

## نموذج وصف المقرر

1. اسم المقرر	
ادارة مشاريع	
2. رمز المقرر	
MU0224002	
3. الفصل / السنة	
سنوي	
4. تاريخ إعداد هذا الوصف	
1.9.2024	
5. أشكال الحضور المتاحة	
حضوري فقط	
6. عدد الساعات الدراسية (الكلية) / عدد الوحدات (الكلية)	
نظري / 2 عملي / 2 كلي / 4 وحدات / 6	
7. اسم مسؤول المقرر الدراسي ( إذا اكثر من اسم يذكر)	
الاسم:	م.م وليد علي حمزة
الأيمل:	waleed.ali@uomus.edu.iq:
8. اهداف المقرر	
اهداف المادة الدراسية	<ol style="list-style-type: none"><li>1. تقديم تقنيات تقود الى مجموعة من القرارات في ادارة المشاريع</li><li>2. تخرج مهندسي يحصل على فهم للوسائل والعمليات في التخطيط والادارة للمشروع الهندسي</li><li>3. استخدام برنامج اكسل لأي مشروع في التخطيط الجدولة</li><li>4. التنبؤ بالأبداع والتقدير والتحكم في التكاليف التي تخفض ادارة المشروع الهندسي</li></ol>
9. استراتيجيات التعليم والتعلم	
الاستراتيجية	<p>فهم مبادئ ومنهجيات إدارة المشاريع في هندسة الكمبيوتر. تطبيق تقنيات إدارة المشاريع للتخطيط الناجح للمشروع والتنفيذ. تطوير مهارات الاتصال والتعاون الفعال داخل المشروع. تقييم نتائج المشروع وتطبيق الدروس المستفادة للاستمرار</p> <p>تحسين... تكييف استراتيجيات إدارة المشروع مع متطلبات المشروع المتغيرة والقيود.</p> <p>○</p>

10. بنية المقرر

بنية المقرر					
طريقة التقييم	طريقة التعلم	اسم الوحدة او الموضوع	مخرجات التعلم المطلوبة	الساعات نظري وعمل	1. الاسبوع
Quiz	In class and Lab Lecture	Introduction, Symmetric Ciphers model: plaintext, encryption algorithm, secret key, cipher text, decryption algorithm, A Model of conventional encryption. Cryptography, Cryptanalysis, block and stream cipher	1	12	1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> . 2
Homework	In class and Lab Lecture	Caesar Cipher The affine Cipher	2	4	4 <sup>th</sup> . 3
In class Discussion	In class and Lab Lecture	Mono alphabetic substitution ciphers Shift ciphers	4,2	8	5 <sup>th</sup> , 6 <sup>th</sup> . 4
Exam#1	In class and Lab Lecture	Hill cipher	6	4	7 <sup>th</sup> . 5
Quiz	In class and Lab Lecture	Play fair cipher	6,7	4	8 <sup>th</sup> . 6
In class Discussion	In class and Lab Lecture	Polyalphabetic ciphers Vigenere cipher	8	4	9 <sup>th</sup> . 7
Report	In class and Lab Lecture	The Transposition cipher	8,9	4	10 <sup>th</sup> . 8
Homework	In class and Lab Lecture	Affine cipher	10	4	11 <sup>th</sup> . 9
In class Discussion	In class and Lab Lecture	One time pad	11	4	12 <sup>th</sup> . 10
Mid-1 Exam	In class and Lab	Cryptanalysis of a	8,9,10,1	12	12 <sup>th</sup> , 14 <sup>th</sup> , . 11

