Ministry of Higher Education and Scientific Research Scientific Supervision and Evaluation Authority, Quality Assurance and Academic Accreditation Department
Accreditation Department

Description of the academic program and course of study

2025-2026

Ministry of Higher Education and
Department of Private University ducation
Al-Farabi University – College of Egineering
Department of Architecture

Description of the academic program

Bachelor of Architectural Sciences.

Academic year (2025-2026)

- Experienced Professor Dr. Bahjat Rashad Shaheen/Assistant Dean for Scientific Affairs - Quality Assurance Coordinator in the Department of Architecture

- Lecturer Dr. Firas Ali Majeed / Head of the Department of Architecture

- Assistant Lecturer Haifa Salem Abdel Karim / Member and Representative of the Quality Division of the Department of Architecture

Academic Program Description Form

University Name: Al-Farabi University

College/ Institute: College of Engineering

Academic Department: Department of Architecture

Name of Academic or Professional Program: Bachelor of Architectural Engineering Sciences

Name of Final Degree: Bachelor of Architectural Engineering

Sciences Study System: Semester and Annual

Description preparation date: 1/6/2025

Date of filling out the file:15/6/2026

Signature: Dr. Firas Ali Majid

Department Head Name:

Date: 20/6/2026

Signature: Prof. Dr. Bahjat R. Shaheen

Scientific Assistant Name:

Date: 20/6/2026

Check the file before
Quality Assurance and University Performance Division Name of the Director of the Quality Assurance and University Performance Division
Date: 21/6/2026
Signature:
Prof. dr. Hanaa Hammoud

Dean of the College of Engineering - Al-Farabi University:

Osama Abd Al-Ameer

prof. Dr. M. M. Abd

Vision, The message and The goals.... Department of Architecture

1- The Program vision
-That The Department of Architecture is a pioneer in the development of architecture at the local and regional levels. This is achieved Yby offering distinguished academic programs that support innovation and creativity, and keep pace with global developments in the field of architectural design and urban planning. The department seeks to graduate academically and professionally qualified architectural in the labor market, capable of designing and planning sustainable urban environments that meet the of the local Iraqi community and supporting cultural identity.

2- The message
-The department aims to become one of the most important tributaries in higher education and scientific research institutions by establishing a base of scientific cadres that combine face-to-face education and blended learning programs. - The Department of Architecture program is Acharacterized by its ability to embrace knowledge and continuous education, which has led to its recognition as one of the important Aprograms at the national level. - Graduating distinguished engineering graduates who possess the scientific and practical experience that qualifies them to work in the local, regional and global labor market. - Encouraging integrated education and practical training alongside the practice of critical thinking.

3- The goals

- The outcome of the architectural curriculum provides distinguished numbers of graduates with professional experience, knowledge, and skills, as well as behavioral attitudes in the field of architectural and urban specialization that must be acquired in accordance with the declared national standards, which cover the requirements of societal aspects, local traditions, and human values, and preserve the Iraqi heritage components, Improving the quality of life, achieving the principles of environmental sustainability, and ensuring mandatory graduate outcomes in the field of architecture and urbanism According to what was stated in the National Standards Guide of the Iraqi Council for Accreditation of Engineering Education (the seven mandatory graduate outcomes), which coincide with the specificity of architectural engineering sciences and according to the following:
- The ability to distinguish, identify, define, formulate and solve architectural problems, by applying the principles of revitalization and preservation of the authentic Iraqi architectural and urban heritage.
- The ability to produce architectural engineering designs that meet market needs through the latest architectural technological developments, industrial planning and design innovations in the field of architecture and urban planning, and through the application of analysis and synthesis processes in the design process.
- The ability to create and implement appropriate measurements and tests with quality assurance for architectural graduates in the field of engineering control, and to reach conclusions for the general planning and design foundations and indicators for residential, administrative and public urban communities, in addition to their accompanying logistical services.
- The ability to communicate effectively on-site with all beneficiaries and investors, and in the field with decision-makers for various documentation, administrative and operational purposes.
- The ability to understand ethical and professional responsibilities in all architectural and urban engineering issues, and the ability to issue sound judgments that take into account the potential consequences that may result from them, in the financial, environmental, and societal fields, and at the global level.
- The ability to realize the need to continue self-development of professional knowledge, and how to find, evaluate, collect and apply it correctly.
- The ability to work effectively within the general teams of the relevant engineering specialties (mechanical, electrical, sanitary, surveying, etc.), setting goals, planning integrated work, meeting completion deadlines,and managing risks .
- Enhancing scientific research by motivating faculty and students to participate in research, conferences and seminars.
- Developing curricula to keep pace with global developments in the field of engineering design and urban planning.

- Enhancing international cooperation with regional and international educational institutions and universities with the aim of exchanging expertise and knowledge.

4- Programmatic accreditation:

Does the program have software accreditation? From which side?
The department is recognized by the Ministry of Higher Education and Scientific Research and seeks to obtain programmatic accreditation
This is the first evaluation submitted by the Quality Assurance and Academic Accreditation Committee/Department of Architecture.It is duly submitted to the Ministry of Higher Education and Scientific Research, noting that the Department of Architecture has prepared the self-evaluation for the following academic years (2019-2020, 2020-2021, and 2023 – 2024)

5- Other external influences

- Is there a sponsor for the program? And from which party?
- University of Baghdad / College of Engineering / architecture department

6- Program structure				
Structure The program	number of courses	Unit Study	ratio Centenary	Notes *
Institutional requirements	(5) courses on human rights and democracy	2	%3.33	Basic
	Academic Arabic Language	2		
	Academic English - 1	2		
	Academic English - 2	2		
	Baath crimes	2		
College requirements	(4) Courses and representation Mathematics 1	4	%5.33	Basic
	Mathematics 2- Statistics	4		
	Physics – Building Materials	4		
	Static and material resistance	4		
Department requirements	(40) courses	266	%88.66	Basic
Summer training	Summer vacation between the third and fourth levels	for one month	%2.74	Basic
Other				

* Notes may include whether the course is basic or optional.

7- Program description

Curriculum Guide – First Academic Level

Course Guide – First Academic Level - First Semester – 30 Study Units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	**FU111**	Human rights & democracy	Arabic	2	——	——	2
2	**GF111**	Computer Science1	English	2	——	3	5
3	**GF112**	Mathmatics	English	2	2	——	4
4	**ARCH1101**	Architectural Design and graphic	Arabic	2	10	——	12
5	**ARCH1102**	Communication skills Freehand	Arabic	1	3	——	4
6	**ARCH1103**	Principles of Art &Architecture	Arabic	3	——	——	3
Total				**30**			**30**

First academic level - second semester – 30 academic units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	**FU020**	Academic Arabic	Arabic	2	——	——	2
2	**GF031**	Academic English - 1	English	2	——	——	2
3	**GE123**	Computer Science-2	English	2	——	3	5
4	**ARCH1204**	Communication skills Freehand	Arabic	1	3	——	4
5	**ARCH1205**	Architectural design and graphics 2-	Arabic	2	8	——	10
6	**ARCH11206**	Principles of Art and architecture- 2	Arabic	3	——	——	3
7	**ARCH11207**	Physics of Building Materials	English	2	4	——	4
Total				**30**			**30**

Course Guide – Second Academic Level - Third Semester – 30 credits

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	GEO3	Academic English 2	English	2	——	——	2
2	ARCH2107	Computer digital communication 1	English	——	——	3	3
3	ARCH212	Architectural communication, descriptive geometry	Arabic	1	3	——	4
4	GEG211	Mathematics 2- Statistics	English	2	2	——	4
5	ARCH2101	Architectural design 3	Arabic	2	8	——	10
6	ARCH12102	Communication skills Freehand 3	Arabic	——	3	——	3
7	ARCH2106	Building construction 1	Arabic	1	3	——	4
Total				**30**			**30**

Second academic level - fourth semester – 30 academic units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	ARCH12207	Computer, digital communication 2	English	——	——	3	3
2	GEG222	Static and stregth of materials/ Structure	English	4	——	——	4
3	ARCH2201	Architectural design 4	Arabic	2	8	——	10
4	ARCH2202	Communication skills Freehand 4	Arabic	——	3	——	3
5	ARCH2206	Building installation 2	Arabic	1	3	——	4
6	ARCH2205	History of Arch./Iraqi Arch. 1	Arabic	4	——	——	4
7	FU225	Baath Crimes	Arabic	2	——	——	2
Total				**30**			**30**

Course guide – Third academic level - Fifth semester – 30 academic units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	ARCH3101	Architectural design 5	Arabic	2	——	——	2
2	ARCH3106	Building installation 3	Arabic	——	——	3	3
3	ARCH3107	Computer Digital architecture 1	English	1	3	——	4
4	GEG313	Structure 2	English	2	2	——	4
5	ARCH3105	History of arch. world Arch 2	Arabic	2	8	——	10
6	GEG314	Architecture systems/lighting system 1	English	——	3	——	3
Total				**30**			**30**

Third academic level - sixth semester – 30 academic units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	ARCH3201	Architectural design 6	Arabic	2	10	——	12
2	ARCH3206	Building Construction 4	Arabic	1	3	——	4
3	ARCH3205	History of arch. world Arch 3	Arabic	4	——	——	4
4	GEG325	Architecture systems/Sanitary system 2	English	2	——	——	2
5	ARCH3207	computer ,Digital arch.	English	1	——	3	4
6	GEG323	Structure 3	English	3	1	——	4
Total				**30**			**30**

Course guide – Fourth academic level - Seventh semester – 30 academic units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	ARCH4101	Architectural design 7	Arabic	2	10	——	12
2	ARCH4108	Interior Design	Arabic	1	3	——	4
3	ARCH4105	History of Arch., Modern Arch 4	Arabic	4	——	——	4
4	ARCH4109	Ecology and Architecture	Arabic	4	——	——	4
5	ARCH4111	Urban planning and design	Arabic	4	——	——	4
6	ARCH4127	Architecture systems 3/Air conditioning	English	2	——	——	2
Total				**30**			**30**

Fourth academic level - eighth semester – 30 academic units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	ARCH4101	Architectural design 8	English	2	10	——	12
2	ARCH4212	Landscape Design	English	1	3	——	4
3	ARCH4213	Housing	English	4	——	——	4
4	ARCH4205	History of Arch., Islamic Arch. 5	Arabic	4	——	——	4
5	ARCH4214	Architecture ystems 4/Acoustics	English	2	——	——	2
6	GEG427	Surveying	English	1	3	——	4
Total				**30**			**30**

Course guide – Fifth academic level - Ninth semester – 30 academic units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	ARCH5101	Architectural design 9	Arabic	2	14	——	16
2	ARCH5115	Graduation project seminar	Arabic	——	6	——	6
3	ARCH5116	theory Arch. and design 1	Arabic	2	——	——	2
4	ARCH5117	Contemporary Iraqi architecture	Arabic	2	——	——	2
5	ARCH5118	Prof .practice/build specification 1	Arabic	2	——	——	2
6	ARCH5119	Sustainablity	Arabic	2	——	——	2
Total				**30**			**30**

Fifth academic level - tenth semester – 30 academic units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	ARCH5215	Graduation project	Arabic	2	20	——	22
2	ARCH5216	Theory of Arch and criticism 2	English	2	——	——	2
3	ARCHE00	Conservation of Arch.	English	2	——	——	2
4	ARCH5218	Professional practices and ethics 2	Arabic	2	——	——	2
5	ARCH5220	Advanced construction technology	Arabic	2	——	——	2
Total				**30**			**30**

8- Expected learning outcomes of the program

Knowledge

Theoretical knowledge (A1)

• It mentions the basic principles of architectural design, represented by architectural theories and history.
• Translates mathematical equations and physical laws that define structures.
• Explains the history of architecture and its development.

