) by a student in front of his fellow students to enhance his confidence.</p>
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## Student Workload (SWL)

### الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	65	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	4.3
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	85	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	6.6
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	150		

## Module Evaluation

### تقييم المادة الدراسية

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

## Delivery Plan (Weekly Syllabus)

### المنهاج الاسبوعي النظري و التطبيقي

	Material Covered
<b>Week 1</b>	Study the welding skill theoretically.
<b>Week 2</b>	Study the welding skill experimentally.
<b>Week 3</b>	Study the measurement skill theoretically.
<b>Week 4</b>	Study the measurement skill experimentally.
<b>Week 5</b>	Study the casting skill theoretically
<b>Week 6</b>	Study the casting skill experimentally.
<b>Week 7</b>	Study the turning skill theoretically.
<b>Week 8</b>	Study the turning skill experimentally
<b>Week 9</b>	Study the milling skill theoretically.
<b>Week 10</b>	Study the milling skill experimentally
<b>Week 11</b>	Study the carpentry skill theoretically.
<b>Week 12</b>	Study the carpentry skill experimentally
<b>Week 13</b>	Study car workshop skill theoretically.
<b>Week 14</b>	Study car workshop skill experimentally
<b>Week 15</b>	Study the car workshop skill experimentally
<b>Week 16</b>	<b>Preparatory week before the final Exam</b>

## Learning and Teaching Resources

### مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>	1. Theory of Basic workshop skills with applications By By s. Gally math 2. 1- Workshop skill By Smith .jon	Yes

Recommended Texts		No
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
<p><b>Note:</b> 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.</p>				