	<b>Lecture</b>	Symmetric key	<b>1</b>		<b>15<sup>th</sup></b>
<b>Quiz</b>	<b>In class and Lab Lecture</b>	Euclid's Algorithm	<b>13,14,15</b>	<b>4</b>	<b>16<sup>th</sup>.12</b>
<b>In class Discussion</b>	<b>In class and Lab Lecture</b>	SYMMETRIC-KEY ALGORITHMS -DES—The Data Encryption Standard, others -16 round Feistily system	<b>16</b>	<b>12</b>	<b>17<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup>.13</b>
<b>Homework</b>	<b>In class and Lab Lecture</b>	PUBLIC-KEY ALGORITHMS, -RSA, - Other Public-Key Algorithms,	<b>16</b>	<b>8</b>	<b>20<sup>st</sup>, 21<sup>nd</sup>.14</b>
<b>Exam#2</b>	<b>In class and Lab Lecture</b>	AUTHENTICATION PROTOCOLS, -Authentication Based on a Shared Secret Key, -Establishing a Shared Key: The Daffier - Hellman Key Exchange, -Authentication Using a Key Distribution Center, -Authentication Using Kerberos, Authentication - Using Public-Key Cryptography,	<b>17,18</b>	<b>16</b>	<b>22<sup>nd</sup>, 23<sup>rd</sup>, 24<sup>th</sup>, 25<sup>th</sup>.15</b>
<b>In class Discussion</b>	<b>In class and Lab Lecture</b>	OSI security Architecture , a model for network security, EMAIL SECURITY PGP—Pretty Good - Privacy, S/MIME	<b>22</b>	<b>8</b>	<b>26<sup>th</sup>, 27<sup>th</sup>.16</b>
<b>Mid-2 Exam</b>	<b>In class and Lab Lecture</b>	Protocols of computer networks PROTECTION SERVICES: • OS protection service: protected objects and methods	<b>26,27</b>	<b>12</b>	<b>28<sup>th</sup>, 29<sup>th</sup>, 30<sup>th</sup>.17</b>

		<p>of OS protection, security of OS, memory and addressing protection, fence protection</p> <ul style="list-style-type: none"> <li>• Database protection service:</li> </ul> <p>Network protection service: IP and E-Commerce protection, VPN and next generation networks protection</p>			
<b>Mid-1 Exam</b>	<b>In class and Lab Lecture</b>	Cryptanalysis of a Symmetric key	<b>8,9,10,11</b>	<b>12</b>	<b>13<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup></b>
<b>Quiz</b>	<b>In class and Lab Lecture</b>	Euclid's Algorithm	<b>13,14,15</b>	<b>4</b>	<b>16<sup>th</sup>, 19<sup>th</sup></b>
<b>In class Discussion</b>	<b>In class and Lab Lecture</b>	<p>SYMMETRIC-KEY ALGORITHMS</p> <ul style="list-style-type: none"> <li>-DES—The Data Encryption Standard, others</li> <li>-16 round Feistily system</li> </ul>	<b>16</b>	<b>12</b>	<b>17<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup></b>
<b>Homework</b>	<b>In class and Lab Lecture</b>	<p>PUBLIC-KEY ALGORITHMS,</p> <ul style="list-style-type: none"> <li>-RSA, - Other Public-Key Algorithms,</li> </ul>	<b>16</b>	<b>8</b>	<b>20<sup>th</sup>, 21<sup>st</sup>, 21<sup>st</sup></b>
<b>Exam#2</b>	<b>In class and Lab Lecture</b>	<p>AUTHENTICATION PROTOCOLS,</p> <ul style="list-style-type: none"> <li>-Authentication Based on a Shared Secret Key,</li> <li>-Establishing a Shared Key: The Daffier - Hellman Key Exchange,</li> <li>-Authentication Using a Key Distribution Center,</li> <li>-Authentication Using Kerberos,</li> <li>Authentication - Using Public-Key</li> </ul>	<b>17,18</b>	<b>16</b>	<b>20<sup>th</sup>, 21<sup>st</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, 24<sup>th</sup>, 25<sup>th</sup></b>

		Cryptography, OSI security Architecture , a model for network security, EMAIL SECURITY PGP—Pretty Good - Privacy, S/MIME	22	8	26 <sup>th</sup> , 27 <sup>th</sup> .23
Mid-2 Exam	In class and Lab Lecture	Protocols of computer networks PROTECTION SERVICES: • OS protection service: protected objects and methods of OS protection, security of OS, memory and addressing protection, fence protection • Database protection service: Network protection service: IP and E- Commerce protection, VPN and next generation networks protection	26,27	12	28 <sup>th</sup> , 29 <sup>th</sup> ,30 <sup>th</sup> .24
Mid-1 Exam	In class and Lab Lecture	Cryptanalysis of a Symmetric key	8,9,10,1 1	12	h, 14 <sup>th</sup> , .25 15 <sup>th</sup>

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1- تقييم المقرر

توزيع الدرجة من ١٠٠ على وفق المهام المكلف بها الطالب مثل التحضير اليومي والامتحانات اليومية والشفوية والشهرية  
والتحضيرية والتقارير .... الخ

درجة	امتحان	نشاطات	الفصل الثاني			الفصل الاول		
			فصلي	نشاطات	عملي	فصلي	نشاطات	عملي
100	50	50	10	5	10	10	5	10

2- مصادر التعلم والتدريس

- William Stallings, Cryptography and Network Security; Principals and Practice, 7<sup>rd</sup> Ed. 2017.
- Behrouz A. Forouzan, Cryptography and Network Security, McGraw-Hill Int. Ed. 2008.