Applied knowledge (A2)

• Applies architectural design theories to real-life projects.
• Applies the foundations of sanitary, electrical and mechanical systems in buildings.
• Classifies the concepts of sustainability (environmental, economic and social) and the mechanism of their application in architectural design.
• Differentiates between construction materials, their properties and methods of use

Technical knowledge (A3)

• The techniques are known as three-dimensional modeling (3D modeling)
• Explains modern building systems such as solar energy systems and others and how to use them in buildings.
• Design software such as autocad-Revit and D max3

Contextual knowledge (A4)

• Mention local and international laws and regulations related to construction and architectural design.
• Analyzes the impact of architecture on societal and cultural identity.
• Distinguishes global challenges such as climate change and others with ways to address them through architectural design.

skills

Cognitive skills (B1)

• Translates the formulation of design concepts in a creative and innovative way that meets the needs of the labor market.
• Evaluates architectural theories and concepts and applies them in diverse contexts.
• Makes the right decisions based on data.

Practical skills (B2)

• Applications construction and building techniques in real-world projects.
• Draws perfectly using design tools (traditional and digital).
• Produces executive drawings.

Personal skills (B3)

• Develops a plan for producing scientific reports and research by understanding scientific research methodologies and methods of applying them in architecture.
• Expresses his opinion on developing teamwork and communication skills.
• Develops a plan for managing architectural projects (planning – scheduling - budgeting).

Creative skills (B4)

• Transforms design ideas into innovative and attractive practical solutions.
• Applies digital tools to create creative designs.
• Designs with innovative design concepts

values

Moral values (Part 1)

• Translates integrity and transparency into work.
• Applies professional ethics and professional responsibilities of the architect.
• Distinguishes between intellectual property rights.

Social values (Part 2)

• Respects the cultural and social diversity of the local, Arab and international community.
• Contributes to sustainable development.
• Discusses work to improve the quality of life of society.

Personal Values (Part 3)

• Respects oneself, the individual and others.
• Regulates responsibility and at the same time has the ability to rely on oneself.
• Patience and perseverance in reaching goals.
• Evaluates and criticizes architectural projects.

Professional values (Part 4)

• Professional standards apply.
• Organizes time through good management and develops a teamwork plan with the aim of

continuously improving professional performance to achieve the required goals.
• Decides on the right decisions, taking into account the consequences for society, the environment and the finances.

9- Teaching and learning strategies •

The teaching and learning strategies followed by the Department of Architecture – College of Engineering – Al Farabi University.
Built on educational and scientific foundations with the aim of achieving the best educational results for students, through the diversity of these strategies to meet the different needs of students and also encourage their participation in the educational process, which is embodied in:
• Lectures following active learning strategies - flipped learning - blended learning.
• Project-based education (linking theoretical knowledge to practical application).
• Problem-based education.
• Effective course feedback when needed.
• Tests and exams.
• Home tasks and activities.
• Extracurricular activities.
• Summer training.
• Field visits and trips.
• Conferences, seminars and committees.
• Reports, presentations and posters.

10- Evaluation methods

The evaluation methods followed by the department are comprehensive and diverse to ensure the measurement of all aspects of learning (cognitive, skill and emotional) with the aim of achieving a fair and comprehensive evaluation that contributes to enhancing the teaching and learning process. These methods can also be modified and developed to suit the nature of the curriculum and the needs of students, taking into consideration keeping pace with the modern developments witnessed by the world in the field of education.Among these methods:
• Written tests (daily, weekly and monthly).
• Research projects.
• Presentations.
• Practical evaluation.
• Cumulative evaluation.
• Self-assessment (standard).

• Oral evaluation.
• Feedback-based evaluation.

11- Faculty

Table (1) shows: The reality of the basic teaching staff of the Department of Architecture for the academic year (2024-2025)

Teaching staff				
	Lecturer staff	scientific title	specialty	Notes
1	Prof. Dr. Bahjat Rashad Shaheen	Professor Experienced	Architecture & Environment	Assistant Dean for Scientific Affairs
2	Dr. Faras Ali Majeed	lecturer	Architecture & Environment	Head of Department
5	MSc. Mithm Hassan Mahdi	lecturer	Housing planning and design	Department rapporteur
3	Dr. Wadah Abdel -Sahib	lecturer	urban design	
6	MSc. Ban Asmat Abdul Qadir	teacher Assistant	Airport management, planning and design	
7	MSc. Haifa Salem Abdel Karim	teacher Assistant	Urban planning smart – sustainable	lecturer – Secretary and Rapporteur of the College of Engineering Council - Women's Representative of the College of Engineering, Quality Member of the Department of Architecture – Women's Affairs Member of the Department of Architecture.
8	MSc. Rima Hamza Yassin	teacher Assistant	urban design	
9	MSc. Shahd Mohammed Abdullah	teacher Assistant	urban design	
10	MSc. Taiba Basil Daham	teacher Assistant	urban design	

External lecturers

	External lecturers staff	scientific title	specialty	Notes
1	Prof. Dr. Sabah Fakhraldin Abdul Qadir	Professor	Sculpture (Arts beautiful)	He devoted himself to teaching for two days - in the Design Department
2	A.M.D.SajidaKa zem Aliwi	assistant professor	urban design	Attributed to teach for two days from the Department of Architectural Engineering – University of Baghdad
3	M.D. Ali Abdel Asal	lecturer	Architecture and environment technology	Attributed to teach for two days - from the Department of Architectural Engineering – University of Baghdad
4	M.D. Hisham Alaa	lecturer	Architectural theory	Attributed to teach – for one day from the Department of Architectural Engineering – University of Baghdad
5	M.D.. Maryam Faisal Abdul Latif	lecturer	urban design	Attributed to one-day teaching about the Technological University
6	MSc. Tayseer Ihsan Jabbar	Assistant lecturer	Green preservation technology	Dedicated to teaching for one day from the Baghdad Municipality
	Technical staff accompanying the Lecturer staff	**scientific title**	**specialty**	**Notes**
1	Azhaar Faisal Najm	Engineer Consultant	architecture	BSc.
2	Daina Ayad Hekmat	Engineer Architect	architecture	

3	Mohammed Saadoun Abdel Abdulaziz	Engineer Architect	architecture	BSc.
4	Shaima Thamer	Engineer Architect	architecture	BSc.
5	Lina Ahmed	Engineer Architect	architecture	BSc.
6	Tara Hekmat	Engineer Architect	architecture	BSc.
7	Rufaida Majed	Engineer Architect	architecture	BSc.

Professional development

Orientation of new faculty members

The professional development program for new faculty members must be comprehensive and flexible in order to enhance their academic and research performance and meet their needs. This is achieved by following the following strategies:

• Guidance and counseling with the aim of helping new members adapt to the teaching environment, by providing advice on how to manage academic pressures and adhere to teaching dates and hours.

• The teacher should be taught on the basis of his scientific specialization, meaning that the specialization is appropriate for the courses that the teacher is taking.

• Working on self-development and making scientific efforts through (publishing, participating in conferences, seminars, etc...)

• Comparison and diagnosis of students' success and failure rates in the subjects taught by the teacher.

• Keeping pace with scientific development by joining the courses offered by the Continuing Education Center.

• Preparing and training teachers to serve the educational and teaching process.

• Holding training courses in the department's halls and laboratories, outside it, or outside the country.

• Communicating and organizing periodic meetings between old and new faculty members with the aim of exchanging experiences

• Organizing social activities to support communication between new members with the aim of promoting mental and social health.

Professional development for faculty members

The professional development of faculty members raises the quality of education and scientific research and enhances the improvement of academic performance in general. This is achieved through:

• Support participation in conferences, seminars and committees.
• Holding workshops and training courses.
• Establishing programs for guidance, advice and counseling from more experienced professors to less experienced colleagues.
• Encouraging scientific research and research cooperation.

• Stimulating innovation, renewal and modernization and supporting academic exchange.
• Support communication with the community.
• Appreciating efforts through awards and certificates of appreciation.
• Encouraging the use of technology.
• Establishing internal and external networks to enhance communication between faculty members with the aim of exchanging experiences.

12- Acceptance criterion

- Admission to the Bachelor of Science in Architecture – College of Engineering – Al Farabi University program depends on:
- • The applicant must have a preparatory school certificate from Iraqi schools or an equivalent certificate certified by the General Directorate of Education in the governorate.
- • The acceptance rate is controlled by the Ministry of Higher Education and Scientific Research.
- • The required documents are submitted within the specified period

13- The most important sources of information about the program

• Department page on Al Farabi University website.
• College of Engineering Guide.
• Architecture Department Guide
• Official department email.

14- Program development plan

In order to develop an educational program that meets the needs of students, keeps pace with scientific developments, and prepares graduates for the labor market, the development and improvement plan must be implemented continuously by focusing on learning outcomes, taking into account the opinion of students and faculty members and the reality of the department's infrastructure.
The development mechanism is carried out in line with performance standards in international universities and meets the requirements of the labor market, in addition to developing a future plan aimed at overcoming weaknesses and threats and reducing the obstacles facing students.
The Department of Architecture – College of Engineering – Al Farabi University has implemented a number of measures, including:

• Evaluating the current program and analyzing the strengths, weaknesses, opportunities and threats in the program. This is done through self-evaluation of the program, reviewing the curricula, teaching methods, evaluation methods, collecting observations and comparing the program with similar programs.
• Determine educational objectives (general and specific objectives) and the extent to which

these objectives are compatible with the requirements of the labor market
• Developing curricula by organizing workshops and training courses on modern teaching methods, training in scientific research skills, and developing administrative skills.
• Developing evaluation methods by diversifying evaluation tools and assessing practical skills.
• Supporting participation in conferences (local and international) and organizing seminars inside and outside the university
• Supporting educational infrastructure by modernizing educational facilities (ceremonies, laboratories, halls, etc...) Providing the necessary technology.

• Establish mentoring and counseling programs while providing external mentors from other universities to provide a new perspective.
• Encouraging scientific research and research cooperation between different departments inside and outside the university.
• Conducting periodic evaluations of teaching and administrative staff members, providing feedback and stimulating innovation and renewal.
• Support communication with the community by organizing field visits to identify the needs of the local market and develop curricula accordingly.
• Providing material and moral support by offering financial incentives and valuing efforts.
• Encouraging knowledge exchange with other universities to learn about best practices and transfer experiences.
• Supporting the use of technology through training in the use of e-learning tools, while encouraging the use of technology in research (data analysis and artificial intelligence) and evaluating development programs through paper or electronic questionnaire surveys
• Providing support to students by establishing academic support and guidance centers.

