

وزارة التعليم العالي والبحث العلمي
جهاز الاشراف والتقويم العلمي
دائرة ضمان الجودة والاعتماد الأكاديمي

استمارة وصف البرنامج الأكاديمي للكليات والمعاهد

للعام الدراسي 2025-2026

الجامعة : العلوم العراقية

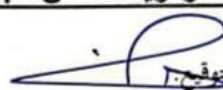
الكلية /المعهد : كلية الهندسة

القسم العلمي : هندسة المدنية

تاريخ ملء الملف : 2026-1-4

تاريخ ملء الملف : 2026-1-4

اللجنة المركزية لضمان الجودة لمسار بولونيا

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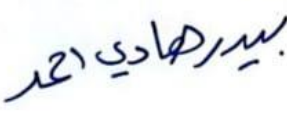
اللجنة الفرعية لضمان الجودة لمسار بولونيا

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كلية بغداد للعلوم الاقتصادية
* الجامعة *
(حالة الأداء الجامعي)

دقق الملف من قبل

شعبة ضمان الجودة والأداء الجامعي

اسم مدير شعبة ضمان الجودة والأداء الجامعي: 

التاريخ

التوقيع



مصادقة العميد

دليل البرنامج الدراسي الاكاديمي | 2025-2026



جامعة العلوم العراقية

كلية الهندسة

قسم الهندسة المدنية

بكلوريوس هندسة مدنية



جدول المحتويات

1. بيان المهمة والرؤية
2. مواصفات البرنامج
3. أهداف البرنامج
4. مخرجات تعلم الطالب
5. الهيئة التدريسية
6. الاعتمادات والدرجات والمعدل التراكمي
7. المواد الدراسية
8. اتصال

1- الرؤية والرسالة والاهداف

يأتي استحداث قسم الهندسة المدنية للعام الدراسي 2025-2026 استجابةً للتحويلات المتسارعة في قطاع البناء والتشييد، والحاجة المتزايدة إلى كوادر هندسية مؤهلة تمتلك مهارات مبتكرة تتناغم مع متطلبات سوق العمل المحلي والإقليمي والعالمي. ويسعى القسم إلى خلق بيئة تعليمية عصرية تعتمد على التقنيات الحديثة والممارسات الهندسية المتقدمة، بما يضمن إعداد مهندسين قادرين على بناء مستقبل حضري مستدام وداعم للتنمية.

• الرؤية

أن يكون قسم الهندسة المدنية بيئة رائدة في التعليم الهندسي والابتكار والبحث التطبيقي، وقادرًا على إنتاج كفاءات هندسية تنافسية تسهم بفاعلية في تطوير البنية التحتية المستدامة وتلبية احتياجات سوق العمل المتجدد.

• الرسالة

تقديم تعليم هندسي متميز يجمع بين المعرفة النظرية والمهارات التطبيقية، وتعزيز ثقافة الابتكار والبحث العلمي، وبناء شراكات فاعلة مع المؤسسات الصناعية والاستشارية، بهدف تأهيل مهندسين قادرين على التخطيط والتنفيذ والإشراف على المشاريع الهندسية وفق أعلى معايير الجودة والسلامة والاستدامة.

2. مواصفات البرنامج

Programme code:	BSc-CIV	ECTS	240
Duration:	4 levels, 8 Semesters	Method of Attendance:	Full Time

تم إنشاء دورات درجة البكالوريوس في الهندسة المدنية لمساعدة الخريجين على تطوير المعرفة والقدرات المحددة المتعلقة بمختلف جوانب الهندسة المدنية، مثل تصميم وتنفيذ وإدارة ومسح وصيانة أنواع مختلفة من المباني والهياكل الكبيرة والبنية التحتية.

كان الهدف الرئيسي للبرنامج الذي يمتد لأربع سنوات هو تزويد الطلاب بالمهارات التي قد يحتاجون إليها في سوق العمل وفي مناصب من شأنها أن تدعم الأنشطة المذكورة أعلاه.

يحصل الطلاب على تعليم يؤسس لأساس هندسي قائم على المبادئ الأساسية للبناء بدءًا من السنة الأولى وجزء من السنة الثانية بالعلوم الأساسية، يليه تدريب متخصص في الهندسة المدنية. يحتوي هذا على مكونات نظرية وعملية يمكن استخدامها كمراجع في الأنشطة المهنية المستقبلية

يمكن لخريجي الهندسة المدنية الانخراط في الأنشطة المهنية التي تأتي مع المسؤولية تجاه الغير. تهتم الإدارات الفنية العامة والخاصة ومقاولو البناء وشركات الهندسة بهذه المهام، والتي تدرج تحت فئات التصميم والتنفيذ والإدارة والمسح واختبار وصيانة المباني والأشغال العامة المهمة والبنية التحتية.

3. اهداف البرنامج

1. توفير برنامج أكاديمي حديث يلبي معايير الجودة والاعتماد الأكاديمي ويواكب التطورات العلمية والتكنولوجية في مجال الهندسة المدنية.
2. إعداد خريجين مؤهلين يمتلكون مهارات التفكير التحليلي والإبداعي والقدرة على حل المشكلات الهندسية المعقدة.
3. تعزيز التكامل بين التعليم النظري والتطبيقي من خلال المختبرات المتطورة والتدريب الميداني والشراكات مع القطاعين العام والخاص.
4. تشجيع الابتكار والبحث العلمي في مجالات الاستدامة، والهندسة الإنشائية، وإدارة البنية التحتية، والهندسة الجيوتقنية، وهندسة المياه والبيئة.
5. الاستجابة لاحتياجات سوق العمل من خلال تحديث المناهج باستمرار وتزويد الطلبة بالمهارات الرقمية والهندسية المستقبلية مثل النمذجة الرقمية والذكاء الاصطناعي في التطبيقات الهندسية.
6. تعزيز خدمة المجتمع عبر تقديم استشارات هندسية وبرامج توعوية وبحوث تطبيقية تدعم خطط التنمية العمرانية.
7. تنمية القيم المهنية لدى الطلبة مثل العمل الجماعي، وأخلاقيات المهنة، والالتزام بالجودة والسلامة.

4. مخرجات تعلم الطلبة

يتيح برنامج الهندسة المدنية للخريج حل مشاكل الهندسة المدنية المعقدة وتعلم كيفية استيعاب المعلومات الجديدة المطلوبة لتصميم وبناء وصيانة الطرق والجسور والمباني وإمدادات المياه والري والتحكم في الفيضانات والموانئ والبنية الأساسية الأخرى. يسعى البرنامج إلى توفير تجربة تعليمية شخصية على مستوى عالمي، تمكن الخريجين من:

المخرج 1

القدرة على تمييز وتحديد وصياغة وحل المشاكل الهندسية في الهندسة المدنية من خلال تطبيق مبادئ الهندسة والعلوم والرياضيات.

المخرج 2

القدرة على إنتاج تصميمات هندسية تلبي الاحتياجات المطلوبة ضمن قيود معينة من خلال تطبيق عمليات التحليل والتكوين في عملية التصميم.

المخرج 3

القدرة على إنشاء وتنفيذ القياسات والاختبارات المناسبة مع ضمان الجودة، وتحليل وتفسير النتائج، والقدرة على الحكم على الاستنتاجات الهندسية.

المخرج 4

القدرة على التواصل بشكل فعال شفهيًا مع مجموعة من الأشخاص وكتابيًا مع مستويات مختلفة من الإدارة ولأغراض مختلفة.

المخرج 5

القدرة على إدراك المسؤوليات الأخلاقية والمهنية في القضايا الهندسية وإصدار أحكام سليمة تأخذ بعين الاعتبار العواقب المترتبة عليها في المجالات المالية والبيئية والمجتمعية والعالمية.

المخرج 6

القدرة على إدراك الحاجة إلى الاستمرار في تطوير المعرفة المهنية وكيفية العثور عليها وتقييمها وجمعها وتطبيقها بشكل صحيح.

المخرج 7

القدرة على العمل بشكل فعال ضمن فرق العمل وتحديد الأهداف والتخطيط للأحداث والوفاء بمواعيد الإنجاز وإدارة المخاطر وعدم اليقين.

5. الكادر التدريسي

1- أ.م.د. نصير عبد الرزاق الحمود
هندسة مدني-مساحة / تخطيط حضري

naseerhasach@baghdadcollege.edu.iq

التحصيل الأكاديمي

بكالوريوس / جامعة بغداد 2007

ماجستير / جامعة بغداد 2011

دكتوراه / جامعة بغداد 2015

العمل الأكاديمي

- مدرس مساعد في جامعة الكوفة 2011.
- مدرس دكتور / جامعة الكوفة 2016.
- استاذ مساعد / منذ 14-4-2019 .
- رئيس قسمين علميين ومعاون عميد للشؤون العلمية/جامعة الكوفة 2019-2023.
- رئيس قسم الهندسة المدنية / جامعة العلوم العراقية 2025 ولحد الان.

العضوية الأكاديمية

- عضو نقابة المهندسين العراقيين
- عضو نقابة الاكاديميين العراقيين
- عضو الجمعية الهندسية المصرية
- اتحاد المهندسين العرب

2.م.د. رهام رعد عبد الله

Reham@baghdadcollege.edu.iq

هندسة المواد/مواد بناء

التحصيل الاكاديمي

- بكالوريوس / الجامعة التكنولوجية 2014
- ماجستير-مواد بناء الجامعة التكنولوجية 2016
- دكتوراه/ الجامعة التكنولوجية 2022

العمل الاكاديمي

- مدرس دكتور في جامعة العلوم العراقية 2025.

العضوية الاكاديمية

- عضو نقابة المهندسين العراقيين

3.م.م مريم قاسم محمد

maryamqassim@baghdadcollege.edu.iq

هندسة مدني-انشاءات

التحصيل الاكاديمي

- بكالوريوس-هندسة مدنية / جامعة النهرين 2021
- ماجستير-انشاءات / جامعة النهرين 2025

العمل الاكاديمي

- مدرس مساعد في جامعة العلوم العراقية 2025.

العضوية الاكاديمية

- عضو نقابة المهندسين العراقيين

4.م.م امير حسين حمزة

Amir.hamza2201m@coeng.uobaghdad.edu.iq

هندسة مدني-صحية

التحصيل الاكاديمي

- بكالوريوس-هندسة مدنية / جامعة الاسراء 2018
- ماجستير-هندسة مدنية /صحية / جامعة بغداد 2025

العمل الاكاديمي

- مدرس مساعد في جامعة العلوم العراقية 2025.