الكتب المقررة المطلوبة (المنهجية)

1. • William Stallings, Cryptography and Network Security; Principals and Practice, 7rd Ed. 2017.	المراجع الرئيسية (المصادر)
2. Matt Bishop, Computer Security: Art and Science, Addison Wesley Professional Copyright: 2003, ISBN: 0-201-44099-7 3. Schneier, Bruce , Secrets and Lies : Digital Security in a Network World, John Wiley & Sons, 2000. ISBN 0-471-25311-1 4. Charlie Kaufman, Radia Perlman, Mike Speciner: Network Security - private communication in a public world, 2nd Ed., Prentice Hall, 2002. Newman, Robert C: Enterprise Security, 1st ed., Prentice Hall, 2003.	الكتب والمراجع الساندة التي يوصى بها (المجلات, التقارير , الاوراق البحثية ....)
5. <a href="http://williamstallings.com/Crypto/Crypto4e.html">http://williamstallings.com/Crypto/Crypto4e.html</a>	المراجع الالكترونية (مواقع الانترنت)

## Course Description Form

12. Course Name:	<b>Project Management</b>
13. Course Code:	<b>MU0224002</b>
14. Semester / Year:	<b>Yearly</b>
15. Description Preparation Date:	<b>1.9.2024</b>
16. Available Attendance Forms:	<b>Only Attendance</b>
17. Number of Credit Hours (Total) / Number of Units (Total)	<b>Theoretical / 2 practical / 2 comprehensive / 4 units / 6</b>
18. Course administrator's name (mention all, if more than one name)	<b>Name: MSC Waleed ali hamza</b> <b>Email: waleed.ali@uomus.edu.iq</b>
19. Course Objectives	
<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>1. . Understand project management principles in computer engineering.</li> <li>2. Apply project management techniques for successful project execution.</li> <li>3. Develop skills in scheduling, resource allocation, and risk management.</li> <li>4. Communicate and collaborate effectively within project teams.</li> </ol>

Evaluate project outcomes for continuous improvement.

## 20. Teaching and Learning Strategies

### Strategy

1. Understand project management principles and methodologies in computer engineering.
  2. Apply project management techniques for successful project planning and execution.
  3. Develop effective communication and collaboration skills within project teams.
  4. Evaluate project outcomes and apply lessons learned for continuous improvement.
- Adapt project management strategies to changing project requirements and constraints.

## 21. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
	<b>Material Covered</b>		<b>Material Covered</b>		<b>Material Covered</b>
1 <sup>st</sup> , 2 <sup>nd</sup>	Project management	1 <sup>st</sup> , 2 <sup>nd</sup>	Project management	1 <sup>st</sup> , 2 <sup>nd</sup>	Project management
3 <sup>rd</sup> , 4 <sup>th</sup>	Economics and management for the engineers	3 <sup>rd</sup> , 4 <sup>th</sup>	Economics and management for the engineers	3 <sup>rd</sup> , 4 <sup>th</sup>	Economics and management for the engineers
5 <sup>th</sup> , 6 <sup>th</sup>	Layout of factories and workshops	5 <sup>th</sup> , 6 <sup>th</sup>	Layout of factories and workshops	5 <sup>th</sup> , 6 <sup>th</sup>	Layout of factories and workshops
7 <sup>th</sup>	Productivity	7 <sup>th</sup>	Productivity	7 <sup>th</sup>	Productivity
8 <sup>th</sup> , 9 <sup>th</sup>	Networks	8 <sup>th</sup> , 9 <sup>th</sup>	Networks	8 <sup>th</sup> , 9 <sup>th</sup>	Networks
10 <sup>th</sup> , 11 <sup>th</sup>	Critical path method(CPM)	10 <sup>th</sup> , 11 <sup>th</sup>	Critical path method(CPM)	10 <sup>th</sup> , 11 <sup>th</sup>	Critical path method(CPM)
	Pet technique	12 <sup>th</sup>	Pet technique (Time and cost)	12 <sup>th</sup>	Pet technique (Time and cost)