Program Skills Chart - First Academic Level

Level	Course code Year	Course name	Basic or optional	Learning outcomes required by the program											
				Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2024 **First academic level First semester**	**FU111**	Human rights and democracy	fundamental							√		√	√	√	
	GF111	Computer Science1	fundamental			√			√	√		√		√	
	GF112	Mathematics 1	fundamental	√		√			√	√		√		√	
	ARCH1101	Architectural and graphic design 1	fundamental	√	√	√	√	√	√	√	√	√	√	√	√
	ARCH1102	Communication skills Freehand	fundamental						√	√		√		√	
	ARCH1103	Principles of art and architecture	fundamental	√			√			√		√	√	√	

Program Skills Chart

Level	Course code Year	Level	Course code Year	Learning outcomes required by the program											
				Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2024 **First academic level Second semester**	**FU020**	Academic Arabic	fundamental							√		√			√
	GF031	Academic English - 1	fundamental							√		√			√
	GE123	Computer Science-2	fundamental			√		√	√	√		√		√	√
	ARCH1204	Communication skills Freehand	fundamental						√	√		√		√	
	ARCH1205	Architectural design and graphics 2-	fundamental	√	√	√	√	√	√	√	√	√	√	√	√
	ARCH11206	Principles of Art and Architecture - 2	fundamental	√			√			√		√	√	√	
	ARCH11207	Physics - Building Materials	fundamental	√				√	√	√		√		√	

Program Skills Chart - Second academic level															
				Learning outcomes required by the program											
Level	Course code Year	Course name	Basic or optional	Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2024 Second academic level Third semester	GEO3	Academic English 2	fundamental							√		√			√
	ARCH2107	Computer, digital communication 1	fundamental			√		√	√	√		√		√	√
	ARCH212	Architectural communication, descriptive geometry	fundamental	√					√	√		√			√
	GEG211	Mathematics 2- Statistics	fundamental	√		√			√	√		√		√	
	ARCH2101	Architectural design 3	fundamental	√	√	√	√	√	√	√	√	√	√	√	√
	ARCH12102	Communication skills Freehand 3	fundamental						√	√		√		√	
	ARCH12106	Building construction 1		√	√				√	√		√		√	√

Program Skills Chart															
				Learning outcomes required by the program											
Level	Course code Year	Level	Course code Year	Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2024 Second academic level Fourth semester	ARCH12207	Computer, digital communication 2	fundamental			√		√	√	√		√		√	√
	GEG222	Static and stregth of materials/ Structure	fundamental	√		√			√	√		√		√	
	ARCH2201	Architectural design 4	fundamental	√	√	√	√	√	√	√	√	√	√	√	√
	ARCH2202	Communication skills Freehand 4	fundamental						√	√		√		√	
	ARCH2206	Building installation 2	fundamental	√	√				√	√		√		√	√
	ARCH2205	History of Architecture / Iraqi Architecture 1	fundamental	√				√		√				√	
	FU225	Baath Crimes	fundamental							√		√		√	√

Program Skills Chart - Third academic level															
				Learning outcomes required by the program											
Level	Course code Year	Course name	Basic or optional	Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2024 Third academic level Fifth semester	ARCH3101	Architectural design 5	fundamental	√	√	√	√	√	√	√	√	√	√	√	√
	ARCH3106	Building installation 3	fundamental		√		√	√		√		√	√	√	√
	ARCH3107	Computer Digital architecture 1	fundamental			√			√	√	√	√		√	√
	GEG313	Structure 2	fundamental	√	√				√		√	√		√	
	ARCH3105	History of arch. world Arch 2	fundamental	√			√	√		√				√	
	GEG314	Architecture Systems / Lighting System 1	fundamental		√				√	√		√		√	√

Program Skills Chart															
				Learning outcomes required by the program											
Level	Course code Year	Level	Course code Year	Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2024 Third academic level Sixth semester	ARCH3201	Architectural design 6	fundamental	√	√	√	√	√	√	√	√	√	√	√	√
	ARCH3206	Building Construction 4	fundamental		√		√	√		√		√	√	√	√
	ARCH3205	History of arch. world Arch 3	fundamental	√			√	√		√				√	
	GEG325	Architecture systems/Sanitary system 2	fundamental		√				√	√		√		√	√
	ARCH3207	computer ,Digital arch.	fundamental			√			√	√	√	√		√	√
	GEG323	computer ,Digital arch.	fundamental	√	√				√		√	√		√	

Program Skills Chart - - Fourth academic level																
				Learning outcomes required by the program												
Level	Course code Year	Course name	Basic or optional	Knowledge				Skills				Values				
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	
2025-2024 Fourth academic level Seventh semester	ARCH4101	Architectural design 7	fundamental	√	√	√	√	√	√	√	√	√	√	√	√	
	ARCH4108	Interior design	fundamental	√	√			√	√	√	√	√		√	√	
	ARCH4105	History of modern architecture 4	fundamental	√			√	√		√				√		
	ARCH4109	Ecology and Architecture	fundamental		√	√		√	√	√	√	√	√	√	√	
	ARCH4111	Urban planning and design	fundamental	√	√		√	√	√	√		√	√	√	√	
	ARCH4127	Architecture systems 3/Air conditioning	fundamental		√				√	√		√		√	√	

Program Skills Chart																
				Learning outcomes required by the program												
Level	Course code Year	Level	Course code Year	Knowledge				Skills				Values				
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	
2025-2024 Fourth academic level Eighth semester	ARCH4101	Architectural design 8	fundamental	√	√	√	√	√	√	√	√	√	√	√	√	
	ARCH4212	Landscape Design	fundamental		√		√	√		√	√	√	√	√	√	
	ARCH4213	Housing	fundamental	√	√		√	√	√	√		√	√	√	√	
	ARCH4205	History of Arch., Islamic Arch. 5	fundamental	√			√	√		√				√		
	ARCH4214	Architecture ystems 4/Acoustics	fundamental			√			√	√		√		√	√	
	GEG427	Surveying	fundamental				√		√			√		√	√	

Program Skills Chart - - Fourth academic level															
				Learning outcomes required by the program											
Level	Course code Year	Course name	Basic or optional	Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2024 Fifth academic level Ninth semester	ARCH5101	Architectural design 9	fundamental	√	√	√	√	√	√	√	√	√	√	√	√
	ARCH5115	Graduation project seminar	fundamental		√				√	√	√	√	√	√	√
	ARCH5116	theory Arch. and design 1	fundamental	√				√	√	√		√		√	√
	ARCH5117	Contemporary Iraqi architecture	fundamental	√	√		√	√		√		√		√	
	ARCH5118	Prof .practice/build specification 1	fundamental					√		√		√	√	√	√
	ARCH5119	Sustainability	fundamental		√				√				√		

Program Skills Chart															
				Learning outcomes required by the program											
Level	Course code Year	Level	Course code Year	Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2024 Fifth academic level Tenth semester	ARCH5215	Graduation project	fundamental	√	√	√	√	√	√	√	√	√	√	√	√
	ARCH5216	Theory of Arch and criticism 2	fundamental	√				√		√		√			
	ARCHE00	Conservation of Arch.	fundamental				√		√	√		√	√	√	
	ARCH5218	Professional practices and ethics 2	fundamental					√		√		√	√	√	√
	ARCH5215	Advanced construction technology	fundamental	√	√	√			√	√			√		

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

Curriculum Guide – First Academic Level

First semester – 30 study units

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	**FU111**	Human rights & democracy	Arabic	2	——	——	2
2	**GF111**	Computer Science1	English	2	——	3	5
3	**GF112**	Mathmatics	English	2	2	——	4
4	**ARCH1101**	Architectural Design and graphic	Arabic	2	10	——	12
5	**ARCH1102**	Communication skills Freehand	Arabic	1	3	——	4
6	**ARCH1103**	Principles of Art &Architecture	Arabic	3	——	——	3
Total				**30**			**30**

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTION FORM

Module Information

Module Title	**Human Rights & Democracy**		**Module Delivery**	
Module Type	**Support or related learning activity**		☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**FU111**			
ECTS Credits	**2**			
SWL (hr/sem)	50			
Module Level	1	**Semester of Delivery**	1	
Administering Department	Architecture	**College**	Engineering	
Module Leader	Azhar Muslih Hamad	**e-mail**	Azhar hamad @gmail.com	
Module Leader's Acad. Title	Teacher	**Module Leader's Qualification**	Ph.D.	
Module Tutor	Azhar Muslih Hamad	**e-mail**	Azhar hamad @gmail.com	
Peer Reviewer Name	Dr.Bahjat R.shahin	**e-mail**	bahgat.rashad@alfarabiuc.edu.iq	
Scientific Committee Approval Date	1-6-2024	**Version Number**	1.0	

Relation with other Modules

Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives أهداف المادة الدراسية	1- Defining democracy, its origins, what is meant by human rights, and how to exercise them. 2- A comparison between democratic systems and what democracy provides in order to exercise human rights freely without restrictions. 3- Defining the features and characteristics of human rights. 4- Clarifying international documents and international organizations that established human rights principles. 5- Identify the electoral systems practiced by countries in choosing democratic governments. 6- Learn about international laws that protect and guarantee the exercise of human rights in all societies. 7- Comparison between democratic systems and dictatorial systems in the application and practice of human rights. -8Defining what women's rights are and defining what is meant by peaceful coexistence.
Module Learning Outcomes	1- Understanding what democracy and human rights mean. 2- Make the student realize the importance of the historical context and how popular practices developed in order to establish a democratic system of government that guarantees equality in rights and obligations. 3- The student's knowledge of his basic rights that he can exercise freely, and the obligations that he must follow. 4- Guiding the student to exercise his rights in accordance with international laws and the Iraqi Constitution. 5- Teaching the student how to exercise his right to elections according to the type of system adopted. 6- Make the student realize the importance of the democratic system and its role in protecting human rights in society. 7 -Access to community applications and practices that ensure peaceful coexistence in one society
Indicative Contents	The term democracy and human rights consists of two articles: democracy and human rights. They are two different fields in meaning, specialization, and application, but one complements the other because they are part of the social sciences, especially the field of political science. Without a democratic system, human rights cannot be exercised and there is no mention of them at all. Therefore, democracy will determine (25) hours, and human rights will determine (25) hours

Learning and Teaching Strategies	
Strategies	1- Explanation of the meaning of the vocabulary included in the subject by the professor. 2- Giving students a role to exercise their right to express their opinion without fanaticism and respect for other opinions. 3- Organizing practices inside the halls to simulate an electoral experience or address a specific issue for which appropriate solutions need to be developed by dividing students into groups and giving them roles in them. 4- Displaying video content that helps break the routine of giving the lecture. 5 -Conducting field visits to the most prominent organizations sponsoring human rights.

student Workload (SWL)

The student's academic load is calculated for 15 weeks

Structured SWL (h/sem) Regular student academic load during the semester	33	**Structured SWL (h/w)** Regular student academic load during the week	2, 2
Unstructured SWL (h/sem) Irregular student load during the semester	17	**Unstructured SWL (h/w)** Irregular student academic load during the week	1, 13
Total SWL (h/sem) Student academic load during the semester	50		

Module Evaluation					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	20% (20)	4, 11	LO# 1,2,3, 4
	Assignments	2	10% (10)	5, 12	LO# 4, 5 , 8 ,9
	Projects / Lab.				
	Report	1	10% (10)	12	LO# 8 ,9
Summative assessment	Midterm Exam	2hr	10% (10)	8	1-9
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	The concept of democracy and the historical development of its practice in the civilization of Mesopotamia.
Week 2	Democracy in ancient civilizations
Week 3	Democracy in Islam and Christianity
Week 4	Types of democracy
Week 5	Election and regulations
Week 6	exam
Week 7	The meaning of human rights and its most prominent characteristics
Week 8	Definition of international humanitarian law and international human rights law
Week 9	Field visit
Week 10	Sources of international human rights law
Week 11	Types of human rights and international human rights conventions
Week 12	Recent experiences of human rights
Week 13	Women's rights and peaceful coexistence
Week 14	Leading human rights organizations
Week 15	Human rights in the Iraqi constitution
Week 16	exam

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	1- Riyad Aziz Hadi, Human Rights and Their Development – Their Contents and Protection -2Various Internet sources	Yes
Recommended Texts	Saleh Jawad Kazem, Ali Ghaleb Al-Ani, Political Systems, College of Law, Baghdad, 2nd ed., 2007	Yes
Websites		