العضوية الاكاديمية

- عضو نقابة المهندسين العراقيين

6. الاعتمادات والدرجات والمعدل التراكمي

- الاعتمادات

يتبع قسم الهندسة المدنية في كلية الهندسة في الجامعة العراقية عملية بولونيا بنظام الاعتماد الأوروبي للتحويل الائتماني (ECTS) بناءً على برنامج التوأمة العلمية مع قسم الهندسة المدنية في كلية الهندسة جامعة القادسية. ويبلغ إجمالي عدد برامج الدرجة التي يتم منحها بنظام الاعتماد الأوروبي 240، بواقع 30 وحدة اعتماد أوروبية لكل فصل دراسي. وتعادل وحدة اعتماد أوروبية واحدة 25 ساعة عمل للطالب، بما في ذلك العمل المنظم وغير المنظم.

• التقييم

قبل التقييم، يتم تقسيم النتائج إلى مجموعتين فرعيتين: النجاح والرسوب. وبالتالي، تكون النتائج مستقلة عن الطلاب الذين فشلوا في الدورة. ويتم تعريف نظام التقييم على النحو التالي:

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:				
Number 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.				

• حساب المعدل التراكمي للنقاط

يتم حساب المعدل التراكمي من خلال مجموع درجات كل وحدة مضروبة في نقاط ECTS الخاصة بها، ثم يتم تقسيمها جميعاً على إجمالي نقاط ECTS للبرنامج.

المعدل التراكمي لدرجة البكالوريوس في العلوم لمدة 4 سنوات:

$$CGPA = [(1st\ module\ score \times ECTS) + (2nd\ module\ score \times ECTS) + ...] / 240$$

7. المنهج الدراسي/الوحدات الدراسية

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENG.111	الرياضيات	79	71	6	B	

CE.112	الفيزياء	64	86	6	B	
CE.113	الرسم الهندسي	93	82	7	B	
CE.114	مواد بناء	79	46	5	C	
UNV.115	اساسيات الحاسوب	64	36	4	B	
UNV.116	ديمقراطية وحقوق الانسان	32	18	2	S	

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENG.121	رياضيات 2	79	71	6	B	
CE.122	علم السكون	79	96	7	C	
CE.123	برمجة الحاسوب	64	61	5	B	
CE.124	الإحصاء والاحتمالية	79	71	6	B	
CE.125	جيولوجيا	47	53	4	B	
UNV.126	لغة إنكليزية اكااديمية 1	32	18	2	S	

Semester 3 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENG.211	رياضيات 3	79	71	6	B	ENG.111
CE.212	مقاومة مواد 1	64	61	5	C	CE.122
CE.213	هندسة مساحة 1	94	81	7	C	
CE.214	ميكانيك موانع 1	64	61	5	B	
CE.215	تكنولوجيا الخرسانة 1	64	61	5	C	
UNV.216	لغة إنكليزية اكااديمية 2	32	18	2	C	

Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CE.221	مقاومة مواد 2	64	86	6	C	CE.122
CE.222	انشاء مبان	10	66	7	C	
CE.223	هندسة مساحة 2	64	61	5	C	
CE.224	ميكانيك مواع 2	49	51	4	B	
CE.225	تكنولوجيا الخرسانة 2	64	61	5	C	CE.215

Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CE.311	نظرية الانشاءات	10	91	8	C	CE.212
CE.312	ميكانيك التربة 2	66	59	5	C	
CE.313	تصاميم خرسانة 2	64	61	5	C	CE.212
CE.314	هنسة بيئة	49	51	4	C	
CE.315	إدارة والاقتصاد الهندس	79	71	6	C	
CE.226	ري وبزل	47	28	3	C	

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CE.321	تحليلات هندسية	94	81	7	B	ENG.211
CE.322	ميكانيك التربة 2	49	51	4	C	
CE.323	تصاميم خرسانة 2	64	61	5	C	CE.212
CE.224	هندسة مياه	79	71	6	C	CE.214
CE.325	هندسة مرور	62	38	4	C	
CE.326	تطبيقات حاسوب	48	52	4	C	

Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CE.411	أسس 1	64	86	6	C	CE.312
CE.412	تصاميم خرسانة	10	91	8	C	CE.313
CE.413	تصاميم طرق	64	61	5	C	
UNV.414	اخلاقيات	33	42	3	C	
ENG.415	مشروع هندسي	32	43	3	C	
CE.416	هندسة مجاري	62	63	5	C	CE.324

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CE.421	أسس 2	49	51	4.0	C	CE.312
CE.422	تصاميم حديد	10	91	8.0	C	CE.221
CE.423	تخم زلي ومواصفات	93	82	7.0	C	
CE.424	هندسة مصادر المياه	79	71	6.0	C	
UNV.425	اللغة الانكليزية (IV)	32	18	2.0	C	
ENG.415	مشروع هندسي	32	43	3.0	S	

8.الاتصال

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Al-Iraqia Science University جامعة العلوم العراقية



First Cycle – bachelor's degree (B.Sc.) - Civil Engineering

بكالوريوس - هندسة مدنية



Table of Contents

1. Overview
2. Undergraduate Modules 2023-2024
3. Contact

1. Overview

This catalogue is about the courses (modules) given by the program of Civil Engineering to gain the Bachelor of Science degree. The program delivers (47) Modules with (6000) total student workload hours and 240 total ECTS. The module delivery is based on the Bologna Process.

نظرة عامة

يتناول هذا الدليل المواد الدراسية التي يقدمها برنامج الهندسة المدنية للحصول على درجة بكالوريوس العلوم. يقدم البرنامج (47) مادة دراسية، مع (٦٠٠٠) إجمالي ساعات حمل الطالب و ٢٤٠ إجمالي وحدات أوروبية. يعتمد تقديم المواد الدراسية على عملية بولونيا.

2. Undergraduate Courses 2023-2024

Module 1

Code	Course/Module Title	ECTS	Semester
ENG.111	Mathematics (I)	6	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	2	79	71
Description			
The module provides the required learning skills in mathematics for the 1 st level undergraduate students in civil Engineering department. The module consists of theoretical (3 hours a week) and tutorial (2 hours a week) parts. The module covers the functions and general concepts, complex functions, derivatives of functions, vectors and mathematical operations of matrices. The module develops the student's skills to solve mathematical equations. The tutorial part covers solve different examples of theoretical part. By the end of the course, the students should be able to guess and check, use a formula, use direct reasonin, solve an equation and covered issues related to mathematics.			

Module 2

Code	Course/Module Title	ECTS	Semester
CE.112	Physics	6	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	1	64	86
Description			
The module includes teaching the students concepts involving kinematics, forces, work and energy, and equilibrium. The mathematical framework for the course will involve some basic understanding of calculus and vectors and will introduce some "new" mathematical concepts needed to fully describe real world situations. These include such ideas as unit vector notation, "dot" and "cross" vector products and path integrals which are NOT covered in HSC physics or extension mathematics courses.			

The Newton's law will be covered in this course with their application. These applications include force equilibrium and friction. Motion of particles in one and two dimensions will be studied also.

Module 3

Code	Course/Module Title	ECTS	Semester
CE.113	Engineering Drawing	7	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
1	5	93	82
Description			
Engineers need to understand engineering drawing since it helps them explain and envision complicated designs. Students get a solid basis for accurate depiction by learning the fundamentals of drawing, including measurements, scale, and symbols. Then, to modify forms and express complex features, they investigate geometric operations. Drawing projections of forms improves their capacity to faithfully represent three-dimensional things. Regular assessments help to reinforce their comprehension while strengthening critical thinking and problem-solving abilities. Through interactive lessons, tutorials, and hands-on experiments, the learning process places a strong emphasis on active student engagement. In the end, students master the necessary abilities to excel in technical drawing, preparing them to express concepts accurately and graphically. Additionally, they learn the skills required to use computer-aided drawing tools, further developing their skills. Engineering drawing unlocks the language of visual communication and precision, empowering students in the field of engineering.			

Module 4

Code	Course/Module Title	ECTS	Semester
CE.114	Construction Materials	5	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	2	79	46
Description			
This module includes some information about general properties of engineering materials, types of engineering materials according to different classifications, types of loading, the behavior of different types of engineering materials under different loading conditions, this module gives some information on building material, their properties, and their use as building materials. Methods of testing physical-mechanical properties and durability characteristics with focus on destructive methods. Basic deformational characteristics of building materials and their monitoring. Forms and properties of building materials: stone, bricks, binder, mortars, building ceramics, tiles, metal, timber, and glass. The module also includes practical laboratory tests of selected building materials under different loading conditions.			

Module 5

Code	Course/Module Title	ECTS	Semester
UNV. 115	Fundamental & Computer Programming (I)	4	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	2	64	36
Description			
The main modules or applications within Microsoft Office typically include: 1. Microsoft Word: creating and editing documents by utilizing a wide range of tools for formatting text, adding images and graphics, and creating tables. 2. Microsoft Excel: organizing, analyzing, and manipulating numerical data and utilizing the powerful features of the Excel for creating formulas, performing calculations, creating charts and graphs, and managing large sets of data. 3. Microsoft PowerPoint: create visual presentations with slides, and combine text, images, videos, and other multimedia elements to create dynamic and engaging presentations. On the other hand, Quick Basic supports a wide range of commands, functions, and statements that allow students to perform calculations, make decisions, and control program flow.			

Module 6

Code	Course/Module Title	ECTS	Semester
UNV.116	Democracy and Human Rights	2	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
1	1	32	18
Description			
في هذا المقرر سيتم شرح كيفية ترسيخ مبادئ حقوق الإنسان والحرية واحترامها والعمل على إنضاجها. وكذلك بيان أهمية وضروية حب الوطن وابناء الوطن وزرع بذور التعايش السلمي والعيش بكرامة لكل المكونات. مع الحرص على التركيز على الهوية الوطنية واحترامها والعمل على ترسيخ مبادئها. كذلك الرغبة في تنشئة جيل واع ومؤمن بقيم التسامح والتعدد والاختلاف من خلال احترام الكرامة الانسانية، وتفعيل العقل، والتفكير، والابداع. ايضا أهمية نشر ثقافة قبول الآخر واحترام خصوصيته الدينية، والسياسية، والثقافية، والاجتماعية. كذلك سيتم التطرق الى ضرورة التعاون مع مؤسسات الدولة من اجل بسط الامن والامان في ربوع البلد العزيز. كذلك الى أهمية وإمكانية الحد من ظاهرة انتشار المخدرات			

Module 7

Code	Course/Module Title	ECTS	Semester
ENG.121	Mathematics (II)	6	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	2	79	71
Description			
The module provides the required learning skills in mathematics for the 2nd level undergraduate students in civil Engineering department. The module consists of theoretical (3 hours a week) and			

tutorial (2 hours a week) parts. The module covers integral equations, method of integration, applications of integration, double and triple integrals with their applications. The module develop the student's skills to solve mathematical equations. The tutorial part covers solve different examples of theoretical part. By the end of the course, the students should be able to guess and check, use a formula, use direct reasonin, solve an equation and covered issues related to mathematics.

