### 3- Course Specification Advanced Project Management (3): (Risk, Procurement & Stakeholders Management)

II.	I. Course Identification and General Information				
1	Course Title:	Advanced Pro Procurement Management)	oject Manag &	gement (3) Stake	: (Risk, holders
2	Course Code & Number:	CE592			
		Credit	t Hours (CH	)	Credit
3	Credit hours:	Lecture	Laboratory	Seminars	Hours
		4	-	-	4
4	Study semester at which this course is offered:	Second Semest	ter		
5	Pre –requisite (if any):	-			
6	Co –requisite (if any):	None			
7	Program (s) in which the course is offered:	MSc. in Engineering Project Management			nent
8	Language of teaching the course:	English			
9	Course type	Compulsory			
1 0	Location of teaching the course:	Faculty of Engineering, Master programs class rooms			rograms
1 1	Prepared By:	Prof. Dr. Eng.	Wael A. Ala	ghbari	
1 2	Date of Approval				

#### IX. Course Description:

This course builds to cover the third section of The Project Management Body of Knowledge (PMBOK). This course is introducing coverage of advanced topics in project risk and procurement management, and project stakeholder engagement, as well as providing comprehensive knowledge of scheduling and other PM tools. It also introduces the topic of delivering complex projects. It draws topics from the following knowledge of project management:

- 1. <u>Project Risk Management :</u> the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project.
- 2. <u>Project Procurement Management</u>: the processes necessary to purchase or acquire products, services, or results needed from outside the project team. Processes in this area include Procurement Planning, Solicitation Planning, Solicitation, Source Selection, Contract Administration, and Contract Closeout.
- 3. <u>Project Stakeholder Management</u>: the processes required to identify all people or organizations impacted by the project, analyzing stakeholder expectations and impact on the project, and developing appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

X	Course Intended Learning Outcomes (CILOs)	<b>Referenced PILOs</b>	I, E, A
al	Provide the graduate students with holistic understanding of the principal components and concepts of project management.	A1	
a2	Demonstrate knowledge and understanding planning, classification of the project risks and construct a prioritized risk register with a risk-response plan.	A2	
b1	Managing, planning, evaluating risks and opportunities and execute the tough processes, and using necessary tools and effectively address the challenges faced during the project.	B1	
b2	Analyze the nature of stakeholder groups and summarize their impact on project performance. Also, create a stakeholder engagement plan that includes approaches to issues such as communication, ethics, and leadership.	B2	
c1	Construct a procurement management plan that reflects the project's procurement needs.	C1	
c2	Determine, analyze and evaluate different types of contracts and monitoring of the risks associated with each type of contract-procurement.	C2	
d1	Write and explain technical reports, in addition to solving problems in the project and presenting them orally and in writing to persuade stakeholders.	D1	

# (A) Alignment of Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
a.1	Provide the graduate students with holistic understanding of the principle components and concepts of project management.	Lectures, Demonstrations, Interactive class discussion	Multiple choice tests, Assignments, Presentations, Quizzes,
a.2	Demonstrate knowledge and understanding planning, classification of the project risks and construct a prioritized risk register with a risk- response plan.		Exams

## (B) Alignment of Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b.1	Managing, planning, evaluating risks and opportunities and execute the tough processes, and using necessary tools and effectively address the challenges faced during the project.	Lectures, Demonstrations, Interactive class discussions	Assignments, Oral Presentations, Quizzes, Exams
b.2	Analyze the nature of stakeholder groups and summarize their impact on project performance. Also, create a stakeholder engagement plan that includes approaches		

to issues such as communication, ethics,	
and leadership.	

### (C) Alignment of Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
	Construct a procurement management	Lectures,	Assignments,
c.1	plan that reflects the project's	Demonstrations,	Oral Presentations,
	procurement needs.	Interactive class	Quizzes,
	Determine, analyze and evaluate different	discussions	Exams
c.2	types of contracts and monitoring of the		
	risks associated with each type of		
	contract-procurement.		