Grading Scheme

Group	Grade	Marks %	Definition
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

Ministry of Higher Education and Scientific Research
Al Farabi University college
Department of Architectural Engineering

Ministry of Higher Education and Scientific Research
Al Farabi University - College of Engineering
Department of Architecture

MODULE DESCRIPTION FORM

Module Information

Module Title	**Computer science 1**	**Module Delivery**	
Module Type	Basic learning activities	**x Theory x Lecturex Lab x Tutorial ☐ Practical ☐ Seminar**	
Module Code	**GE111**		
ECTS Credits	**5**		
SWL (hr/sem)	**125**		
Module Level	1	**Semester of Delivery**	1
Administering Department	Architectural	**College**	Engineering
Module Leader	Haifa Salem Abdel Karim	**e-mail**	haifa.salem@alfarabiuc.edu.iq
Module Leader's Acad. Title	lecturer	**Module Leader's Qualification**	Ph.D.
Module Tutor	Dr.Bahjat R.shahin	**e-mail**	bahgat-rashad@alfarabiuc.edu.iq
Peer Reviewer Name	None	**e-mail**	none
Scientific Committee Approval Date	01/06/2024	**Version Number**	1.0

Relation with other Modules

Prerequisite module	None	**Semester**	1
Co-requisites module	**Computer 2**	**Semester**	2

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	1- Develop advanced proficiency in Microsoft Office applications for efficient document creation, spreadsheet management, and presentation design. 2- Cultivate digital literacy and internet fluency, covering web navigation, effective use of search engines, email communication, and fundamental computer network concepts.
Module Learning Outcomes	1- Students will demonstrate proficiency in using Microsoft Word, Excel, and PowerPoint for creating, formatting, and presenting documents, spreadsheets, and slides. 2- Students will acquire the skills to navigate the internet, use search engines, understand URLs, and utilize web browsers for communication and collaboration. Additionally, they will demonstrate competence in email etiquette and formatting. 3- Students will gain proficiency in using Mendeley for academic research, including registering for an account, downloading and installing the desktop application, importing references, and properly citing sources using various citation styles (APA, MLA, Harvard).
Indicative Contents	75 Hours of of students work included many of assaments and exams

Learning and Teaching Strategies	
Strategies	The subject will be presented to students through a specified series of lectures and tutorials assisted by notes. It will be underpinned by use of computer assisted packages, the learning element will be evaluated by a set of assignments on computer element and tests to ensure outcomes are achieved.

Student Workload (SWL) The student's academic load is calculated for 15 weeks			
Structured SWL (h/sem) Regular student academic load during the semester	48	**Structured SWL (h/w)** Regular student academic load during the week	3.2
Unstructured SWL (h/sem) Irregular student load during the semester	52	**Unstructured SWL (h/w)** Irregular student academic load during the week	3.4
Total SWL (h/sem) Student academic load during the semester	100		

Module Evaluation					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	5% (5)	4, 11	LO# 1.2.,3,4,5 ,6,7,8,9,10
	Assignments	2	10% (10)	5, 12	LO# 1-11
	Projects / Lab.				
	Report				
Summative assessment	Midterm Exam	2hr	15% (15)	14	All
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction
Week 2	Basic Applications of Computer
Week 3	Computer Hardware and Software
Week 4	Basics of Operating System-Quizze
Week 5	Microsoft word: Creating, editing, saving, and printing text documents
Week 6	Microsoft word: Using lists and styles
Week 7	Microsoft Excel: Spreadsheet basics+ Quiz
Week 8	Microsoft Excel: Working with functions and formulas
Week 9	Microsoft Power Point: Opening, viewing, creating, and printing slides
Week 10	Microsoft Power Point: Creating Professional Slide for Presentation
Week 11	Basics of Computer Networks-Quizze
Week 12	Internet
Week 13	Communications & Collaboration
Week 14	Introduction to Mendeley-Midterm Exam
Week 15	Citation Guides: APA, MLA, Harvard, citing a website
Week 16	Final Exam

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	"Microsoft Office 365: The Complete Guide" Author: Shelly Cashman Series ISBN: 978-0357126219 "Internet Basics for Beginners" Author: John Kinsella ISBN: 978-1119647780 "Mendeley: A Guide for Researchers" Author: Caroline Whitworth ISBN: 978-1784271384	Yes
Recommen dedTexts	Operating System Concepts" Authors: Abraham Silberschatz, Greg Gagne, Peter B. Galvin ISBN: 978-1118063330	Yes
Websites	https://support.microsoft.com/en-us	

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTION FORM

Module Information

Module Title	**Mathematics1**	**Module Delivery**	
Module Type	Basic learning activities	**x Theory x Lecture ☐ Lab x Tutorial ☐ Practical ☐ Seminar**	
Module Code	**GE112**		
ECTS Credits	**4**		
SWL (hr/sem)	**100**		
Module Level	1	**Semester of Delivery**	1
Administering Department	Architecture	**College**	Engineering
Module Leader	Safa Alaa Hussain	**e-mail**	
Module Leader's Acad. Title	A.teacher	**Module Leader's Qualification**	Ms.c
Module Tutor	Safa Alaa Hussain	**e-mail**	
Peer Reviewer Name	Dr.Bahjat R.shahin	**e-mail**	bahgat-rashad@alfarabiuc.edu.iq
Scientific Committee Approval Date	1/06/2024	**Version Number**	1.0

Relation with other Modules

Prerequisite module	None	**Semester**	**1**
Co-requisites module	**Mathmatics**	**Semester**	**3**

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	The aim of the subject is to provide the student with a general idea about mathematics as basic principles to the student of the College of Engineering, supported by some engineering applications which will benefit the student.
Module Learning Outcomes	1- Apply all functions to the solution of engineering problems. 2- Apply algebra and trigonometry to solve engineering problems. 3- Solve basic engineering problems using mathematical models employing calculus.
Indicative Contents	125Hours of of students work included many of assaments and exams
Learning and Teaching Strategies	
Strategies	The subject will be presented to students through a specified series of lectures and tutorials assisted by notes. It will be underpinned by use of computer assisted packages, the learning element will be evaluated by a set of assignments on computer element and tests to ensure outcomes are achieved.

Student Workload (SWL) The student's academic load is calculated for 15 weeks			
Structured SWL (h/sem) Regular student academic load during the semester	63	**Structured SWL (h/w)** Regular student academic load during the week	4.2
Unstructured SWL (h/sem) Irregular student load during the semester	37	**Unstructured SWL (h/w)** Irregular student academic load during the week	2.4
Total SWL (h/sem) Student academic load during the semester	100		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	4, 11	LO# 1,2,3, 4,5,6,7,8,9,10
	Assignments	2	15% (15)	5, 12	LO# 1-12
	Projects / Lab.				
	Report				
Summative assessment	Midterm Exam	2hr	15% (15)	14	All
	Final Exam	3hr	60% (60)	1-15	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Introduction
Week 2	Functions
Week 3	Trigonomtric Function
Week 4	Trigonomtric Function Inverse-Quizze
Week 5	The Derivative
Week 6	The Derivative and applications
Week 7	Trigonomtric Function and application
Week 8	Trigonometric Function and application
Week 9	Trigonometric Function and application
Week 10	The Integration
Week 11	Infinity and final Integration-Quizze
Week 12	infinite and final Integration
Week 13	Type of Integrations
Week 14	Exponational function -Midterm Exam
Week 15	Logarithem and Nutral Logarithem
Week 16	Final Exam

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	Calculus: Essential Skills Practice Workbook with Full Solutions - Derivatives, Limits and Integrals 2022 Edition Calculus: Essential Skills Practice Workbook with Full Solutions - Derivatives, Limits and Integrals 2022 Edition	Yes
Recommended Texts	Advanced Engineering Mathematics – Erwin Kreyszig	Yes
Websites		

Grading Scheme مخطط الدرجات			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTION FORM

Module Information			
Module Title	**Architectural Design and Graphic 1**	**Module Delivery**	
Module Type	**Core**	☒**Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☒ **Practical** ☒**Seminar**	
Module Code	**ARCH1101**		
ECTS Credits	**12**		
SWL (hr/sem)	300		
Module Level	1	**Semester of Delivery**	1
Administering Department	Architecture	**College**	Engineering
Module Leader	Maitham Hasan Mahdi	**e-mail**	maitham.hassan@alfarabiuc.edu.iq
Module Leader's Acad. Title	A. Lecturer	**Module Leader's Qualification**	M.Sc.
Module Tutor	Maitham Hasan Mahdi	**e-mail**	maitham.hassan@alfarabiuc.edu.iq
Peer Reviewer Name	Dr.Bahjat R.Shahin	**e-mail**	bahgat.rashad@alfarabiuc.edu.iq
Scientific Committee Approval Date	1-8-2024	**Version Number**	1.0

Relation with other Modules			
Prerequisite module	All basic engineering supplies and equipment	**Semester**	1
Co-requisites module	The integration of the material with hand drawing materials, principles of art and architecture, and a prelude to architectural design and graphics 2	**Semester**	1-2

Module Aims, Learning Outcomes and Indicative Contents

Module Objectives	Introducing the student to architectural and graphic design tools, and then practicing geometric graphic drawings including parallel, inclined, curved and overlapping lines, so that the student moves on to drawing traditional shapes: square, rectangle, circle and triangle, and overlapping them with different compositional measurements, then moves on to integrated formations in the second and third dimensions to form the basics of architecture and by organizing the student's artistic and compositional sense to enable him to taste the integrated integration of simplified natural formsAnd producing it in a complex artistic form that is cognitively acceptable to others, so that the first semester of the architectural design and graphics subject ends with the student presenting an integrated artistic painting of simplified architectural formative relationships.
Module Learning Outcomes	1- Introducing the student to basic architectural design tools and supplies. 2- Enabling the student to practice simplified and complex graphic drawings. 3- Introducing the student to the rules of design, starting with the point and the line of all kinds (straight, curved, wavy), as well as the traditional basic shapes (square, rectangle, triangle, and circle). 4- Introducing the student to the measurements of simplified traditional forms, their relationship to the human scale, and the practice of reconstructing them and integrating them artistically into the second and third dimensions, through advanced reciprocal relationships. -5Giving the student a simplified opportunity for professional practice, by creating an artistic painting for a colorful formal composition .