Module 8

Code	Course/Module Title	ECTS	Semester
CE.122	Static	7	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	2	79	96
Description			
The module deals with the statics condition of particle under the effect of different type of forces. These forces include coplanar and non- coplanar forces, concurrent and non-concurrent forces. Also, the centroid and moments of inertia of different cross section will be considered. Much time will be spent finding resultant forces for a variety of force systems, as well as analyzing forces acting on bodies to find the reacting forces supporting those bodies. Frames and plane trusses will be analyzed to determine the reaction forces using equilibrium conditions. Students will develop critical thinking skills necessary to formulate appropriate approaches to problem solutions.			

Module 9

Code	Course/Module Title	ECTS	Semester
CE.123	Computer Programming	5	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	2	64	61
Description			
In this module, a high-level programming language (MATLAB) is presented for students that expresses matrix and array mathematics directly. Students can use MATLAB for everything, from running simple interactive commands to developing large-scale applications. Coding in general is important for students because it helps to increase confidence. Because coding empowers students with applicable skills such as creativity, problem-solving and persistence, it also empowers them to face a variety of challenges and opportunities more confidently. In this course, the students will be able to use the programming tools to solve different problem related to mathematics and civil engineering sciences more effectively.			

Module 10

Code	Course/Module Title	ECTS	Semester
C.E 124	Statistics and probability	6	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)

3	2	79	71
Description			
This course provides the students with exposure to fundamentals of statistical methods and their applications, covering Introduction to Statistics descriptive and data analysis, Probability, Random Variables and Probability Distributions, Mathematical Expectation, Discrete Probability Distributions, Continuous Probability Distributions, Functions of Random Variables, Fundamental Sampling Distributions and Data Descriptions. After this course, the student will be able to understand and speak the basic language of statistics and select the right statistical method for his/her applications. Also, the course will provide the fundamental theoretical background that will allow the student to appreciate the strengths and limitations of each method and formulate conclusions accordingly.			

Module 11

Code	Course/Module Title	ECTS	Semester
C.E. 125	Geology	4	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	1	47	53
Description			
The module provides the required learning skills at the relationship between rocks, soil, water, and their effect on human-made structures for the 1st-level undergraduate students in civil Engineering department. The module consists of theoretical (2 hours a week) and practical training (1 hours a week) parts. The theoretical part covers the geologic factors can influence construction projects, the properties of bedrock to soil structure to determine the strength of building foundations and predict potential landslides. The practical training part covers practical applications in areas like civil engineering, mining operations, and environmental assessment. By the end of the course, the students should be analyzed geological data to advise on optimal land use practices.			

Module 12

Code	Course/Module Title	ECTS	Semester
UNV.126	English for Academic Purposes (I)	2	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
1	1	32	18
Description			
The module provides the required learning skills in English languages for beginners. for the 1st level undergraduate students in civil Engineering department. The module consists of theoretical (1 hours a week) and tutorial (1 hour a week) parts. The theoretical part covers developing the student's skills in using appropriate phrases and correct grammar, developing listening, speaking, pronunciation, reading and writing skills. During the tutorial part, students will practice and do exercises regarding the materials covered during the lecture covered in the same week. After completing the class, students should demonstrate ability to read paragraphs, listening to short conversations, make a dialogue writing short paragraphs.			

Module 13

Code	Course/Module Title	ECTS	Semester
ENG.211	Mathematics III	6	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	2	79	71
Description			
In this course, the matrix algebra and its operation like sub of determinate and matrix inversion are reviewed, as well as the vector and its algebra including dot and cross product. In present module the polar coordinates were explained besides the transfer between polar and Cartesian coordinates, the module describe at present module the ordinary differential equation and partial derivatives were studied, also application of partial differential equation including introduction to differential equations specially first order differential equation and solution of first order differential equations using separate variable method in addition to solution of first order differential equations using exact method.			

Module 14

Code	Course/Module Title	ECTS	Semester
CE.212	Strength of Materials (I)	5	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	1	64	61
Description			
The module provides the required learning skills in strength of materials for the 2nd level undergraduate students in civil Engineering department. The module consists of theoretical (3 hours a week) and tutorial (1 hours a week) parts. The theoretical part covers recognizing of type of forces and stresses and calculation of simple stresses and strains because of external forces, it also covers methods of analysis different types of section subjected to torsional moments. Furthermore, this module including two methods to draw the axial force, shear force and bending moment diagrams for beams and frames. The tutorial part includes solving more. In addition, Students will be given a handout with multiple problems, and they are asked to apply what they learned in the lecture to solve the problems in groups. They are asked to discuss it together and come up with a single solution that all members agree on. After completing the class, students should be able to recognize type of stresses, able to find maximum stresses and location and maximum values forces.			

Module 15

Code	Course/Module Title	ECTS	Semester
CE.213	Engineering Surveying (I)	7	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	3	94	81

Description
This section includes an introduction to Engineering Surveying and its application. Also in this module, the student must understand the compute and design of a many process such as (Levelling table, profile of project , differential levelling by the least squares method , and adjustment of profile leveling, computation of cut and fill.). Angles and directions will be studying in this semester. Also, some homework will designation for student. Every student need to interduce a report about a process compute by the instrument as tape and level. Some quizzes also will be done through the semester.

Module 16

Code	Course/Module Title	ECTS	Semester
C.E 214	Fluid Mechanics I	5	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	2	64	61
Description			
In this class, provides students with an introduction to principal concepts and methods of fluid mechanics. Topics covered in the course include pressure, hydrostatics, and buoyancy; open systems and control volume analysis; mass conservation and momentum conservation for moving fluids; viscous fluid flows, flow through pipes; dimensional analysis; boundary layers, and lift and drag on objects. Students will work to formulate the models necessary to study, analyze, and design fluid systems through the application of these concepts, and to develop the problem-solving skills essential to good engineering practice of fluid mechanics in practical applications.			

Module 17

Code	Course/Module Title	ECTS	Semester
C.E 215	Concrete Technology I	5	3
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	2	64	61
Description			
In this course the students will have knowledge about physical, mechanical, chemical, and mathematical tools and concepts for the understanding the engineering behavior of concrete and introduction to engineering design of concrete mixes. The student will also have knowledge on manufacture of cement and its components, types, and hydration. It also emphasizes mechanical and physical properties of aggregate, its impurities and sieve analysis. On successful completion of this module, the students will be able to identify the types of cement and its manufacture, hydration and components. Laboratory tests on cement and mortar mixes in accordance with different standard specifications are also considered. Additionally, the course concentrates on the mechanical and physical properties of aggregate (fine and coarse), its impurities, specific gravity, and sieve analysis. It also carries out laboratory tests for engineering assessment of mix ingredients according to standard specifications.			

Module 18

Code	Course/Module Title	ECTS	Semester
UNV.216	English for Academic Purposes (II)	2	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
1	1	32	18
Description			
The module provides the required learning skills in English languages for pre-intermediate level for the 2nd level undergraduate students in civil Engineering department. The module consists of theoretical (1 hours a week) and tutorial (1 hour a week) parts. The theoretical part covers developing the student's skills in using appropriate tenses and correct grammar, developing listening, speaking, pronunciation, reading and writing skills. During the tutorial part, students will practice and do exercises regarding the materials covered during the lecture covered in the same week. After completing the class, students should demonstrate ability to read paragraphs, listening to medium conversations, make a dialogue writing medium paragraphs.			

Module 19

Code	Course/Module Title	ECTS	Semester
CE.221	Strength of Materials (II)	6	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	1	64	86
Description			
The module provides the required learning skills in strength of materials for the 2nd level undergraduate students in civil Engineering department. The module consists of theoretical (3 hours a week) and tutorial (1 hours a week) parts. The theoretical part covers calculation of flexural, shear, combined and principal stresses, it also covers two methods to determine deflection in beams. The tutorial part includes solving more. In addition, students will be given a handout with multiple problems, and they are asked to apply what they learned in the lecture to solve the problems in groups. They are asked to discuss it together and come up with a single solution that all members agree on. After completing the class, students should be able to recognize type of stresses, able to find maximum stresses and maximum deflections and compare them to allowable limits.			

Module 20

Code	Course/Module Title	ECTS	Semester
C.E 222	Building Construction	7	4

Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	4	109	66
Description			
الكورس مخصص لطلبة المرحلة الثانية يتم فيه من خلال الجانب النظري (5 ساعات/ اسبوع) التعرف على انواع المباني من حيث طرق الانشاء والمواد الانشائية المستخدمة في انشائها ويناقش مراحل تنفيذ المبنى من بداية الاعمال الترابية اسفل مستوى الاسس وصولا الى مرحلة الإنشاءات والاكساء بالمواد الانشائية المختلفة مروراً بأنواع الاسس وخصائصها والبناء فوق مستوى مانع الرطوبة وانواع الارضيات والسقوف والاعمدة والاعتاب وكذلك يناقش خصائص وطرق صناعة واستخدام بعض انواع المواد الانشائية الشائعة مثل الخرسانة بأنواعها والطابوق والكتل البنائية ويتطرق الى بعض اهم المشاكل التي تمر بها مراحل انشاء اي مبنى مثل مشاكل الرطوبة ومشاكل الانتهاءات والمشاكل المرافقة لأعمال خلط ونقل وصب الخرسانة ويعطي الحلول الهندسية الملائمة لها. اما الجانب العملي-المختبر-(2 ساعة/ اسبوع) فيخصص لتعلم رسم التفاصيل الانشائية لبعض العناصر داخل المبنى باستخدام برنامج الأوتوكاد وبالتالي يساهم الكورس بتتمية مهارة الطالب بعد التخرج على اتخاذ القرارات السليمة والقدرة على حل المشاكل المرتبطة بتفسير البيانات والمعطيات العملية وفقا للأطر النظرية.			