## (D) Alignment of Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
	Write and explain technical reports, in	Lectures,	Assignments,
11	addition to solving problems in the	Demonstrations,	Oral Presentations,
a.1	project and presenting them orally and in	Interactive class	Quizzes
	writing to persuade stakeholders.	discussions	

XI. Course Content								
A – Le	A – Lecture Aspects							
Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours			
1.	Introduction	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li>Definition of the course plan</li> <li>Definition of the course topics:</li> <li>Project Risk Management</li> <li>Project Procurement Management</li> <li>Project Stakeholders Management</li> </ul>	1	4			
2.	<ul> <li>11- <u>Project Risk</u> <u>Management:</u></li> <li>1) Plan Risk Management</li> <li>2) Identify Risk</li> </ul>	a.1, a.2, b.1, b.2, c.1, c.2, d.1 a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li>d) <u>Plan Risk</u> <u>Management:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> <li>e) <u>Identify Risk:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> </ul>	1	2			

			- Outputs		
	3) Perform Qualitative Risk Analysis	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li>f) <u>Perform Qualitative</u> <u>Risk Analysis:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>		2
3.	4) Perform Quantitative Risk Analysis	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li>g) <u>Perform</u> <u>Quantitative Risk</u> <u>Analysis:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>	1	2
4	5) Plan Risk Responses	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li>h) <u>Plan Risk</u> <u>Responses:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>	- 1	2
	6) Implement Risk Responses	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li>i) <u>Implement Risk</u> <u>Responses:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>	1	2
5.	7) Monitor Risks	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li>j) <u>Monitor Risks:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>	1	2
	Class Work: - Presentations - Group Discussions - Quiz	a.1, a.2, b.1, b.2, c.1, c.2, d.1	Each student will take 15-20 minutes		2
6.	Class Work: - Presentations - Group Discussions - Quiz	a.1, a.2, b.1, b.2, c.1, c.2, d.1	Each student will take 15-20 minutes	1	4
7.	Midt	term Exam	1	1	4
8.	<ul> <li>12- <u>Project Procurement</u> <u>Management:</u></li> <li>1) Plan Procurement Management</li> </ul>	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li><u>1) Plan Procurement</u></li> <li><u>Management:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>	1	2
	2) Conduct Procurements	a.1, a.2, b.1, b.2, c.1, c.2, d.1	2) Conduct Procurements - Inputs - Tools and Techniques	1	2

			- Outputs		
	3) Control Procurements	a.1, a.2, b.1, b.2, c.1, c.2, d.1	3) Control <u>Procurements:</u> - Inputs - Tools and Techniques		2
9.	Class Work: - Presentations - Group Discussions	a.1, a.2, b.1, b.2, c.1, c.2,	- Outputs Each student will take 15-20 minutes	1	2
	- Quiz	d.1			
10.	Class Work: - Presentations - Group Discussions - Quiz	a.1, a.2, b.1, b.2, c.1, c.2, d.1	Each student will take 15-20 minutes	1	4
11	<b><u>13- Project Stakeholders</u></b> <u>Management:</u> 1) Identify Stakeholders:	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li><u>1) Identify</u></li> <li><u>Stakeholders:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>	1	2
11.	2) Plan Stakeholder Engagement	eholder2) Plan Stakeholdera.1, a.2, b.1, b.2, c.1, c.2,Engagement: Inputs c.1, c.2, Tools and Techniques	I	2	
12.	3) Manage Stakeholder Engagement	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li><u>3) Manage Stakeholder</u></li> <li><u>Engagement:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>	1	2
	4) Monitor Stakeholder	a.1, a.2, b.1, b.2, c.1, c.2, d.1	<ul> <li><u>4) Monitor Stakeholder:</u></li> <li>Inputs</li> <li>Tools and Techniques</li> <li>Outputs</li> </ul>		2
13.	Class Work: - Presentations - Group Discussions - Quiz	a.1, a.2, b.1, b.2, c.1, c.2, d.1	Each student will take 15-20 minutes	1	4
14.	Class Work: - Presentations - Group Discussions - Quiz	a.1, a.2, b.1, b.2, c.1, c.2, d.1	Each student will take 15-20 minutes	1	4
15.	General Revision			1	4
16.	Fii	nal Exam		1	4
Numb	er of Weeks /and Units Per Ser	nester		16	64

B - Semi	nar NA			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours	Learning Outcomes
1.				
2.				
Number of Weeks /and Units Per Semester				

#### XII. Teaching Strategies of the Course

- Lectures
- Interactive Sessions (Brainstorming Sessions, Discussions, etc.)
- Team Working Sessions
- Active Learning Approaches (Searching, case studies, ...)