Learning and Teaching Strategies

Strategies	Architectural and graphic design strategies 1 are represented by the basics of architecture and its vocabulary, its output and formative requirements, and the practice of using it in engineering drawings, as simplified two- and three-dimensional formations, and organizing the student's basic skills in reconfiguration and graphic and color production in preparation for entering into some simplified design practices for the second semester, from the first level of the subject (Architectural and Graphic Design 2)

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

Structured SWL (h/sem) Regular student academic load during the semester	180	**Structured SWL (h/w)** Regular student academic load during the week	12
Unstructured SWL (h/sem) Irregular student load during the semester	120	**Unstructured SWL (h/w)** Irregular student academic load during the week	8
Total SWL (h/sem) Student academic load during the semester	300		

Rapporteur's assessment					
		Time/ NO.	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
formative assessment (60%)	**Basic of design\ point, line and surface Exercises (class work and homework)**	2	5% (5)	1,2	LO #1, 2
	Abstraction withColor and texture exercise (homework)	2	5% (5)	2,3	LO #1, 2, 3 and 4,5
	Day –sketch	1	10%(10)	5	LO #1-5
	2D composition exercise (class work and homework)	2	10% (10)	6,7	LO # 6,7
	Day –sketch	1	10%(10)	2	
	3D composition(class work and homework)	2	10% (10)	9,10	LO # 1-7 and 9,10,11
	Day-sketch	1	10% (10)	11	
midterm exam (10%)	**Developing exercise of spaces**	1	10%	12	LO # 1-11
final examination (30%)	**Prelim – presentation**	1	5%	13	All
	Pre-final presentation	1	10%	14	All
	Final presentation	1	15%	15	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introducing the student to basic engineering tools and supplies, and training on their use in graphic drawing, including the point, types of lines and their intersections, and their linear, oblique, and curved probabilities, using a pencil, and through direct classroom assignments, as well as homework assignments.
Week 2	Completing classroom assignments, submitting homework assignments, discussing them collectively by subject supervisors with student participation, and evaluating them.
Week 3	daily experience
Week 4	Learn about the principles of color theory, its cold and hot types, and a presentation of abstraction, color, texture, and their derivatives of colors and their gradations.
Week 5	Practicing engineering drawing in wooden colors through classroom hours, as well as homework done in wooden colors, and presenting it in the studio for the purposes of group discussion with the participation of students, and evaluating it.
Week 6	Daily test (Day-sketch), on week outputs (1,2,3,4).
Week 7	Explanation of the principles of two-dimensional configuration: - Learn the basics of 2D configuration. Give homework as applied training on 2D configuration.
Week 8	Presenting homework assignments for group discussion purposes and with student participation and evaluation
Week 9	daily experience
Week 10	Explanation of the principles of 3D configuration: - Transformations of two-dimensional formations towards the third dimension, using advanced output methods, and giving a simplified home project as applied training
Week 11	Presenting homework assignments for group discussion purposes and with student participation and evaluation
Week 12	Mid-semester test, for the outputs of all previous quarterly weeks
Week 13	End of semester project (final exam) – initial submission
Week 14	Pre-final submission of project requirements
Week 15	Final submission of the final project

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	-Ernst Neufert, Architects' Data, 2012 -Francis D. K. Ching, Steven P. Juroszek, Architecture:Form, Space, and Order, 2004	yes
Recommended Texts	-Recommended books and references (scientific journals,reports…): -Many local and international projects, and many examples	yes
Websites	-: https://www.archdaily.com/ -: https://www.arch2o.com/ -: https://thearchspace.com/ -: https://www.dezeen.com/ -: https://architizer.com/ -: https://www.arcign.com/projects/	

Grading Scheme

Group	Grade	Marks %	Definition
Success Group(50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group(0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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 markof 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 automaticrounding outlined above.

Ministry of Higher Education and Scientific Research
Al Farabi University college
Department of Architectural Engineering

Ministry of Higher Education and Scientific Research
Al Farabi University - College of Engineering
Department of Architecture

MODULE DESCRIPTION FORM

Module Information

Module Title	**communication skills Freehand**	**Module Delivery**	
Module Type	**Core**	☐ **Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☒ **Practical** ☐ **Seminar**	
Module Code	**ARCH1102**		
ECTS Credits	**4**		
SWL (hr/sem)	**100**		
Module Level	1	**Semester of Delivery**	1
Administering Department	Architecture	**College**	Engineering
Module Leader	Sabah Fakhruldin	**e-mail**	sabah_F.Aldin@gmail.com
Module Leader's Acad. Title	Prof.	**Module Leader's Qualification**	Ph.D.
Module Tutor	Sabah Fakhruldin	**e-mail**	sabah_F.Aldin@gmail.com
Peer Reviewer Name	Dr.Bahjat R.Shahin	**e-mail**	bahgat.rashad@alfarabiuc.edu.iq
Scientific Committee Approval Date	5-6-2024	**Version Number**	1.0

Relation with other Modules

Prerequisite module	All materials supporting and requiring manual drawing	**Semester**	1
Co-requisites module	A material that supports the outputs of architectural and graphic design and paves the way for hand drawing 2	**Semester**	2

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	The student learned about the most important requirements for free drawing, including types of graphic drawing paper, pencils and their patterns, colored and wooden pens, watercolors, poster colors, and oil colors for the complementary chapters, with explanatory explanations of the importance of each of them and methods of using them, along with purchasing an art bag to store his semester and secondary work. - Training the student on the principles of free drawing, choosing appropriate locations, and how to determine the standards of drawing on paper to transfer the required images and ensure the links to the supposed integrated output Exercising the student's eye to perceive fine physical details, determine their proportion on drawing paper, and ensure their formative output. - Training the student to draw simple linear, broken and curved lines and repeat them in a parallel, intersecting, repeated or curved manner, with the student's hand controlling the distances between the lines as equal as possible, while distinguishing their color gradation to ensure confirmation of the locations of shadow, shading and output light. - Shifting towards simplified geometric shapes to draw them in perspective, including a cube, rectangle, cylinder, and sphere, individually or through artistic structures chosen by the student, implemented in class and at home - Training the student to use colored pens to draw simplified geometric shapes, such as cubes, rectangles, cylinders, and spheres, individually and combined with compositional backgrounds drawn from different angles, leading to complex formal composition. - Drawing simplified live binoculars in two or three shapes from different angles depending on the students' seating, with a light source that embodies the perspective output in a game of light and shadow Training the student to draw details of plants and their formations, including leaves, plant branches, and their structures in living nature, and it is carried out inside the studio or within an external natural atmosphere.
Module Learning Outcomes	The student learned about freehand drawing supplies, their rules of use, their executive and executive importance, adherence to the controls of simplified freehand drawing, and reliance on pencils and colored wooden pens The student practices free drawing and the purity of parallel lines and their medium and complex configurations -Maturation of the student's imagination and artistic capabilities to draw living perspectives of simplified and overlapping shapes and their perspective measurements with a single vanishing point, and to show the depths of the perspective and the integration of its shaded and illuminated surfaces, using black and white, colored wooden pens, or introducing watercolors.

Indicative Contents	During the semester, learn about the types of graphic drawing, controls for artistic production, the drawing board, shape scales, their complementary relationship, their color and light values, and manual control over the creation of lines and their complex composition with calm and precise touches, graphic images, or using the colors of wooden pens or watercolors. Encouraging outstanding students in free hand drawing to develop their innate drawing abilities and expand their artistic fields in producing optional drawings by redrawing some international, Arab or local paintings and training in producing posters or cards for festive occasions, in addition to developing their skills in the field of sculpture and ceramics -Training the student's eye on how to transfer real measurements of buildings, plants, trees, and human and animal organisms to the drawing board with the same proportional relationships and using the drawing pen exclusively as a direct measurement source with its horizons and columns. - The students' imagination has matured in the principles of drawing external and internal binoculars, starting with simplified shapes and reaching complex building formations. During the first semester of the subject, the focus is on simplified exercises on three-dimensional shapes and drawing binoculars with different angles that express the depths of the meaningful shape. Then, moving on to drawing parts of building facades with a single vanishing point, their sections, to daytime lighting characterized by its formative details between light and shadow, reaching drawing binoculars For complex geometric shapes such as spherical and cylindrical shapes, curved ceilings, and spiral drawers, individually or combined between two or more shapes At the end of the first semester, the student presents all his classroom and home work in the form of an integrated art bag, which serves as the student's final exam. Through it, some of the works that distinguish the student are selected to be included in the department's student exhibition. The art bag includes the following: 1- The student's classroom work outputs inside the studio... 40% of the calendar percentage 2- The student's homework outputs and keeping up with the curriculum... 20% of the calendar percentage 3- Rapid classroom test outputs... 10% of the calendar percentage 4- Midterm exam results... 10% of the calendar percentage 5- The technical portfolio represents the outputs of the entire weeks of the semester... 20% of the calendar percentage. The student submits three graphic paintings as part of the homework during the spring break and is submitted at the beginning of the second semester. The student must submit a media painting in the form of a poster in the art bag that includes one of the heritage landmarks of Baghdad, and the student is left to choose the media topic and the method of producing it.

Learning and Teaching Strategies	
Strategies	- Training the student on methods of practicing freehand drawing of all kinds on his own, through classroom educational follow-up, intensifying homework, field visits to archaeological and heritage sites, documenting conservation landmarks, participating in student discussions, and following up on the works of major international Iraqi Arab artists. Encouraging students who are distinguished by their artistic ideas to participate in the optional drawing workshop and allowing the student to develop his artistic capabilities in addition to practicing natural and ceramic works. - Introducing students to international, Arab and Iraqi art pioneers and reviewing their most important artistic achievements - Developing the student's ability to draw freely and externally around the clock during his tours and visits to public and private sites, in addition to practicing field documentation of heritage, preservation and historical buildings -Making the student art portfolio one of the basics of student work and included in the final evaluation of student practices in the semester at a rate of 20% From the student's final calendar grade, and the art bag must include one of the student's main artistic works and be in the form of an informational poster about documenting one of the heritage landmarks of Baghdad, chosen by the student and executed in his own directing style, in addition to all the classroom and home artistic works that the student executes during the entire first semester of the hand-drawing subject, and through it some distinguished works are selected for the student exhibition.

Student Workload (SWL) The student's academic load is calculated for 15 weeks			
Structured SWL (h/sem) Regular student academic load during the semester	64	**Structured SWL (h/w)** Regular student academic load during the week	4,2
Unstructured SWL (h/sem) Irregular student load during the semester	36	**Unstructured SWL (h/w)** Irregular student academic load during the week	2,4
Total SWL (h/sem) Student academic load during the semester	100		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment التقويم التكويني	**Classroom work**	(1-5) +(8-10)	40% (40)	(1-6) +(8-10)	LO #(1-11)
	Housework	(1-5) +(8-10)	20% (20)	(1-6) +(8-10)	LO #(1-11)
	Tests	2	10% (10)	7،12	LO # (1-6)+(8-11)
	Half-semester test	3hr in the studio	10% (10)	15	LO # 3,4,5,6 LO # 8,9,10 LO #12,13,14
Summative assessment	**Art bag**	4hr	20% (20)	11,16	LO#All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Welcoming new students and introducing the importance of the subject and its relationship to other basic subjects, especially architectural drawing, graphics, and principles of architecture. The student is then introduced to the most important requirements of freehand drawing, its production tools, and methods of using them.
Week 2	Introducing the student to the principles of free drawing, how to determine the default drawing scales on the drawing paper, and learning about the controls of the integrated output of the drawing board, with a practical exercise for the student to understand the scales and details of the meaningful shape.
Week 3	Practical training for the student in the studio on drawing simple linear, broken and curved lines in an abstract manner, and training the student's hand to hold the graphic pen and make the distances between parallel, curved and broken lines equal as much as possible.
Week 4	Shifting towards drawing simplified geometric shapes from a perspective to include the cube, rectangle, cylinder, and sphere, individually for each shape and at a different speed. The student is also given homework in the same format, which is submitted in the fifth week.
Week 5	Drawing simplified geometric shapes in an overlapping manner through artistic structures chosen by the student in an artistic formative manner on the drawing paper and with all the output requirements required for the drawing board. The student is also given a homework assignment that is executed in the same format and with a different composition that is presented in the sixth week.
Week 6	Student group discussion of the entire outcomes of the weeks (1-5).
Week 7	An in-drawer test on the outputs of previous weeks.
Week 8	Drawing simplified geometric shapes and their configurations using colored pencils with a compositional background for the painting. The student is left to choose the configuration, colors, and final display by introducing shadow and light. The student is also given a homework assignment that is executed in a different configuration and presented in the ninth week.
Week 9	Week 9: Drawing live binoculars, for example, a half-filled glass cup with a jar of water or a coffee pot, according to the opinion of the subject officer. The drawing is done from different angles, according to the students' sitting, and in the presence of a light source that embodies the formative relationship with the background. A homework assignment is also given to draw a simplified live indoor or outdoor view.
Week 10	Drawing live landscapes from nature in the college gardens for a simplified plant formation determined by the subject officer, with drawing some plant details chosen by the student. The student is asked to bring a plant painting for the same subject, which will be submitted in the eleventh week.
Week 11	Group student discussion of the entire outcomes of the weeks (10,9,8).
Week 12	A test within the studio on the outputs of recent weeks is determined by subject officials.
Week 13	Organizing a media painting in the form of a poster for a topic chosen by the student that represents one of Baghdad's heritage landmarks or an embodiment of a distinguished work of art in the city of Baghdad, provided that information and field documentation are collected exclusively by the student during this week.
Week 14	A critical discussion with students about their suggestions or the required technical presentation method, submitted within the technical portfolio in the last week.
Week 15	First semester midterm exam: Drawing an artistic painting determined by subject officials.
Week 16	Submit the art bag.