Module 21

Code	Course/Module Title	ECTS	Semester
CE.223	Engineering Surveying (II)	5	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	2	64	61
Description			
This section includes an introduction to Engineering Surveying and its application. Also in this module, the student must understand the compute and design of a many processes such as Measuring horizontal. angles; repetition method, direct method, methods of control survey, accuracy standards and specifications, basic concept of traversing and types of traverses). Aerial survey Eng., applications, type of photographs, different between vertical aerial photographs & maps, Indications on aerial photographs will be studying in this semester. Also, some homework will designation for student. Every student need to interduce a report about many processes' computes by digital theodolite, total station. Some quizzes also will be done through the semester.			

Module 22

Code	Course/Module Title	ECTS	Semester
C.E 224	Fluid Mechanics (II)	4	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	1	49	51
Description			
This class provides students with an introduction to principal concepts and methods of fluid mechanics. Topics covered in the course include types of fluid in motion, and the Laws of it. Study application of continuity Equation. Learning application of Energy Equation (Bourinolly Equation) as Orifice, Siphon, Pitot tube. Drawing method T.E.L, and H.G.L. Learning to study the effect of use Pump or Turbine to the flow. The major and minor losses. Determine the force by Momentum Equation in a Free			

jet on plate, closed conduit flow, and slice gate. Knowlagent the types of the pipe connection and design criteria for it. As well as study the Flow in open channels.
Students will work to formulate the models necessary to study, analyze, and design fluid systems through the application of these concepts, and to develop the problem-solving skills essential to good engineering practice of fluid mechanics in practical applications.

Module 23

Code	Course/Module Title	ECTS	Semester
C.E 225	Concrete Technology II	5	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	2	64	61
Description			
This module was designed to have knowledge on fresh, physical, and mechanical properties of concrete mixes. It also provides theoretical and experimental tools for understanding the engineering behavior of hardened concrete and introduction to engineering mix design. Two methods of mix design were incorporated in this module: namely British and American methods. Besides, the students will have knowledge on factors affecting workability and strength of concrete mixes in the short and long-term behaviors. Deformation of concrete, Modulus of elasticity, and Durability are also key aims of this module. Several assessments will be conducted to verify the students' comprehension of the module's objectives.			

Module 24

Code	Course/Module Title	ECTS	Semester
C.E 226	Irrigation & Drainage Engineering	3	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	1	47	28
Description			
The irrigation and drainage is designed to provide students with a comprehensive understanding of water quality assessment and the principles of irrigation and drainage processes. The topics related to water quality parameters, and techniques for used in irrigation. The module begins by introducing students to irrigation engineering, sources, objective treatment. Concept soil and relationship with water. The consumptive use depends on Evaporation, Humidity, temperature, and precipitation. Water application methods and types of irrigation with design criteria by the classification canal irrigation and uses. Students learn how to choose most economical section of a channel and choose water ratio for design. Overall, the module equips students with the skills, and tools necessary to assess water quality, quantity and operate for irrigation. Benefits of the drainage of farmlands. Design and maintenance of open drains with design criteria drain specification.			

Module 25

Code	Course/Module Title	ECTS	Semester
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C.E 311	Analysis of Structures	8	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
4	3	109	91
Description			
This module includes principles and method of the analysis of structures. Firstly, the student learns how to determine the stability and the degree of determinacy of the structures, analysis of statically determinate structures / trusses and frames. Then, the influence lines for statically determinate structures beams, Influence lines for statically determinate structures beams floor beams system, Influence lines for statically determinate composite structures and the effect of moving loads for structures will be instructed with tutorial examples. Thereafter, this module will be directed to the Analysis of statically indeterminate structures using the unite force method or the consisting deformation method (beams, trusses, and frames); using the slope deflection method (beams and frames), and using the moment distribution method (beams and frames).			

Module 26

Code	Course/Module Title	ECTS	Semester
CE. 312	Soil Mechanics (I)	5	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	2	66	59
Description			
The module provides the required learning skills in soil mechanics (1) for students of Civil Engineering department. The module consists of theoretical (2 hours a week) and laboratory (2 hours a week) parts. The theoretical part covers the origin of soil, weigh-volume relationships, Atterberg limits, soil classification, soil compaction, and flow through soil. The laboratory part covers the soils tests associated with the subject. By the end of the course, the students should be able to explain the original of soil, solve weight-volume problems, classify the soil, conduct, and interpret the laboratory and field compaction problems, and solve flow through soil problems.			

Module 27

Code	Course/Module Title	ECTS	Semester
C.E. 313	Design of Reinforced Concrete (I)	5	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	1	64	61
Description			
The module provides the required learning skills in reinforced concrete design I for students of Civil			

Engineering department. The module consists of theoretical (3hours a week) and Tutorial (1 hours a week) parts. The theoretical part covers the types of structural members, analysis and design of single longitudinal reinforced concrete beams, analysis and design of double longitudinal reinforced concrete beams, the analysis and design of continuous concrete beams, the analysis and design of transverse reinforcing steel for concrete beams, and the calculation of deflection and comparing it with the American code. By the end of the course, the students should be able to design and analysis of structural member.

Module 28

Code	Course/Module Title	ECTS	Semester
C.E 314	Environmental Engineering	4	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
1	2	49	51
Description			
In this course, the most important environmental legislation and global pollutants limitations in general are reviewed, as well as the Iraqi determinants of water surface sources pollutants. In present module the surface water and its quality in addition to its pollutants and its effect, the module describe environmental impact assessment and it's important to protect environment, the air pollution was described in the present module and its control, the solid waste types , characteristics , and reduction options were described ,also noise pollution and its effects on human health important water and waste water services including introduction to water treatment plants and water networks and waste water treatment plants and sewer networks.			

Module 29

Code	Course/Module Title	ECTS	Semester
C.E. 315	Engineering of project management and Engineering Economy	6	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
4	1	79	71
Description			
تتألف هذه المادة الدراسية من جزأين أساسيين، هما هندسة إدارة المشاريع والاقتصاد الهندسي، الجزء الأول يهدف الى اكساب الطالب المهارات والمعارف اللازمة لإدارة المشروع من وجهة نظر هندسية، يتعرف خلالها الطالب على المبادئ العامة لهندسة إدارة المشروع والمراحل التي يمر بها وأطرافه بالإضافة الى أنواع العقود وأحالتها. يتعلم كذلك المبادئ العامة لتخطيط وجدولة المشاريع والطرق المتبعة في اعدادها، ومراجعة وتعديل البرنامج الزمني للمشروع الانشائي. كما يتعرف على انواع الكلف في المشروع الانشائي وكيفية اعداد حسابات التدفق النقدي للمشروع. خلال هذا الجزء الأول من المادة الدراسية يتعرف الطالب ايضا على البرمجيات الحاسوبية المساعدة في ادارة المشروع الانشائي. اما الجزء الثاني للمادة الدراسية فهو الاخر يهدف الى اكساب الطالب المهارات والمعارف اللازمة للمحافظة على الجانب الاقتصادي للمشروع الهندسي. ويكون ذلك من خلال تعلم تأثير الزمن والفائدة (بنوعها البسيطة والمركبة) على قيمة الأموال. يتعلم الطالب كذلك حساب فترة الاسترداد للمبالغ المستثمرة في انشاء المشروع الهندسي وانواع الاندثار الذي تتعرض له الاصول والممتلكات وطرق حسابه، تعلم هذه المعارف بالإضافة الى تعلم الطرق الاساسية للدراسات الاقتصادية، تجعله مؤهلا لتحديد ما إذا كان إقامة المشروع الهندسي مجدي اقتصاديا ام لا، بالإضافة الى إمكانية اختيار المشروع الأفضل من بين عدة مشاريع. ولغرض ان يكون القرار الهندسي			

في أمثل حالته كان لابد للطلاب من تعلم كيفية حل البرمجة الخطية باستخدام الطريقة البيانية إضافة الى حل مشاكل النقل والتخصيص.

Module 30

Code	Course/Module Title	ECTS	Semester
UNV.316	English language III	2	5
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
1	1	32	18
Description			
In this course the New Headway -Intermediate level is studied. The course comprises lectures on language input, grammar, vocabulary, everyday English, reading passages, speaking, listening, and different techniques of writing. It also concentrates on developing skills (reading, writing, speaking and listening). Students in this course will increase their awareness of correct usage of English grammar in writing, as well as will improve their speaking ability in terms of fluency and clarity. Students can also increase their reading speed, improve their reading fluency skills through extensive reading, enrich their vocabulary, and strengthen their ability to write essays and summaries. Indicative content includes tenses, auxiliary verbs, modal verbs, and future forms. Besides, it includes conditionals, indirect questions, and question tags.			

Module 31

Code	Course/Module Title	ECTS	Semester
CE.321	Advanced Mathematics & Numerical Analyses	7	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
4	2	94	81
Description			
The module provides the required learning skills in advanced engineering mathematics for the 3 rd level undergraduate students in Roads and Transport Engineering department. The module consists of theoretical (4 hours a week) and tutorial (2 hours a week) parts. The theoretical part covers the basics of differential equations (definitions, classifications, solutions, and applications in the field). The module also covers the numerical methods which are used to solve some of mathematics problems that are difficult to have an exact solution. By the end of the course, the students should be able to solve all covered issues related to the engineering mathematics.			

Module 32

Code	Course/Module Title	ECTS	Semester
CE 322	Soil Mechanics (II)	4	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	1	49	51

Description
The module provides the required learning skills in soil mechanics (2) for the students of Civil Engineering department. The module consists of theoretical (2 hours a week) and laboratory (2 hours a week) parts. The theoretical part covers the in-situ stress, external loads on soil, settlement (immediate and consolidation), shear strength of soil. The laboratory part covers the soils tests associated with the subject. By the end of the course, the students should be able to calculate the in-situ stresses, understand the effect of external loads and calculate the increase of the soil stresses due to these loads, understand the settlement of the soil and calculate the immediate and consolidation settlement, and understand how the soil respond to surface loads and what mobilizes its resistance and calculate the shear strength of the soil.

Module 33

Code	Course/Module Title	ECTS	Semester
C.E. 323	Design of Reinforced Concrete (II)	5	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	1	64	61
Description			
The module provides the required learning skills in reinforced concrete design II for students of Civil Engineering department. The module consists of theoretical (3hours a week) and Tutorial (1 hours a week) parts. The theoretical part covers the introduction to slab and their types, knowledge of the analysis of one-way slab, know the design of one-way slab, introduction to concrete columns and their types, knowledge of short column analysis, know the design of short columns, knowledge of long column analysis, know the design of long columns, knowledge of the design of the additional length of the reinforcing by the end of the course, the students should be able to design and analysis of structural member.			