### VIII. Schedule of Assessment Tasks for Students During the Semester

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Assignments and Quizzes	3 - 14	30	30	
2	Mid-Term Exam	7 - 9	20	20	a.1, a.2, b.1, b 2 c 1 c 2 d 2
3	Final Exam	16	50	50	0.2, 0.1, 0.2, 0.2
Total			100	100%	

IX.	Assignments:			
No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	<ul> <li>Readings: Each week readings; based on each reading/topic, a written assignment will be issued. Students will be asked to write synthetic essays and/or complete analyses pertaining to the reading materials. These will be short (&gt;4, &lt;5 pages double spaced) pieces.</li> <li>Each work assigned for reading will have 1 or 2 presenters assigned to it from the class.</li> <li>In general students will be asked to describe the main points of the paper and to offer a critique of the contents.</li> <li>Students are expected to prepare for class by reading the assigned reading prior to the class for which they are listed, and to participate in class sessions/group discussions.</li> </ul>		3 - 14	20

#### **VIII Learning Resources and Facilities**

#### 1- Required Textbook(s)

• PMI (2017). A Guide to the Project Management Body of Knowledge - PMBOK: (6th ed.). Project Management Institute, Newtown Square, PA, USA

#### 2- Essential References

- Heerkens, G.R. (2002). Project Management. The McGraw-Hill Companies, Inc., NY: USA
- Verzuh, E. (2003). The Portable MBA in Project Management, John Wiley & Sons, Inc., Hoboken, NJ: USA.

#### 3- Electronic Materials and Websites etc.

- Course Power Point.
- Video clips.
- Links to information resources.

#### Educational and research Facilities and Equipment Required

#### **Technology Resources**

(AV, data show, Smart Board, software, etc.)

Datashow, Whiteboard, Software

#### **Other Resources**

(Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)

#### X. Course Policies

Unless otherwise stated, the normal course administration policies and rules of the Faculty of Engineering apply. For the policy, see: ------

#### • Class Attendance

A student should attend not less than 75 % of total hours of the course; otherwise, he will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university clinic.

#### • Tardy

2 For being late in attending the class, the student will be initially notified. If he/she repeated lateness in attending class he will be considered as absent.

#### • Exam Attendance/Punctuality

A student should attend the exam on time. He is permitted to attend an exam half an hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.

#### • Assignments and Projects

4 Assignments are given to the students after each chapter; students have to submit all assignments for checking on time.

#### • Cheating

5 For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study, the student will be dismissed from the faculty.

#### • Plagiarism

Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed a plagiarism of a student, he will be dismissed from the faculty. The final dismissal of the student from the faculty should be confirmed by the Student Council Affairs of the university.

#### • Other policies

- 7 Mobile phones are not allowed to use during a class lecture. It must be closed, otherwise the student will be asked to leave the lecture room.
  - Mobile phones are not allowed in class during the examination.

- Lecture notes and assignments may be given directly to students using soft and/or hard copy.

#### 4- Course Plan (Syllabus) Advanced Project Management (3): (Risk, Procurement & Stakeholders Management)

I Information about Faculty Member Responsible for the Course							
Name of Faculty Member	Prof. Dr. Eng. Wael A. Alaghbari	Office Hours					
Location& Telephone No.	Faculty of Engineering Mobile: 777869168	SAT	SUN	MON	TUE	WED	THU
E-mail	wael.aghbari@gmail.com						