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	1- Imad Muhammad Azhar Al-Bakri – Shadow and Perspective - 1988 2- Muhammad Thabet Al-Baldawi – Raw materials technology and its uses in interior design 3 - Gormlin – human head layout – in Russian 1978 4- sherleyw.morgan-architectural drawing perspective , light, and shadow, rendering	Yes Yes Yes Yes
Recommended Texts		
Websites		

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A** - Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	(45-49)	More work required but credit awarded
	F – Fail	(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 markof 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 automaticrounding outlined above.

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTION FORM

Module Information

Module Title	**Principles of Art & Architecture**	**Module Delivery**	
Module Type	**Core**	☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**ARCH1103**		
ECTS Credits	3		
SWL (hr/sem)	**75**		
Module Level	1	**Semester of Delivery**	1
Administering Department	Architecture	**College**	Engineering
Module Leader	Sabah Fakhruldin	**e-mail**	sabah_F.Aldin@gmail.com
Module Leader's Acad. Title	Prof.	**Module Leader's Qualification**	Ph.D.
Module Tutor	Sabah Fakhruldin	**e-mail**	sabah_F.Aldin@gmail.com
Peer Reviewer Name	Dr.Bahjat R.Shahin	**e-mail**	bahgat.rashad@alfarabiuc.edu.iq
Scientific Committee Approval Date	3/6/2024	**Version Number**	1.0

Relation with other Modules

Prerequisite module	Theoretical introductory material on art and architecture	**Semester**	1
Co-requisites module	A material that paves the way for the principles of art and architecture 2, a supporting material for applied architectural design materials, and hand drawing	**Semester**	2

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	Introducing the student at the beginning of his university life to the origins and history of art and architecture in the world, starting from ancient historical civilizations, and through the successive historical eras of classical art concepts in Greece and Rome, the Renaissance and during the sixteenth and seventeenth centuries, reaching the realistic trend in the second half of the nineteenth century, and Impressionism in the last quarter of the nineteenth century, and its transformations towards the new Impressionism of the Impressionist artist Cézanne With the emergence of brutality in art and Cubism by the international artist Picasso, Expressionism by the artist Kandinsky, and Surrealist Performance by the artist Salvador Dali, as well as abstractionism, Russian constructivism, the De Stille movement, and the relationship of all these artistic trends to architecture and urbanism . Some living examples that distinguished themselves during these historical eras in fine art, including the Middle Ages and the Renaissance, which spread in Roman and Gothic cathedrals in northern France, Germany, England, and Italy, will be reviewed to include Byzantine mosaic arts, metalwork, glassmaking, and sculpture. Which distinguished Michelangelo and Donatello, followed by Baroque and Rococo sculptors and neoclassical sculpture.This chapter will also address the history of Iraqi art and architecture, and its relationship to political changes across successive historical eras, represented by the era of Safavid rule, which made the city of Baghdad a center for poetry and arts, and then this prosperity increased under the Ottoman era during the eighteenth and nineteenth centuries Up until the beginning of the twentieth century and the establishment of the Iraqi state in 1921, the fifties and sixties of the twentieth century witnessed the emergence of many prominent painters, sculptors and calligraphers who contributed to maximizing the practice of folk arts, especially in the capital, Baghdad, such as the pioneers of art, Jawad Salim, Faiq Hassan (the father of plastic art), Shaker Hassan, Hafez Al-Droubi, and Lorna Salim
Module Learning Outcomes	Enriching the student's imagination and intellectual maturity with the characteristic of artistic and architectural taste and perception, and familiarity with the principles of beauty, the rules of lines and directions, the dominance of color, the balance of artistic forms, their transformations and integration with architectural arts over time, and their entry as a basis in the sciences of architecture and its urban environment, and considering it as one of its specializations and functional ramifications to represent the concepts of beauty, romantic expression, and media impression, contemporary architecture internally and externally supported by living examples globally, Arably, and locally, especially during the twentieth century and the beginning of the third millennium.

Indicative Contents	Identifying the intellectual diversity of art pioneers, and using their artistic proposals and orientations, for the principles and elements of art such as conformity, similarity, difference, balance, proportion and homogeneity, the concepts of lines and directions, the standards of shapes and their color and light values, the methods of producing space, and its organic and expressive assemblies and orientations, so that these concepts become a well-established cognitive base in the student's mentality and the impulse of application.

Learning and Teaching Strategies	
Strategies	It is represented by a group of theoretical classroom lectures and self-follow-up by the student, on the history of art and its transformations over time, as a basis in the sciences of architecture and urbanism, passing through the classical Greek and Roman arts, expressionism, performance, surrealism and Russian constructivism, and De Stijl, so that these concepts work to deepen the student's sense at the beginning of his specialized life of these trends and their differences in their artistic and urban variables, and instill a spirit of perseverance in the field of self-investigation, office follow-up and field documentation, comprehensive to get to know the giants of Italian, French, Russian and Spanish art The likes of Leonardo da Vinci, Michelangelo, Van Gogh, and Picasso, and their achievements had the greatest impact on the axis of European arts, which filled the ceilings of churches, their pulpits, cathedrals, their facades, and their urban surroundings, in which they demonstrated their architectural abilities, including columns, arches, stairs, and giant murals, adding vitality and dynamism with the skill of their details and dominance.

Student Workload (SWL) **The student's academic load is calculated for 15 weeks**			
Structured SWL (h/sem) Regular student academic load during the semester	48	**Structured SWL (h/w)** Regular student academic load during the week	3,2
Unstructured SWL (h/sem) Irregular student load during the semester	27	**Unstructured SWL (h/w)** Irregular student academic load during the week	1.8
Total SWL (h/sem) Student academic load during the semester	**75**		

Module Evaluation					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	20% (20)	5,10	LO #1-5, and 6-10
	Assignments	2	20% (20)	8,11	LO # 1-11
	Projects / Lab.				
	Report				
Summative assessment	**Midterm Exam**	3hr	10% (10)	13	LO # 1-12
	Final Exam	3hr	50% (50)		All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Reviewing the history of art and architecture, starting with ancient historical civilization, through the classical arts of Greece and Rome, passing through the Renaissance and during the seventeenth and eighteenth centuries.
Week 2	The emergence of realistic art during the second half of the nineteenth century, Impressionism in the last quarter of the nineteenth century, and its transformations towards Neo-Impressionism by the Impressionist artist Cézanne .
Week 3	The concept of the art of brutality and the emergence of the Cubist movement in art were proposed by its founder, the Spanish painter, sculptor and visual artist Picasso, during the first half of the twentieth century, with the Cubist movement and the Surrealist movement dominating, which is described as above reality, and the unconscious state of its founder, Andre Breton, and its Spanish Surrealist pioneer, Salvador Dali He contributed to spreading the Surrealist movement until his death in 1989 and beginning between the second and third decades of the twentieth century (the period between World War I and World War II).
Week 4	The Expressionist school of art, pioneered by the Russian artist Kandinsky, is a plastic movement based on returning artistic elements to their geometric shapes. It is an abstract expressionist doctrine that prevailed during the Second World War era, and the German Bauhaus school contributed to the development of the abstract expressionist school at that time.
Week 5	Reviewing previous technical eras and testing the outputs of weeks(4-1) .
Week 6	A review of the most important products of the Syriac performance art movement, which in French means (realistic art), to include the cultural movement of modern art, literature and its expression in the subconscious mind, as an attempt to reveal the mysterious aspects of the human senses and the subconscious mind. Among the most famous pioneers of this movement is the French critic André Breton, influenced by the psychological and surrealist ideas of the philosopher Freud, as well as the creative artist Salvador Dali, René Magritte and others.
Week 7	A review of the most important products of geometric abstract art, i.e. the art of drawing, such as drawing circles and spiral patterns away from squares, triangles, rectangles, circles and straight lines, with a touch of the color qualities for which the French artist Oscar Le Cod Monet, the pioneer of the Impressionist school of drawing, and his famous painting (The Impression of the Rising Sun) were famous, based on the principle of Impressionism .
Week 8	The World Cup of Abstract Art, and one of the most famous pioneers of the abstract school is the Russian artist Kandinsky, who expressed ideas related to spirituality and the unconscious, i.e. getting rid of all traces of reality and being connected to it. For example, the spherical body is an abstraction of a large number of spherical shapes in nature, which is a kind of rebellion against the shapes and trends that were prevalent and dominant in plastic art at the end of the nineteenth century, such as the Impressionist, Post-Impressionist and De Style schools Especially the Dutch artist Mondrian, whose works were described

	as strong abstraction, and who emphasized the shapes of the square colored in the basic colors red, blue, and yellow, to compose images of abstract horizontal and vertical lines .
Week 9	Romance and Architecture: The Art Nouveau movement, a term for an international style that combines art, architecture and design, reached its peak at the beginning of the twentieth century, during the modernist period, and was characterized by its curved lines and flower shapes inspired by plants, which strongly influenced artists and architects and which later developed in the De Stijl movement and the German Bauhaus school, which spread throughout Europe, especially in Spain, which was centered in Barcelona It was known as (Modernism) with the most prominent designer (Antonio Caudi), which paved the way for modernity in art and architecture and with the aim of escaping historical styles and patterns that were characterized by transition and academic tendency and were widely used in architecture, interior design, decorations, furniture, jewelry designs, glass art, textiles, and ceramics.
Week 10	Reviewing previous technical eras and testing the outputs of weeks(9-6) .
Week 11	The geniuses of art and architecture during the Renaissance, the contribution of the greats of the European Renaissance, the Italian Renaissance, and the High Renaissance in architectural and urban works, especially the Italian painter, sculptor, and engineer (Michelangelo), the Italian artist (Leonardo da Vinci), and the artist Raphael Sanrewa Urbino, who represented a traditional trinity of great masters, in those historical eras, to point out their most important achievements.
Week 12	Completing the works of the artists of the traditional trinity of the three great masters Michelangelo, Leonardo da Vinci, and Raphael Saint-Redauer.
Week 13	Review of previous technical eras and the midterm exam for the outputs of the weeks(11-10) .
Week 14	History of Fine Arts and Sculpture in Iraq: Iraqi art was greatly influenced by political changes throughout successive historical eras and flourished under the Ottoman era starting from the sixteenth century, especially the capital Baghdad, which was at that time a center for poetry and arts and was famous in the field of drawing until the twentieth century, especially after the Iraqi artist became acquainted through European study missions with European arts in the field of drawing, sculpture and printing In addition to their knowledge of Gothic architecture, classical paintings, manuscripts, wall and glass decorations of famous classical artists, most notably the artists Jawad Selim, Faiq Hassan, Atta Sabry, Shaker Hassan Al Saeed, and others, as well as the pioneers of the second generation such as Rafi Al Nasseri, Ismail Fattah Al Turk, and Alaa Bashir, who worked in diversifying styles and developing artistic visions from the natural realistic style towards modern Neo-Impressionist, Expressionist and Cubist styles .
Week 15	A review of the most important artistic – architectural works in which the Iraqi artist participated, such as the Unknown Soldier Monument and the Martyr Monument.. etc.
Week 16	final exam.