Module 34

Code	Course/Module Title	ECTS	Semester
C.E. 324	Water Engineering	6	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	2	79	71
Description			
The Water Engineering module is designed to provide students with a comprehensive understanding of water quality assessment and the principles and processes involved in treating and purifying water for various purposes. The module covers a range of topics related to water quality parameters, monitoring techniques, and treatment technologies. The module begins by introducing students to water uses, factors affecting water uses, fire demand, and population forecasting and then moves to the importance			

of water quality and its significance in various sectors such as public health, industry, and agriculture. Students learn about the different sources of water contamination, including natural sources, anthropogenic activities, and emerging pollutants.

The treatment of water is a critical aspect of water engineering, and the module covers different water treatment processes and technologies. Students learn about the physical, chemical, and biological processes involved in removing contaminants from water, such as coagulation, flocculation, sedimentation, filtration, disinfection, and advanced treatment methods. Overall, the Water Quality and Treatment module equips students with the knowledge, skills, and tools necessary to assess water quality, design and operate water treatment systems, and ensure the provision of safe and clean water for various applications.

Module 35

Code	Course/Module Title	ECTS	Semester
C.E 325	Traffic Engineering	4	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	1	62	38
Description			
The module provides the required learning skills for students in traffic engineering for the 3rd level undergraduate students in Civil Engineering department. The module consists of two parts, theoretical (3 hours a week) and tutorials (1 hours a week) parts. The theoretical part covers the elements of highways design, elements of roadways cross section, design of horizontal and vertical curves. The module also covers the design of intersection and parking. By the end of the course, the students should be able to solve all covered issues related to highways design.			

Module 36

Code	Course/Module Title	ECTS	Semester
C.E 326	Computer Applications in Civil Engineering	4	6
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
1	2	48	52
Description			
The module provides the required learning skills in structural analysis using matrix method (stiffness method) for the 3rd level undergraduate students in civil Engineering department. The module consists of theoretical (1 hours a week) and practical (2 hours a week) parts. The theoretical part covers the analysis of two-dimensional structures (trusses, beam, and frames) using stiffness matrix method. The practical part covers the structural analysis and design proficient program (STAAD.Pro®) which is one of the most widely used software for developing and analyzing the designs of various structures, such as buildings, tunnels, bridges etc. Students will learn with various software functionalities like model generation and editing; loading analysis; design concrete and steel structures. After completing the class, students should proficiently use the software to design different structures and generate design reports.			

Module 37

Code	Course/Module Title	ECTS	Semester
C.E 411	Foundation Engineering I	6	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	1	64	86
Description			
The module provides the required learning skills in foundation design for the 4th level undergraduate students in civil Engineering department. The module consists of theoretical (3 hours a week) and tutorial (1 hours a week) parts. The theoretical part covers the elements of soil exploration, elements of bearing capacity of soil, shape of failure under footing, method of calculation of bearing capacity, settlement for all types of foundation under load, design of footing (isolated, combined strip and mat). The tutorial part covers examples for soil exploration and write the report, the design of footing, settlement for foundation above sand and clay soil. By the end of the course, the students should be able to solve all covered issues related to foundation design.			

Module 38

Code	Course/Module Title	ECTS	Semester
CE.412	Design of concrete structures	8	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
4	3	109	91
Description			
The module provides the required learning skills in the design of concrete structures for the 4th-level undergraduate students in the Civil Engineering Department. The module consists of a class lecture (4 hours per week) and a tutorial (3 hours per week) part. The module covers the estimation of slab thickness moreover the design of a two-way slab by the Direct Design Method, and the Shear strength of a flat slab (Punching shear) this subject included the effect of opening and moment transfer between column and slab, the analysis and design of slabs by the Yield Line Method, the analysis and design of prestressed concrete beams. This module is depending on the specifications of ACI-318 of 2019. By the end of the course, the students should be able to solve all covered issues related to the design of concrete structures.			

Module 39

Code	Course/Module Title	ECTS	Semester
C.E 413	Highway Engineering	5	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	2	64	61
Description			
The module provides the required learning skills in highways design for the 4th level undergraduate students in Civil Engineering department. The module consists of theoretical (2 hours a week) and lab			

and tutorials (2 hours a week) parts. The theoretical part covers the elements of Bituminous materials used in the asphalt mixtures, sources of bitumen and types, aggregate used in the asphalt mixture, its types, sources and desired properties, the weight and volumetric relationship of asphalt mix, Asphalt mix design using Marshall method, Types of pavements (flexible pavement and rigid pavement), Stresses with rigid paving, Thermal stresses affecting Pavements, Rigid paving design and types of joints with rigid paving. The module also covers the lab part covers the test of materials using in highway design. By the end of the course, the students should be able to solve all covered issues related to highways design.

Module 40

Code	Course/Module Title	ECTS	Semester
UNV.414	Ethics	3	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
-	2	33	42
Description			
يتضمن هذا الكورس التعرف على مجموعة من المفاهيم التي تخص مهنة الهندسة واسس أخلاقيات المهنة والشرح الكامل للواجبات الوظيفية والمهنية للمهندس و توضيح المسؤوليات التي يتحملها المهندس في حالة أخفاقه في تطبيق الالتزامات المطلوبة منه بموجب المدونة والإجراءات المترتبة على ذلك، و استعرضت وثائق الشرف واللوائح والتعهدات المطلوب من المهندس تنفيذها.ستساعد المدونة عند تطبيقها في جميع الاعمال الهندسية القائمة في البلد في ضبط الممارسات المهنية بما يدعم تنفيذ الاعمال على وفق معايير أخلاقية منظمة تؤدي بالتالي الى تقدم ورقى الجانب الهندسي . بالإضافة الى ما سبق يتضمن الكورس تعريف الخريجين بالشروط الخاصة بالمقاولات التي يتم التعامل اثناء تنفيذ المشاريع الانشائية وكيفية التعامل مع المشاكل الإدارية والفنية بشكل مهني .			

Module 41

Code	Course/Module Title	ECTS	Semester
ENG. 415	Engineering Project	3	7 and 8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
-	3	47	28
Description			
In the graduation project, fourth-stage students are divided into groups consisting of two or three students, according to the opinion of the scientific department. The graduation project includes the study of fourth-stage students for a specific topic or a specific case study in one of the fields of civil engineering, where the graduation project may be of a experimental or theoretical field according to the nature of the project, through which a specific study or case is studied through analysis or design with the help of a supervisor. Willing to come up with a set of conclusions and recommendations. The graduation project aims to develop the academic level of students and increase their ability to			

understand additional subjects.

Module 42

Code	Course/Module Title	ECTS	Semester
C.E 416	Wastewater Engineering	5	7
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	1	62	63
Description			
The wastewater is designed to provide students with a comprehensive understanding of wastewater quality assessment and the principles of processes for treating. The topics related to wastewater quality parameters, and techniques. The module begins by introducing students to wastewater, sources, objective treatment. Forecasting the future population and quality of wastewater. learn the different sources of wastewater contamination. Identify sewer hydraulic. The treatment of wastewater is a critical aspect of wastewater engineering. Students learn about the physical, chemical, and biological processes involved in removing contaminants, such as sedimentation, biological, filtration and disinfection. Types and parts of sanitary drainage system in a building for design. Knowledge of the laws of treatment in the design of plant treatment, network, and plumbing. Overall, the Wastewater Quality and Treatment module equips students with the skills, and tools necessary to assess quality, and ensure the provision of safe and treated.			

Module 43

Code	Course/Module Title	ECTS	Semester
C.E 421	Foundation Engineering II	4	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
2	1	49	51
Description			
The module provides the required learning skills in foundation design for the 4th level undergraduate students in civil Engineering department. The module consists of theoretical (3 hours a week) and tutorial (1 hours a week) parts. The theoretical part covers the elements of calculate of lateral earth pressure, design of retaining wall and sheet pile, design of bearing capacity for single pile and group pile. The tutorial part covers examples for the design of retaining wall, sheet pile, piles, group piles. By the end of the course, the students should be able to solve all covered issues related to foundation design.			

Module 44

Code	Course/Module Title	ECTS	Semester
C.E 422	Steel Structure Design	8	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
5	2	109	91

Description
This section includes an introduction to steel structure and the adopted analysis and design methods according to AISC code and its application. Also in this module, the student must understand the analysis and design of steel members such as (tension members, compression, or column members, flexural or beam member, and finally the connections methods). Bolt and weld connection were adopted in the connection subject. Analysis and design of column within steel frame i.e., steel building also will be studied. Also, some homework will designation for student. Every student need to interduce a report about an object related to steel structure. Some quizzes also will be done through the semester.

Module 45

Code	Course/Module Title	ECTS	Semester
C.E 423	Construction Methods, Specifications & Estimation	7	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
4	2	93	82
Description			
يعرض هذا المقرر تعريف تفصيلي بمادة التخمين والمواصفات وطرق الإنشاء الخاصة بالفقرات الإنشائية للمباني العامة، حيث يتناول عملية إجراء عملية التخمين الأولى أو التقريبي للحصول على معلومات أولية عن إمكانية البدء بالإنشاء وفقاً للميزانية المالية المقررة للمشروع. وبعد توفر الامكانية المالية واخذ القرار بالإنشاء أساسيات التخمين من إجراء عملية تخمين تفصيلية لكل الفقرات الإنشائية التي سيتم الشروع بإنشائها ابتداءً من الحفريات وانتهاءً بالتسطیح. كما تتيح مفردات التخمين على التوصل بدقة الى تقدير الكلف لكل الفقرات وفقاً للمدونة القياسية العراقية وكذلك تتيح مفردات المنهج بالتعرف على المواصفات القياسية وحدودها الحاكمة بالرفض والقبول. يتضمن المنهج المقرر التعرف على الأسس النظرية لتصميم قالب خشبي امن للجدران والسقوف والاعمدة وكذلك يتناول الية حساب الإنتاجية لبعض الاليات في موقع العمل بالإضافة الى الكلف المترتبة على امتلاك وتشغيل الالية في موقع العمل كما يعرض المقرر الشروط العامة لأعمال الهندسة المدنية بقسميها الأول والثاني.			

Module 46

Code	Course/Module Title	ECTS	Semester
C.E 424	Water resources engineering	6	8
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
3	2	79	71
Description			
This course provides the students with exposure to Hydrology science and engineering science, hydrologic cycle, Meteorological data, Precipitation, Rainfall information, Estimating missing precipitation data, Average precipitation over an area, Optimum rain gage station, Hydrograph, Reservoir routing, Stream flow routing, Hydraulic structures (introduction), Seepage under hydraulic structures, Design of Regulators, Protection of approach U/S & D/S of concrete floor, Design of gates, Hydraulic Jump and Design of Stilling Basins, Design of Transition in open channels, and Design of Box- Culverts and Inverted Siphon.			