th,15th	(Time and cost)	h, 13th, 14th,15th		13th, 14th,15th	
	<b>Material Covered</b>		<b>Material Covered</b>		<b>Material Covered</b>
1st,2nd	Project management	1st,2nd	Project management	1st,2nd	Project management
3rd,4th	Economics and management for the engineers	3rd,4th	Economics and management for the engineers	3rd,4th	Economics and management for the engineers
5th, 6th	Layout of factories and workshops	5th, 6th	Layout of factories and workshops	5th, 6th	Layout of factories and workshops
7th	Productivity	7th	Productivity	7th	Productivity
8th, 9th	Networks	8th, 9th	Networks	8th, 9th	Networks
10th, 11th	Critical path method(CPM)	10th, 11th	Critical path method(CPM)	10th, 11th	Critical path method(CPM)
12th,15th	Pet technique (Time and cost)	12th, 13th, 14th,15th	Pet technique (Time and cost)	12th, 13th, 14th,15th	Pet technique (Time and cost)
	<b>Material Covered</b>		<b>Material Covered</b>		<b>Material Covered</b>
1st,2nd	Project	1st,2nd	Project management	1st,2nd	Project

	managem ent				management
d,4 <sup>th</sup>	Economi cs and managem ent for the engineers	3 <sup>rd</sup> ,4 <sup>th</sup>	Economics and management for the engineers	3 <sup>rd</sup> ,4 <sup>th</sup>	Economics and management for the engineers
n, 6 <sup>th</sup>	Layout of factories and workshop s	5 <sup>th</sup> , 6 <sup>th</sup>	Layout of factories and workshops	5 <sup>th</sup> , 6 <sup>th</sup>	Layout of factories and workshops
7 <sup>th</sup>	Productiv ity	7 <sup>th</sup>	Productivity	7 <sup>th</sup>	Productivity
n, 9 <sup>th</sup>	Networks	8 <sup>th</sup> , 9 <sup>th</sup>	Networks	8 <sup>th</sup> , 9 <sup>th</sup>	Networks

**22. Course Evaluation**

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

**23. Learning and Teaching Resources**

quired textbooks (curricular books, if any)	C++ programming: from problem analysis to program design, Third Edition, D.S. Malik , Thomson/ Course Technology, 2007
Main references (sources)	-
Recommended books and references (scientific journals, reports...)	- " -Friedman Frank and Koffman Elliot B., " <i>Problem Solving, Abstraction and Design using C++</i> ", Addison Wesley, Fourth Edition. 2004 -Deitel & Deitel, C++ How to Program, Prentice-Hall, 2001. -A. Lambert Kenneth and Nance Douglas W., " <i>Understanding Programming and Problem Solving With C++</i> ", PWS Publishing Compny, Fourth Edition. 1996 -Bruce Eckel, " <i>Thinking in C++</i> ", Second Edition, Prentice Hall, 2000.

	<p>- Herbert Schildt, <i>"Teach Yourself C++"</i>, Third Edition, McGraw-Hill. 1998</p>
Electronic References, Websites	<ul style="list-style-type: none"><li>• <a href="http://www.cee.hw.zc.uk/~pjbk/pathways/cpp1/cpp1.html">www.cee.hw.zc.uk/~pjbk/pathways/cpp1/cpp1.html</a></li><li>• <a href="http://www.edm2.com/0507/introcpp1.html">www.edm2.com/0507/introcpp1.html</a></li><li>• <a href="http://www.doc.ic.ac.uk/~wjk/C++intro">www.doc.ic.ac.uk/~wjk/C++intro</a></li><li>• <a href="http://www.cprogramming.com/tutorial.html">www.cprogramming.com/tutorial.html</a></li><li>• <a href="http://www.cs.umd.edu/users/cml/cstyle/elementel-rules.html">www.cs.umd.edu/users/cml/cstyle/elementel-rules.html</a></li><li>• <a href="http://www.deakin.edu.au/~agoodman/Ctutorial.html">www.deakin.edu.au/~agoodman/Ctutorial.html</a></li><li>• <a href="http://www.tldp.org/howto/c++programming/howto.html">www.tldp.org/howto/c++programming/howto.html</a></li><li>• <a href="http://www.vb-bookmark.com/cpptutorial.html">www.vb-bookmark.com/cpptutorial.html</a></li></ul>