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	-1The integration of art and architecture throughout history – 2022 – A.Dr.Sabah Fakhr El-Din, M.Hoda Sabah. 2- Principles of Art and Architecture – Sherine Ihsan Sherzad . -3Glimpses from the history of architecture, architectural movements and their pioneers, Sherine Ihsan Sherzad.	Yes
Recommended Texts	Basic design principles of architecture\ Leonard S. Parker Hijun Yn.	Yes
Websites	Arch daily,- Arch h2o,- Arch space,- Dezeen.	

Grading Scheme

Group	Grade	Marks %	Definition
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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 markof 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 automaticrounding outlined above.

Curriculum Guide – First Academic Level

Second semester – 30 credits

	Course code	Name of the course	Language	credits			units
				My theory	My laborato	My work	
1	**FU020**	Academic Arabic	Arabic	2	——	——	2
2	**GF031**	Academic English - 1	English	2	——	——	2
3	**GE123**	Computer Science-2	English	2	——	3	5
4	**ARCH1204**	Communication skills Freehand	Arabic	1	3	——	4
5	**ARCH1205**	Architectural design and graphics 2-	Arabic	2	8	——	10
6	**ARCH11206**	Principles of Art and architecture- 2	Arabic	3	——	——	3
7	**ARCH11207**	Physics of Building Materials	English	2	4	——	4
Total				**30**			**30**

	Ministry of Higher Education and Scientific Research **Al Farabi University college** **Department of Architectural Engineering**	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTOR FORM

Module Information

Module Title	**ARABIC LANGUAGE**		**Module Delivery**	
Module Type	**BASIC**		**Theory**	
Module Code	**FU020**			
ECTS Credits	**2**			
SWL (hr/sem)	**50**			
Module Level	1	**Semester of Delivery**	2	
Administering Department	Architecture	**College**	Engineering	
Module Leader		**e-mail**		
Module Leader's Acad. Title	M.Sc.Sally Abdel Latif Diab	**Module Leader's Qualification**	**Assistant Lecturer**	
Module Tutor	None	**e-mail**	None	
Peer Reviewer Name	Dr.Bahjat R.shahin	**e-mail**	bahgat.rashad@alfarabiuc.edu.iq	
Review Committee Approval	17/10/2024	**Version Number**	1.0	

Relation With Other Modules

Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents

Module Aims	The aim of teaching Arabic in this department is to maximize students' linguistic proficiency and enable them to express their ideas and projects in clear, eloquent Arabic, free of errors, colloquial and foreign language, and in the simplest ways. Language is the first tool of communication between members of society, and when a person is able to master his language, he is able to reach the minds of others so that it is easy for him to deal with them and enable him to achieve his goal at work. This leads to achieving the supposed balance in the students' culture, as it ensures a kind of balance between the curricula of the scientific subject and the means of conveying or expressing it. These lectures include teaching Arabic grammar, spelling rules, and addressing some common linguistic errors, in addition to studying some literary, Quranic, and architectural texts, to train the student to write reports, scenarios, and field descriptions of architectural and cultural landmarks...
Module Learning Outcomes	1- Instilling the student's love and pride in the Arabic language. 2- Training students on correct pronunciation, good delivery and expression in clear vocal tones, and providing them with many words, structures, sentences and methods that develop their linguistic wealth and increase their culture. 3- Training students to write words correctly, fix their images in their minds, and be able to recall those images when writing. 5 -Correcting students' tongues and protecting them from errors, forming sound linguistic habits that enable them to use words and sentences correctly, and having the student practice some architectural texts in sound language, free of errors and linguistic mistakes
Indicative Contents	The emergence of the Arabic language A lesson explaining the importance of the Arabic language in general and its importance to students other than specialists. Sections of speech, inflected speech, and speech based on nouns and verbs. Linguistic errors. Hamzat al-Qat' wa al-Wasl. Drawing the middle and extreme hamza. Letters that increase in writing. Punctuation marks in Arabic. Number and its writing rules. Beginner and predicate. Types of crowds and what follows them. A poem by an ancient poet. A poem by a modern poet. Writing the dha, dha, ta marbuta, and ha

Learning and Teaching Strategies

Strategies	1) Lectures. 2) Tutorials. 3) Homework and Assignments. 4) Tests and Exams. 5) In-Class Questions and Discussions. 6) Extracurricular Activities. 7) Seminars. 8) In- and Out-Class oral conversations.

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

Structured SWL (h/sem) Regular student academic load during the semester	33	**Structured SWL (h/w)** Regular student academic load during the week	2,2
Unstructured SWL (h/sem) Irregular student load during the semester	17	**Unstructured SWL (h/w)** Irregular student academic load during the week	1.14
Total SWL (h/sem) Student academic load during the semester	50		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	20% (20)	6, 10	LO #1, 2, 3 ,4,5,6,7 ,8,9
	Assignments	2	10% (10)	2, 12	LO # 1-11
	Projects / Lab.	-	-	-	-
	Report	1	10% (10)	13	LO # 1-12
Summative assessment	**Midterm Exam**	2 hr	10% (10)	13	LO # All
	Final Exam	3 hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	The emergence of the Arabic language
Week 2	A lesson explaining the importance of the Arabic language in general and its importance to non-specialization students
Week 3	Sections of speech, parsing, and construction of nouns and verbs
Week 4	Hamzat al-Qat' wa al-Wasl
Week 5	Drawing the middle and extreme hamza
Week 6	Common linguistic errors + Quiz-1
Week 7	Punctuation marks
Week 8	Letters that increase in writing
Week 9	Number, rules for writing a number
Week 10	Types of crowds and what follows them + Quiz-2
Week 11	Open and broken
Week 12	The subject and the predicate
Week 13	Midterm Exam A poem by an ancient poet +
Week 14	A poem by a modern poet + a contemporary architectural essay
Week 15	Writing the dha, dha, ta marbuta, and ha
Week 16	Final exam

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	• Mustafa Al-Tuni, The Hamza in the Arabic Language, a Linguistic Study • Saad bin Ali bin Muhammad, the difference between Dhad and Dhad • Abdul Qader Amin, General Arabic Language for Non-Specialized Sections	Yes
Recommended Texts	Youssef Atta Al-Sarifi, clear in spelling and punctuation	Yes
Websites		

APPENDIX:

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTION FORM

Module Information

Module Title	Academic English1		**Module Delivery**
Module Type	Basic		**Theory**
Module Code	FU031		
ECTS Credits	2		
SWL (h/sem)	50		
Module Level	1	**Semester of Delivery**	2
Administering Department	Architecture	**College**	Engineering
Module Leader		**e-mail**	
Module Leader's Acad. Title	MSc. azhaar Fadel Shalal	**Module Leader's Qualification**	**Assistant Lecturer**
Module Tutor		**e-mail**	
Peer Reviewer Name	Dr.Bahjat R.shahin	**e-mail**	bahgat-rashad@alfarabiuc.edu.iq
Scientific Committee Approval Date	01/10/2024	**Version Number**	1.0

Relation with other Modules

Prerequisite module	none	**Semester**	1
Co-requisites module	For English 2	**Semester**	3

Module Aims, Learning Outcomes and Indicative Contents

Module Aims	The course aims to develop the student's ability to deal with the language in the areas of pronunciation, conversation, and writing principles. In his previous studies in secondary school, the student had received a wide range of principles in the grammar of the English language and the principles of pronunciation and reading, but he did not have sufficient opportunity to develop his other skills in the language, which can only be enriched through practice and training. Therefore, the focus is on reading aloud, training on new terms and how to deal with them, the rules of spelling and dictation in the English language, and the principles of writing by writing some short clips. In an attempt to bring the subject closer to the student's architectural study, the focus is on reading and writing topics of an architectural nature and training the student to deal with architectural terminology correctly and recognize them when reading architectural texts in an attempt to keep him away from the common mistake in direct translation in which texts lose their literary, intellectual and conceptual value.
Module Learning Outcomes	A1) Find and understand information about vocabulary, pronunciation, usage, and grammar in reference texts, online resources, and English language dictionaries, (A2) Develop conversational English skills necessary for becoming a contributing participant in small group activities, large group discussions, and oral presentations, (A3) Understand texts using effective learning strategies for reading and vocabulary building,
Indicative Contents	Speaking, reading and writing

Learning and Teaching Strategies

Strategies	Lecture and classroom discussion

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

Structured SWL (h/sem) Regular student academic load during the semester	33	**Structured SWL (h/w)** Regular student academic load during the week	2,2
Unstructured SWL (h/sem) Irregular student load during the semester	17	**Unstructured SWL (h/w)** Irregular student academic load during the week	1.14
Total SWL (h/sem) Student academic load during the semester	50		

Module Evaluation					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	20% (20)	5, 10	1,2,3,4+6,7,8,9
	Assignments	2	10% (10)	4, 12	(1-11)
	Projects / Lab.	———	———	———	———
	Composition	1	10% (10)	13	(1-12)
Summative assessment	Midterm Exam	2 hr	10% (10)	7	1-6
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Explanation of chapter contents Unit 1,2
Week 2	Explanation of chapter contents Unit 3,4
Week 3	Explanation of chapter contents Unit 5,6
Week 4	Explanation of chapter contents Unit 7,8
Week 5	Explanation of chapter contents Unit 9,1 + Quize -1
Week 6	Explanation of chapter contents Unit 11,12
Week 7	Mid exam
Week 8	Explanation of chapter contents Unit 13,14
Week 9	General discussion and Composition Writing
Week 10	English for Specific Purposes , English for Specific Purposes + Quize -2
Week 11	English for Specific Purposes
Week 12	Essay Writing
Week 13	General discussion
Week 14	English for Specific Purposes
Week 15	English for Specific Purposes
Week 16	General discussions- Final Exam

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	New Headway Plus [Beginner] by John and Liz Soars, Oxford: Oxford University Press (2006) Modern scientific articles from the news related to the students' specialty, and Internet links and videos related to the topics discussed in General English and English for Specific Purposes lectures.	Yes
Recommended Texts	Morphy,A.J (1983) English Grammar in use. Cambridge:CUP	Yes
Websites	https://www.englishclub.com/grammar/verb-tenses.htm https://www.ego4u.com/en/cram-www.perfect-english-grammar.com/verb-tenses.htm https://en.wikipedia.org/wiki/Grammatical_tense	

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A** - Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

Ministry of Higher Education and Scientific Research
Al Farabi University college
Department of Architectural Engineering

Ministry of Higher Education and Scientific Research
Al Farabi University - College of Engineering
Department of Architecture

MODULE DESCRIPTOR FORM

Module Information

Module Title	COMPUTER SCIENCE 2	**Module Delivery**	
Module Type	BASIC	**Lecture** **Tutorial** **Practical**	
Module Code	GE123		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level	1	**Semester of Delivery**	2
Administering Department	Architecture	**College**	Engineering
Module Leader	Haifa Salem Abdel Karim	**e-mail**	haifa.salem@alfarabiuc.edu.iq
Module Leader's Acad. Title	lecturer	**Module Leader's Qualification**	M.sc.
Module Tutor	Haifa Salem Abdel Karim	**e-mail**	haifa.salem@alfarabiuc.edu.iq
Peer Reviewer Name	Dr.Bahjat R.shahin	**e-mail**	bahgat-rashad@alfarabiuc.edu.iq
Review Committee Approval	01/06/2024	**Version Number**	2.0

Relation With Other Modules

Prerequisite module	Computer 1	**Semester**	1
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	The aims of this course are to develop skilled Excel and Internet and AutoCAD users with the technical background, knowledge, and adaptability to develop well-designed, robust, computer-based solutions to a range of problems. The course introduces students to Microsoft office excel.
Module Learning Outcomes	Microsoft Excel Examine spreadsheet concepts and explore the Microsoft Office Excel environment. Create, open and view a workbook. Save and print workbooks. Enter and edit data. Modify a worksheet and workbook. Work with cell references. Learn to use functions and formulas. Create and edit charts and graphics. Filter and sort table data. Work with pivot tables and charts. Import and export data. Work with Cells and Worksheets Calculate Your Data Format your Workbook Add Charts and Graphics Collaborate with Others Data analysis Using Lookup Formulas and Formula Auditing
Indicative Contents	Microsoft Excel AutoCAD

Learning and Teaching Strategies

Strategies	Lecture plan and in-class activities. · Each class will commence with a summary of the previous lecture. · Questions will be asked and the responses will be used to evaluate the students' understanding of the topics covered. · Oral and power point presentations by the students are made to participate in the lecture.