Module 47

Code	Course/Module Title	ECTS	Semester
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UNV.425	English language IV	2	4
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/sem)
1	1	32	18
Description			
In this course the New Headway, Upper- Intermediate is studied. In it, there is fluency-based activities, a blend of traditional and more recently developed communicative approaches, treatment of grammar and systematic lexical syllabus, and putting attention to all four language skills (listening, speaking, reading, and writing). The grammatical syllabus will be studied: work on the tense system. perfect versus non-perfect verb forms, simple versus continuous aspects; narrative and future verb forms; expressing quantity relative pronouns, participles and adverbial clauses, conjunctions, and determiners. There is work on new areas: modal auxiliary verbs are dealt with over two units, the first on all meanings, and the second on modal verbs in the past verbs related to modals, such as able to, obliged to, manage to, supposed to are covered. In this course, students will increase their awareness of correct usage of English grammar in writing and listening, as well as improve their speaking and reading ability in terms of upper-level vocabulary, fluency, and clarity.			

Contact

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MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Computer Course		Module Delivery يجب تحديد متطلبات المادة	
Module Type	Supportive		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☒ Practical ☐ Seminar	
Module Code				
ECTS Credits	5			
SWL (hr/sem)	54			
Module Level	First Level	Semester of Delivery		Semester 1
Administering Department	Civil engineering	College	Eng- Al-Iraqia Science University	
Module Leader	Zainab Ghassan		e-mail	MSCZainab@baghdadcollege.edu.iq
Module Leader's Acad. Title	Teaching Assistant	Module Leader's Qualification	Master's Degree	
Module Tutor	Zainab Ghassan		e-mail	MSCZainab@baghdadcollege.edu.iq
Peer Reviewer Name	مراجع المادة	e-mail	ايميل مراجع المادة	
Scientific Committee Approval Date	تاريخ الموافقة على المادة	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	1. Utilize the computer for fundamental tasks. 2. Identify and discuss the hardware components of the computer system. 3. Create documents using a word processor and create presentations 4. Conducting research on the Internet. 5. An introduction to Artificial Intelligence
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	student learns out the types of mputers and the sis of their work
Indicative Contents المحتويات الإرشادية	Part A: Lecture Part - Introduction to Computer and Hardware Concepts Concepts of Hardware and Software with their components; Concept of Computing, Data and Information; Connecting input/output devices, and peripherals to CPU. [4 hrs] - Computer Components and Architecture Computer Portions, Hardware Parts, I/O Units, Memory Types; Basic CPU Components, Computer Ports, Personal Computer (Features and Types). [4 hrs] - Operating System and Graphical User Interface (GUI) Operating System Basics; The User Interface and Mouse Techniques; Use of Common Icons, Status Bar, Menus, Folders and Directories; Opening/closing Windows; Creating Shortcuts. [6 hrs] - Word Processing (Microsoft Word) Word Processing Basics; Opening/Closing documents, Text creation and Manipulation; Formatting Text and Paragraphs; Using Templates, Tables, Styles, Themes, and Headers/Footers. [8 hrs] - Spreadsheets (Microsoft Excel) Introduction to Spreadsheet Software; Creating and Formatting Worksheets; Sorting and Filtering Data; Using Formulas and Functions; Pivot Tables for Data Analysis. [8 hrs] - Presentation Software (Microsoft PowerPoint) Overview of Tools; Using Templates and Themes; Formatting Text and Images; Transition and Animation Effects; Speaker Notes, Hyperlinks, and Action Buttons. [6 hrs] - Internet, Web Browsers and Communication Computer networks (LAN, WAN); Concept of Internet; Web Browsing software, Search Engines, URL, Domain names, and IP Addresses; Basics of E-mail (Sending/Receiving and Collaboration). [6 hrs] - Introduction to Cloud Computing and Services Definition of Cloud Computing; Cloud-Based Office Suites (Office 365 and Google

	Workspace); Google Docs, Sheets, Drive, and Google Meet. [4 hrs] Part B: Computer Application (Practical Lab) Practical sessions covering: Windows GUI navigation, managing files and folders, advanced document formatting in Word, building complex formulas and data analysis in Excel, designing professional presentations, efficient web searching, and managing cloud storage and collaboration tools. [30 hrs]
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Assessment & Learning Strategies Practical Exams: Designed to assess students' speed and accuracy in utilizing software applications effectively. Self-Paced Learning: Encouraging students to explore advanced software features through self-guided training. This approach fosters "Lifelong Learning" skills, which are essential in the rapidly evolving technology sector. Final Capstone Project: Assigning a comprehensive project that integrates all acquired skills, such as: Word: Authoring a professionally formatted research report. Excel: Conducting data analysis for a mock project using tables and charts. PowerPoint: Creating and delivering a visual presentation of the project. Hands-on Lab Sessions: The core strategy for Microsoft Office and Cloud Computing modules. Students execute tasks through a step-by-step demonstration led by the instructor, ensuring real-time application of concepts.

Student Workload (SWL) الحمل الدراسي للطالب موزع على (15) اسبوع			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	54	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	96	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	3
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number (عدد مرات الامتحان)	Weight (Marks)	Week Due (تحديد اسابيع الامتحان)	Relevant Learning Outcome تحديد مواد التعليم التي سيتم الامتحان فيها
Formative assessment التقييم التكويني	Quizzes (امتحان شهري)	4	20% (20)	4, 7, 10, 13	All
	Assignments (واجبات)	Continuou s	10%(10)	Continuous	All
	Projects / Lab. (مشاريع او مختبرات)	1	10% (10)	Continuous	All
	Report (تقارير)	1	10% (10)	10	All
Summative assessment التقييم التلخيصي	Midterm Exam (امتحان النصف)	2hr	50% (50)	16	All
	Final Exam (الامتحان النهائي)	4	20% (20)	4, 7, 10, 13	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to Computer: Concepts of Hardware and Software with their components; Concept of Computing, Data and Information; Connecting input/output devices, and peripherals to CPU
Week 2	Computer Components: Computer Portions, Hardware Parts, I/O Units, Memory Types
Week 3	Computer Components (Cont.): Basic CPU Components, Computer Ports, Personal Computer, Personal Computer (Features and Types)
Week 4	Operating System and Graphical User Interface GUI: Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques.

Week 5	Operating System and Graphical User Interface GUI (Cont.): Use of Common Icons, Status Bar, Using Menu and Menu-selection, Concept of Folders and Directories, Opening and closing of different Windows; Creating Short cuts.
Week 6	Word Processing: Word Processing Basics; Basic Features of Word Processors, Opening and Closing of documents, Text creation and Manipulation; Formatting Text and Paragraphs, Using Templates for Document Creation.
Week 7	Word Processing (Cont.): Creating and Managing Tables, Utilizing Styles and Themes, Spell Check and Grammar Tools, Using Headers and Footers
Week 8	Spread Sheet: Introduction to Spreadsheet Software, Creating and Formatting Worksheets, Sorting and Filtering Data, Using Formulas and Functions.
Week 9	Spread Sheet (Cont.): Using Formulas and Functions, Using Pivot Tables for Data Analysis
Week 10	Presentation Software: Introduction to Presentation Software, Overview of Popular Presentation Tools, creating a New Presentation, Using Templates and Themes, Inserting and Formatting Text and Images, Transition and Animation Effects
Week 11	Presentation Software (Cont.): Using Speaker Notes and Timers, Advanced Features: Hyperlinks and Action Buttons, Troubleshooting Common Presentation Issues, Future Trends in Presentation Technology.
Week 12	Introduction to Internet and Web Browsers: Computer networks Basic; LAN, WAN; Concept of Internet and its Applications; connecting to internet
Week 13	Introduction to Internet and Web Browsers (Cont.): World Wide Web; Web Browsing software's, Search Engines; Understanding URL; Domain name; IP Address
Week 14	Communications and Emails: Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration
Week 15	Introduction to Cloud Computing and Services: Definition of Cloud Computing and its concept, Cloud-Based Office Suites (Office 365 and Google Workspace), Google Docs, Google Sheets, Google Drive, Google Meet

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Identifying CPU, RAM, and storage; connecting I/O peripherals (Mouse, Keyboard, Monitor).
Week 2	Exploring PC features; identifying internal parts and various connection ports (USB, HDMI, LAN).
Week 3	Navigating the Desktop; using mouse techniques; interacting with the Status Bar and Menus.
Week 4	Creating folders/directories; managing multiple windows; creating desktop shortcuts.
Week 5	Text creation; formatting paragraphs; document manipulation; using built-in templates.
Week 6	Creating/managing tables; applying styles/themes; using headers, footers, and spell check.
Week 7	Formatting worksheets; data entry; sorting and filtering datasets.
Week 8	Using basic/advanced formulas and functions; Introduction to Pivot Tables.
Week 9	Creating slides; using themes; inserting images; applying transitions and animations.
Week 10	Using speaker notes/timers; adding hyperlinks; troubleshooting and exploring future trends
Week 11	Connecting to LAN/WAN; using search engines; understanding URLs, Domains, and IP addresses.
Week 12	Creating an email account; sending/receiving attachments; managing sent mail; collaboration basics.
Week 13	Introduction to Google Workspace and Office 365; using Google Drive and Google Meet.
Week 14	Real-time document editing in Google Docs and Sheets; sharing and permission management.