П.	II. Course Identification and General Information							
1	Course Title:	Advan Procur	Advanced Project Management (3): (Risk, Procurement & Stakeholders Management)					
2-	Course Number & Code:	CE592						
			(	C.H		Tatal		
3-	Credit hours:	Th.	Seminar	Pr.	F. Tr.	I otal		
			-	-	-	4		
4-	Study level/year at which this course is offered:	MSc. in Engineering Project Management						
5-	Pre –requisite:			-				
6-	Co –requisite (if any):	None						
7-	Program (s) in which the course is offered	MSc. in Engineering Project Management						
8-	Language of teaching the course:	English						
9-	System of Study:	Regular						
10-	Mode of delivery:	Face-to-Face						
11-	Location of teaching the course:	Faculty of Engineering						

#### III. Course Description

This course builds to cover the third section of The Project Management Body of Knowledge (PMBOK). This course is introducing coverage of advanced topics in project risk and procurement management, and project stakeholder engagement, as well as providing comprehensive knowledge of scheduling and other PM tools. It also introduces the topic of delivering complex projects. It draws topics from the following knowledge of project management:

- 1. <u>Project Risk Management :</u> the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project.
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- 3. <u>Project Stakeholder Management</u>: the processes required to identify all people or organizations impacted by the project, analyzing stakeholder expectations and impact on the project, and developing appropriate management strategies for effectively engaging

stakeholders in project decisions and execution.

#### IV. Intended Learning Outcomes (ILOs) of the Course

- Provide the graduate students with holistic understanding of the principal components and concepts of project management.
- Demonstrate knowledge and understanding planning, classification of the project risks and construct a prioritized risk register with a risk-response plan.
- Managing, planning, evaluating risks and opportunities and execute the tough processes, and using necessary tools and effectively address the challenges faced during the project.
- Analyze the nature of stakeholder groups and summarize their impact on project performance. Also, create a stakeholder engagement plan that includes approaches to issues such as communication, ethics, and leadership.

• Construct a procurement management plan that reflects the project's procurement needs.

- Determine, analyze and evaluate different types of contracts and monitoring of the risks associated with each type of contract-procurement.
- Write and explain technical reports, in addition to solving problems in the project and presenting them orally and in writing to persuade stakeholders.

V. Course Contents					
A – Theoretical Aspects					
Order	Topics List	Week Due	Contact Hours		
1.	Introduction	1 week	4		
2.	<ul> <li>11- Project Risk Management: <ol> <li>Plan Risk Management</li> <li>Identify Risk</li> <li>Perform Qualitative Risk Analysis</li> <li>Perform Quantitative Risk Analysis</li> <li>Plan Risk Responses</li> <li>Implement Risk Responses</li> <li>Monitor Risks</li> </ol> </li> </ul>	3.5 weeks	14		
3.	Class Work: - Presentations - Group Discussions - Quiz	1.5 week	6		
4.	Midterm Exam	1 week	4		
5.	<ol> <li>12- Project Procurement Management:</li> <li>1) Plan Procurement Management</li> <li>2) Conduct Procurements</li> <li>3) Control Procurements</li> </ol>	1.5 week	6		
6.	Class Work: - Presentations - Group Discussions - Quiz	1.5 week	6		

V. Co	urse Contents					
A – Tł	neoretical Aspects					
7.	13- Project Stakeholders Management:	2 weeks	8			
	1) Identify Stakeholders:					
	2) Plan Stakeholder Engagement					
	3) Manage Stakeholder Engagement					
	4) Monitor Stakeholder					
8.	Class Work:	2 weeks	8			
	- Presentations					
	- Group Discussions					
	- Quiz					
9.	General Revision	1 week	4			
10.	Final Exam	1 week	4			
Numbe	Number of Weeks and Units Per Semester1664					

B – Semi	inar NA			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours	Learning Outcomes
1.				
2.				
3.				
Number of Weeks /and Units Per Semester				

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- Lectures
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	VII. Schedule of Assessment Tasks for Students During the Semester						
No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes		
1.	Assignments and Quizzes	3 - 14	30	30%	a.1, a.2, b.1,		
2.	Mid-Term Exam	8	20	20%	b.2, c.1, c.2,		
3.	Final Exam	16	50	50%	d.1		
	<b>Total</b> 100 100%						

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1- Required Textbooks

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- 2- Essential References

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