Delivery Plan (Weekly Tutorial)

المنهاج الاسبوعي الاضافي

	Material Covered
Each week, a question sheet related to the material presented in the theoretical lecture will be solved and debated.	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	1- Graham Brown, David Watson, "Cambridge IGCSE Information and Communication Technology", 3rd Edition (2020) 2. Alan Evans, Kendall Martin, Mary Anne Poatsy, "Technology In Action Complete", 16th Edition (2020). 3. Ahmed Banafa, "Introduction to Artificial Intelligence (AI)", 1st Edition (2024). 4. Microsoft Office 2019 Step by Step 1st Edition by Curtis Frye & Joan Lambert 5. 2016 "Introduction", 5th Edition C O M M E E 6. 2005 "Introduction to the World of the Internet", 1st Edition Jside dsle JsiS.	
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.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Physics		Module Delivery	
Module Type	Basic learning activities		☒ Theory ☒ Lecture ☐ Lab ☒ Tutorial ☐ Practical ☐ Seminar	
Module Code	CE.112			
ECTS Credits	6			
SWL (hr/sem)	150			
Module Level	UGI	Semester of Delivery		1
Administering Department	CE	College	Eng- Al-Iraqia Science University	
Module Leader	Assistant professor Nada Abdul Fatah Mohammed		e-mail	nadaak_phys@csu.uobaghdad.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.	
Module Tutor	Name (if available)	e-mail	nadaak_phys@csu.uobaghdad.edu.iq	
Peer Reviewer Name		e-mail	nadaak_phys@csu.uobaghdad.edu.iq	
Scientific Committee Approval Date	4/1/2026	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	1. Learning about units, Physical Quantities and Vectors. 2. Study the motion in One Dimensions. 3. Motion in Two Dimensions. 4. Newton's Laws discussions. 5. Work and Energy of System. 6. Momentum. 7. Static Equilibrium and Elasticity. 8. Applications of Newton's Law (Friction).
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understanding the units and its identifications. 2. Understanding motion of bodies in one or two directions. 3. Discussing the motion of moving objects. 4. Discussing the energy of bodies and the principal of work. 5. Knowing about bodies momentum. 6. Understanding the equilibrium of structures. 7. Understanding friction phenomena for bodies.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. <u>Part A – SI and FPS units</u> Learn about the types of units, physical terms and the meaning of vectors and how to be deal with. [4 hrs] <u>Part B – Study the motion in One & two Dimensions.</u> Identify the speed, displacement and time to travel an object in one or two directions. [8 hrs] <u>Part C – Newton's Laws discussions.</u> Understanding the laws of motions and identifying the position of a moving object. [16 hrs] <u>Part D – Work and Energy of System</u> Describe the principal of work down by an object and energy even it was kinetic or potential energy [4 hrs]. <u>Part E – Momentum</u>

	Discussing the phenomena of a mass in motion and its application. [4 hrs]. <u>Part F- Static Equilibrium and Elasticity</u> Classify types of supports and how to find its magnitudes for different applied loads. [16 hrs] <u>Part F – Application of Newton’s Law (Friction)</u> Studying friction coefficient and its importance on the slipping, tipping or even no-motion of an object. [8 hrs]
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Using different videos, sketches and photos to understanding the geometry of the problem in the best way and modulate the moving objects using simulation software. The oral exams and the solutions of the students indicate there understanding.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	64	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	86	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	5.7
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	3	24% (24)	5, 9,13	LO # 1 - 9
	Assignments	1	10% (10)	Continuous	All
	oral	1	6% (6)	Continuous	All

	Report				
Summative assessment	Midterm Exam	1	10% (10)	8	LO # 1-5
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Units, Physical Quantities
Week 2	Vectors
Week 3	Study the motion in one Dimensions
Week 4	Study the motion in two Dimensions
Week 5	Newton's Laws discussions -1
Week 6	Newton's Laws discussions -1
Week 7	Work and Energy of System
Week 8	Momentum
Week 9	Static Equilibrium and Elasticity -1
Week 10	Static Equilibrium and Elasticity -2
Week 11	Static Equilibrium and Elasticity -3
Week 12	Application of Newton's Law (Friction)
Week 13	Application of Newton's Law (Friction) – more examples -1
Week 14	Application of Newton's Law (Friction) – more examples -2
Week 15	Review
Week 16	Preparatory week before the final Exam

Learning and Teaching Resources

مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	• Knight, R. D. Physics for Scientists and Engineers; Addison-Wesley Educational Publishers Inc: New Jersey, 2016. • University Physics with Modern Physics (14th ed.) 2015 (Young and Freedman). • Physics for Scientists and Engineers with Modern Physics (17th ed.) (Serway and Jewett).	Yes
Recommended Texts	• Schaum's Outline of Theory and Problems of Physics for Engineering and Science. • Physics for Scientist and Engineers- Strategic Approach with Modern Physics (4th ed.), 2017 (Randall Dewey Knight).	No
Websites	https://qu.edu.iq/eng/ https://www.youtube.com/channel/UCV6dyju08WoaOYjrBrcB2A	

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.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Mathematics (I)		Module Delivery	
Module Type	Basic learning activities		☒ Theory ☒ Lecture ☐ Lab ☒ Tutorial ☐ Practical ☐ Seminar	
Module Code	ENG.111			
ECTS Credits	6			
SWL (hr/sem)	150			
Module Level	UGI	Semester of Delivery		1
Administering Department	CE	College	Eng- Al-Iraqia Science University	
Module Leader	Reham Raad Abdullah and Maryam Qassim Mohammed		e-mail	reham@baghdadcollege.edu.iq maryamqassim@baghdadcollege.edu.iq
Module Leader's Acad. Title	lecturer	Module Leader's Qualification	Ph.D. MSc	
Module Tutor	Name (if available)	e-mail	E-mail	
Peer Reviewer Name	Scientific Committee	e-mail	reham@baghdadcollege.edu.iq	
Scientific Committee Approval Date	04/01/2026	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	1. Identifying coordinates, inclination of a straight line, types of equations, distances between points, drawing different functions, limits, the domain and the corresponding domain, and the continuity test. 2. Knowing vectors and mathematical operations of matrices, translocations and inverses of matrices 3. Learn about trigonometric and inverse trigonometric functions, logarithmic and exponential functions, hyperbolic and inverse hyperbolic functions, their graphics, properties and laws. 4. Studying derivatives and their laws, the derivative of complex functions, the chain rule, and implicit derivatives. 5. Knowledge of derivative laws for exponential, logarithmic, trigonometric, inverse trigonometric, hyperbolic and inverse hyperbolic functions.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understand and know the solution of mathematical problems 2. Recognize symbols and write down mathematics. 3. Develop the student's skills in using matrices, finding the determinant and solving mathematical equations. 4. Develop abstract, logical and critical thinking and the ability to think decisively about their work and the work of others
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. <u>Part A – Functions and general concepts</u> Learn about Identifying coordinates, inclination of a straight line, types of equations, distances between points, drawing different functions. [12 hrs] The domain and the corresponding domain, limit and the continuity test. [9 hrs] <u>Part B – Matrices</u> Learn about vectors and mathematical operations of matrices, translocations and inverses of matrices. [18 hrs] <u>Part C – Complex functions and Function properties</u> Learn about trigonometric and inverse trigonometric functions, logarithmic and exponential functions, hyperbolic and inverse hyperbolic functions, their graphics, properties and laws. [18 hrs] <u>Part D – Derivatives of functions</u> Studying derivatives and their laws, the derivative of complex functions, the chain rule, and implicit derivatives. [18 hrs]

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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• Diction method • Dialogic method • The active method (depends on the student's activity)

Student Workload (SWL) الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	79	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	71	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	4.73
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	150		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	3	27% (27)	5, 9,13	1 - 9
	Assignments	1	10% (10)	Continue	All
	Projects	-	-		
	Report	1	3% (3)	10	
Summative assessment	Midterm Exam	2 hr	10% (10)	8	1-5
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Coordinates, inclination of the straight line, types of equations, distances between points
Week 2	Drawing different functions.
Week 3	Drawing different functions.
Week 4	Limits, their types and solutions.
Week 5	Limits, their types and solutions and the continuity test.
Week 6	Hospitals rule
Week 7	Trigonometric and inverse trigonometric functions
Week 8	logarithmic and exponential functions
Week 9	Hyperbolic and inverse hyperbolic functions, their graphics, properties and laws.
Week 10	Derivatives and their laws
Week 11	The derivative of complex functions, the chain rule, and the implicit derivation.
Week 12	Derivative laws for exponential and logarithmic functions.
Week 13	The derivative of trigonometric and inverse trigonometric functions.
Week 14	Vectors and mathematical operations of matrices
Week 15	Vectors and mathematical operations of matrices
Week 16	Preparatory week before the final Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	- Thomas Calculus 11th edition. - Advanced Engg. Mathematics Erwin Kreyszig.	Yes
Recommended Texts	Methods of Applied Mathematics F.B.Hilderbrand.	No
Websites	https://qu.edu.iq/eng/	

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.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Construction materials مواد بناء		Module Delivery يجب تحديد متطلبات المادة
Module Type	نوع المادة (رئيسية)		☒ Theory ☐ Lecture ☐ Lab ☒ Tutorial ☐ Practical ☐ Seminar
Module Code	CE.114		
ECTS Credits	6		
SWL (hr/sem)	150		
Module Level	UGI	Semester of Delivery	
Administering Department	رمز القسم	College	Eng- Al-Iraqia Science University
Module Leader	د.رهام رعد عبد الله		e-mail Reham@baghdadcollege.edu.iq
Module Leader's Acad. Title	مدرس	Module Leader's Qualification	دكتوراه
Module Tutor	د.رهام رعد عبد الله		e-mail Reham@baghdadcollege.edu.iq
Peer Reviewer Name	مراجع المادة	e-mail	Reham@baghdadcollege.edu.iq
Scientific Committee Approval Date	تاريخ الموافقة على المادة	Version Number	رقم الاصدار يبقى مثل ما هو 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	تعريف الطلاب بالمفاهيم الأساسية والعملية للمواد المستخدمة في البناء وفهم خصائصها وتأثيرها على أداء المنشآت.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	التعرف على الخصائص الفيزيائية والميكانيكية والكيميائية للمواد الإنشائية المختلفة. ومعرفة أنواع المواد التقليدية والحديثة المستخدمة في البناء ومعرفة تأثير المواد على أداء المنشآت ومعرفة المواصفات لهذه المواد. ليتكون لمهندس المدني القدرة على اختيار المواد الأنسب لكل نوع من أنواع المنشآت وفق متطلبات التصميم والأداء. والالتزام بالمعايير الهندسية في التعامل مع المواد وتحليل معوقات المواد أثناء التنفيذ.
Indicative Contents المحتويات الإرشادية	مقدمة عن مواد البناء وخصائصها ومن ثم مواد البناء المستخدمة والتعمق بكل نوع

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	Direct dialogue, videos, reports, Laboratory tests, evaluation test

Student Workload (SWL)			
الحمل الدراسي للطالب موزع على (15) اسبوع			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	77	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	73	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	3
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number (عدد مرات الامتحان)	Weight (Marks)	Week Due (تحديد اسابيع الامتحان)	Relevant Learning Outcome تحديد مواد التعليم التي سيتم الامتحان فيها
Formative assessment التقييم التكويني	Quizzes (امتحان شهري)	3	10% (10)	3, 7,12	1 - 7
	Assignments (واجبات)	2	10% (10)	10	1-5
	Projects / Lab. (مشاريع او مختبرات)	-	10% (10)	-	-
	Report (تقارير)	1	10% (10)	2	-
Summative assessment التقييم التلخيصي	Midterm Exam (امتحان النصف)	2	10% (10)	10	1-9
	Final Exam (الامتحان النهائي)	3	50% (50)	16	All
Total assessment			100% (100 Marks)		

مثال على توزيع درجات تقييم التكويني (يجب تحديد اربع انواع من التقييمات)

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1-4 , LO #5-9
	Assignments	2	20% (10)	4, 11	LO # 1-3 , LO # 4- 10
	Projects / Lab.	N/A			
	Report	1	10% (10)	15	LO # 1-14
Summative assessment	Midterm Exam	2 hr	10% (10)	8	LO # 1-7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	مقدمة عن المواد الهندسية, خواصها والاحمال المسلطة عليها
Week 2	الخواص الميكانيكية للمواد
Week 3	الخواص الميكانيكية للمواد
Week 4	سلوك المواد تحت تأثير اجهاد شد وعوامل اختيار المواد للبناء
Week 5	مواد البناء / الطابوق
Week 6	الاسمنت
Week 7	الركام , الخرسانة
Week 8	الخشب
Week 9	الزجاج
Week 10	حديد التسليح
Week 11	الصخور
Week 12	الارضيات
Week 13	المواد الرابطة
Week 14	الاستدامة
Week 15	الاستدامة
Week 16	العزل الحراري

Delivery Plan (Weekly Tutorial)

المنهاج الاسبوعي الاضافي

	Material Covered
Each week, a question sheet related to the material presented in the theoretical lecture will be solved and debated.	

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	<i>Materials science and engineering</i> : an introduction / by William D. Callister Materials for civil and costruction engineers, by Michael S. et. al.	
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.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Engineering Drawing		Module Delivery
Module Type	Core		☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☒ Practical ☐ Seminar
Module Code	CE.113		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	UGI	Semester of Delivery	
Administering Department	CE	College	Eng- Al-Iraqia Science University
Module Leader	Asst. Prof. Dr. Naseer Al-Homood Asst. Lecturer Maryam Qasim	e-mail	naseerhasach@baghdadcollege.edu.iq maryamqassim@baghdadcollege.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	MsC.
Module Tutor	-	e-mail	-
Peer Reviewer Name	Scientific Committee	e-mail	
Scientific Committee Approval Date	04/01/2026	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	1. Prepare the student to learn the basics of engineering drawing. 2. Familiarize the student with how to use geometric operations to represent different shapes in drawing. 3. Learn how to draw projections of shapes. 4. Consolidate the scientific material properly through conducting exams.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. To learn how to be precise with dimensions, scale, and conclusions of the shapes. 2. To be able to know how to deal with missing parts of the shape and how to draw conclusions based on what's available. 3. To prepare the student for learning computer aided drawing tools which will be much easier to achieve when owning the essential knowledge of drawing.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. <u>Engineering Drawing</u> <u>Basics of engineering drawing.</u> To know the basics of engineering drawing as the language of communication between engineers and to lay a solid foundation for them in understanding the most important basic rules of drawing geometric shapes and maps. It also aims to familiarize them with the most important symbols [12 hrs] <u>Geometric operations</u> Know how to implement engineering operations - take advantage of geometric processes in drawing shapes. [36 hrs] <u>Projections of shapes</u> How to draw the three projections of solids - draw projections for advanced exercises - deduce the third projection based on the other two projectors - deduce the third position for advanced exercises. [42 hrs]
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 classes, 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 محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	93	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	6
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	82	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	5.46
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes \ Classwork	15	15% (15)	Continues	LO #1-15
	Assignments \ Homework	15	15% (15)	Continues	LO #1-15
	Projects \ Lab.	5	10% (10)	Continuous	All
	Report	-	-	-	LO # 10, 11
Summative assessment	Midterm Exam	1	10% (10)	8	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to engineering drawing fundamentals
Week 2	Basic Geometrical Drawing Operations and drawing scale
Week 3	Applications on Basic geometrical drawing operations and the fundamentals
Week 4	Engineering operations: straight line bisection - Draw a straight line parallel to another line - angle division - Draw a triangle given the sides - Applications to engineering processes.
Week 5	Engineering operations: Draw a hexagon inside a circle - Draw a pentagon inside a circle - Applications to engineering processes.
Week 6	Engineering operations: Draw an arc tangent to two straight lines - Draw an arc tangent to another arc and a straight line - Draw an arc that touches a parenthesis - Applications to engineering processes.
Week 7	Engineering operations: Draw an ellipse using the four-center method - Applications to engineering processes.
Week 8	Multiple projection drawing – projection – First angle projection - Applications on projection drawing.
Week 9	Projection – To deduce and draw three projections necessary to illustrate the model from an existing isometric shape - Applications on projection drawing.
Week 10	Applications to learn to draw projections for advanced exercises
Week 11	Conclusion of the third site - Learn how to deduce the third projection based on the other two projections
Week 12	Applications on Conclusion of the third site.
Week 13	Conclusion of the isometric shape after deducing the third projection from a given two projections of the model - Learn how to deduce the third projection based on the other two projections and then draw the isometric shape of the model.
Week 14	Drawing details and defining model features through an isometric representations of the model.
Week 15	Applications on drawing advanced isometric shapes and details.

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the
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		Library?
Required Texts	Engineering Drawing, Abdul Rasoul Al-Khaffaf, Technical University Publications, 1990 edition.	Yes
Recommended Texts	- Textbook of engineering drawing, K. Venkata Reddy, BS Publications, 2008.	No
Websites	https://qu.edu.iq/eng/ Online Recorded Lectures: https://youtube.com/@waleedalawsey5977	

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.				

Business Administration Department- Baghdad
College of Economic Sciences University

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	حقوق الانسان والديمقراطية		Module Delivery
Module Type	اساسية B	☒ Theory ☐ Lecture ☐ Lab ☒ Tutorial ☐ Practical ☐ Seminar	
Module Code	HRAD103		
ECTS Credits	2		
SWL (hr/sem)	50		
Module Level	1		Semester of Delivery
Administering Department	BA	College	BCoESU
Module Leader	عبد الامير عبدالواحد فليح	e-mail	aaahmeed82@gmail
Module Leader's Acad. Title	مدرس	Module Leader's Qualification	دكتورة
Module Tutor	عبد الامير عبدالواحد فليح	e-mail	aaahmeed82@gmail
Peer Reviewer Name	د. محمد احمد حمد	e-mail	d.mohammed_ahmed@baghdadcollege.edu.iq
Scientific Committee Approval Date	20/12/2025	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module		Semester	
Co-requisites module		Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Aims أهداف المادة الدراسية	• نشر الوعي الحقوقي للطالب وبيان ماهية الحقوق السياسية والاجتماعية والاقتصادية. • التأكيد على ادمية الانسان • نشر المعرفة بكل انواع ومضامين موضوع حقوق الانسان وحياته الاساسية ومايرتبط بها من مفاهيم اخرى كالديمقراطية
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	فهم ماهية حقوق الانسان وماهية حرياته الاساسية لبناء جيل يحمل في ذاته الوعي والثقافة من اجل بناء مجتمع حضاري.
Indicative Contents المحتويات الإرشادية	المحتوى الإرشادي يتضمن ما يلي: الجزء الأول جذور حقوق الإنسان وتطورها في تاريخ البشرية (أربع ساعات صفية) الجزء الثاني الاعتراف المعاصر بحقوق الإنسان (أربع ساعات صفية). الجزء الثالث مضامين حقوق الإنسان (أربع ساعات صفية). الجزء الرابع أشكال وأجيال حقوق الإنسان (أربع ساعات صفية). الجزء الخامس ضمانات حقوق الإنسان وحمايتها (أربع ساعات صفية). الجزء السادس الديمقراطية (مفاهيمها، مقوماتها، أبعادها) (أربع ساعات صفية). الجزء السابع الحرية في الرأسمالية والإسلام (ست ساعات صفية).

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	• استراتيجيات التعلم التعاوني. • استراتيجيات التعلم وجهاً لوجه. • استراتيجيات التعلم عبر الإنترنت. • استراتيجيات التعلم الهجين. • تقسيم الطلبة على مجموعات صغيرة لعمل التقارير. • المحاضرات التقليدية. • (Google class room) استخدام منصات التعليم الإلكتروني. • دمج بين التعليم التقليدي والتعليم عبر الإنترنت.
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Student Workload (SWL) الحمل الدراسي للطالب موزع على (15) اسبوع			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	33	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	2.2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	17	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	1.13
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	50		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (5)	5, 10	LO #1-4 , LO #5-9
	Assignments	2	10% (10)	4, 11	LO # 1-3 , LO # 4- 10
	Projects / Lab.	N/A			
	Report	1	10% (10)	15	LO # 1-14
Summative assessment	Midterm Exam	2 hr	10% (10)	8	LO # 1-7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	حقوق الإنسان ، تعريفها ، أهدافها
Week 2	حقوق الإنسان في الحضارات القديمة وخصوصا حضارة وادي الرافدين
Week 3	حقوق الإنسان في الشرائع السماوية مع التركيز على حقوق الإنسان في الإسلام
Week 4	حقوق الإنسان في التاريخ الحديث والمعاصر
Week 5	الاختبار الشهري
Week 6	الاعتراف الدولي بحقوق الإنسان
Week 7	مصادر حقوق الانسان
Week 8	ضمانات احترام وحماية حقوق الانسان

Week 9	دور منظمة الامم المتحدة وفروعها في حماية حقوق الانسان
Week 10	دور المنظمات الغير دولية في حقوق الانسان
Week 11	مفهوم الديمقراطية وخصائصها والتطور التاريخي لها
Week 12	اشكال الديمقراطية, مفهومها وتطبيقها
Week 13	النظام الديمقراطي الايجابيات والسلبيات
Week 14	مفهوم الانتخابات واشكالها
Week 15	التكيف القانوني للانتخابات
Week 16	الامتحان النهائي

Delivery Plan (Weekly Tutorial)	
المنهاج الاسبوعي الاضافي	
	Material Covered
Each week, a question sheet related to the material presented in the theoretical lecture will be solved and debated.	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts		
Recommended Texts	- رياض عزيز , حقوق الانسان وحياته الاساسية . -محمد حسن دخیل , حقوق الانسان وحياته الاساسية , مؤسسة الحلبي الثقافية , بغداد , 2023 . - حميد خالد حنون , حقوق الانسان , مكتبة السنهوري, 2015.	
Websites		

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks (%)	Definition
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