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

Structured SWL (h/sem) Regular student academic load during the semester	78	**Structured SWL (h/w)** Regular student academic load during the week	5
Unstructured SWL (h/sem) Irregular student load during the semester	47	**Unstructured SWL (h/w)** Irregular student academic load during the week	3.1
Total SWL (h/sem) Student academic load during the semester	125		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	4	10% (5)	3,5,8,10	(1-9)
	Assignments	4	10% (5)		
	Lab		10		
	Exams	1 hr/4	20% (20)		
Summative assessment	**Final Exam**	3hr	50% (50)	16	
	100% (100 Marks)				
Total			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	introduction about Auto CAD – and its uses in drawing different plans , and the screen,
Week 2	Theoretical lecture -Draw menu , line, polyline, rectangle Modify menu, eras, copy ,move -Give the student a first Exercise

Week 3	Exercise in computer lap-1
Week 4	Theoretical lecture- Draw menu , circle, arc,Modify menu: mirror rray, join
Week 5	Exercise in computer lap-2
Week 6	Give the student first quiz.
Week 7	Theoretical lecture- Make block, insert block
Week 8	Exercise in computer lap-3
Week 9	Theoretical lecture- about layers Give the student an Exercise
Week 10	Exercise in computer lap-4
Week 11	Mid-term Exam
Week 12	Theoretical lecture- about Dimensions, Text and Insert menu, make group Give the student an Exercise
Week 13	Theoretical lecture about Save, save as (pdf , jpeg) open, plot
Week 14	Theoretical lecture about - 3D Auto CAD , Extrude, box, cylinder , tube Give the student an Exercise
Week 15	Give the student second quiz.
Week 16	Final Exam

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A** - Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group(0 – 49)	**FX** – Fail	(45-49)	More work required but credit awarded
	F – Fail	(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 markof 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 automaticrounding outlined above.

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTOR FORM

Module Information					
Module Title	COMMUNICATION SKILLS FREEHAND 2			**Module Delivery**	
Module Type	CORE			☐ **Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☒ **Practical** ☐ **Seminar**	
Module Code	ARCH1204				
ECTS Credits	4				
SWL (hr/sem)	100				
Module Level		1	**Semester of Delivery**		2
Administering Department		Architecture	**College**	Engineering	
Module Leader	Sabah Fakhruldin		**e-mail**	sabah.fakhr@alfarabiuc.edu.iq	
Module Leader's Acad. Title		Prof.	**Module Leader's Qualification**		Ph.D.
Module Tutor	Sabah Fakhruldin		**e-mail**	sabah.fakhr@alfarabiuc.edu.iq	
Peer Reviewer Name		Dr.Bahjat R.shahin	**e-mail**	bahgat. rashad @alfarabiuc.edu.iq	
Review Committee Approval		1-9-2024	**Version Number**		2.0

Relation with Other Modules			
Prerequisite module	Communication Skills Freehand 1	**Semester**	1
Co-requisites module	A supporting material for architectural and graphic design outputs		2
Module Aims, Learning Outcomes and Indicative Contents			
Module objectives	•The second semester of the subject (Hand Drawing – 2) aims to expand students' knowledge of methods for implementing freehand drawing of the reality of architectural works and the patterns of executive and directorial drawings for graphic drawings using different inking pens, colored wooden pencils, and watercolors, and to learn about the latest developments in freehand graphic works… •Maximizing students' ability to quickly draw living, moving shapes, from different points of view inside and outside the studio workshop. •Introducing students to graphic drawing methods with ink pens of different sizes, drawing circular, zigzag and intersecting lines, and creating silhouettes to show external and internal perspectives . •Training students to draw the (color wheel) with colored wooden pencils and their various color derivatives, and reflect them in the process of producing simplified architectural perspectives... External and internal . •Training students to draw virtual binoculars from two vanishing points using confounding pens, colored wooden pens, as well as 3D binoculars for tall buildings, using color shading, and drawing interior binoculars from one or more vanishing points. •Training students to practice self-field work and collecting work outputs in a technical portfolio... It is submitted at the end of the semester with photo documentation of some local, Arab and international heritage landmarks, and serves as the outcome of the final exam for the subject.		
Module Learning Outcomes	Cognitive objectives: 1- Expanding students' conceptual choice in generating design and directing ideas for artistic paintings. 2- Reviewing the latest developments in contemporary directing technology for free hand drawing skills, and maximizing students' ability to implement urban project perspectives, using various directing techniques.		

	Exercising the student's eye to perceive the fine details of -3 tangible physical reality, and his perception of proportions, movement, shadow, light, and color, of the surrounding live scenes
	Skills objectives for the second semester: 1- Enabling the student to translate the cognitive skills and experiences of the free drawing subject into the process of implementing and producing architectural designs and executive drawings for these basic subjects in architecture and urban science 2- Maximizing the student's ability to choose the appropriate color combinations for his directorial decisions for the subject of architectural design and buildings. -3 Training students to transfer international, Arab and local paintings using contemporary professional techniques, in addition to producing media posters.
Indicative Contents	1- Direct instructions during class lectures, student group discussions, and student seminars. 2- Field reconnaissance directions for extracurricular activities and during the implementation of spring and summer holiday duties, for living sites, especially archaeological, historical and heritage monuments. 3 - Developing students' concepts during student trips and continuous field visits to museums and exhibitions, and learning about artistic and engineering expertise and its latest contemporary developments.

Learning and Teaching Strategies

Strategies	1- Training students to practice free drawing on their own, by intensifying homework and field visits to archaeological and historical sites, documenting conservation landmarks, actively participating in student discussions, and following up on the works of major local and Arab artists and international art pioneers. 2-Encouraging distinguished students (with innate abilities) to continue developing these artistic abilities, through permanent participation in the optional free drawing workshop, throughout the week, in addition to practicing sculpture and ceramic works and developing their artistic skills in using gypsum, or cardboard and cork materials, to implement three-dimensional models and contemporary artistic techniques. 3- Training students to own a personal art bag that includes all their artistic works And over the years of study.

Student Workload (SWL)

Structured SWL (h/sem) Regular student academic load during the semester	64	**Structured SWL (h/w)** Regular student academic load during the week	4,2
Unstructured SWL (h/sem) Irregular student load during the semester	36	**Unstructured SWL (h/w)** Irregular student academic load during the week	2.4
Total SWL (h/sem) Student academic load during the semester	100		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Drawings**	10	20% (20)	2,3,4,5,7,8,11,12,13,14	LO # all
	Assignments	1	10% (10)	10	LO # 10
	Report	1	10% (10)	10	LO # 7,8
Summative assessment	**day-sketches**	3	10% (10)	6,9,15	LO # 3,4,5 LO # 7,8-LO # 11,12,13,14
	Final projects	2	50% (50)	9,15	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
Week 1	The second semester begins with students practicing the possibilities of drawing circular and zigzag lines, overlapping and intersecting between them, and creating silhouette and light gradients
Week 2	Exercising the student's hand on speed in capturing living, moving and rotating shapes, 3D - inside the free drawing workshop, from different points of view and over short periods of time, and transferring these perspective possibilities to the drawing board with an expressive formation
Week 3	Continue quick drawing exercises to produce rotating and spirally flowing perspective shapes.
Week 4	Start training students to use ink pens, with different shades of color, to show the expressions of perspective shapes distinguished by their shadows and shades of color.
Week 5	Student group discussion and evaluation of all the outcomes of the previous weeks (1-4), with discussion of all environmental duties accompanying each week.
Week 6	A test inside the studio, about the outputs of the previous weeks (1 - 5 weeks).
Week 7	An explanatory lecture - a review of the latest techniques for showing the perspective of shapes, using the methods of using inking pens (local, Arab and international examples).
Week 8	Training students to transform a simplified plan of a building into a conceptual perspective from two vanishing points using ink pens - while giving the student homework to implement a set of possibilities for simplified and different plans.
Week 9	Student group discussion and evaluation of all previous weeks' outcomes (6-8).
Week 10	In-classroom test on the outputs of previous weeks (6-9).
Week 11	Training students to draw the (color wheel) with wooden pencils, while giving accompanying homework...
Week 12	Training students to draw 3D views of tall buildings, with pencils and three-point vanishing points - with accompanying homework, and with color shading techniques.
Week 13	Training students to draw endoscopes with colored wooden pencils, in the color shading style, with a homework assignment..
Week 14	Student group discussion, and evaluation of all previous weeks' outcomes...
Week 15	In-room test for second semester graduates.
Week 16	Submitting the requirements for the technical portfolio, with an informational board in the form of a poster for one of Baghdad's heritage landmarks, along with all of the student's semester work.

APPENDEX:

Learning and Teaching Resources		
		Available in the Library?
Required Texts	-1 -Imad Muhammad Azhar Al-Bakri – Shadow and Perspective - 1988 -2 -Muhammad Thabet Al-Baldawi – Raw materials technology and its uses in interior design - 3- Gormlin – Human Head Layout – in Russian 1978 4- sherleyw.morgan-architectural drawing perspective , light, and shadow, rendering	Yes
Recommend edTexts	- Ernst Neufert, Architects' Data, 2012 - Francis D. K. Ching, Steven P. Juroszek, Architecture:Form, Space, and Order, 2004	Yes Yes
Websites	Different architectural websites. - Arch daily : https://www.archdaily.com/ - Arch h2o : https://www.arch2o.com/ - Arch space : https://thearchspace.com/ - Dezeen : https://www.dezeen.com/ - Architizer : https://architizer.com/ - Arkin : https://www.arcign.com/projects/	

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTION FORM

Module Information

Module Title	ARCHITECTURAL DESIGN - GRAPHICS 2		**Module Delivery**	
Module Type	CORE		☒ **Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☒ **Practical** ☒ **Seminar**	
Module Code	ARCH1201			
ECTS Credits	10			
SWL (hr/sem)	250			
Module Level	1	**Semester of Delivery**	2	
Administering Department	Architecture	**College**	Engineering	
Module Leader	Maitham Hasan Mahdi	**e-mail**	maitham.hassan@alfarabiuc.edu.iq	
Module Leader's Acad. Title	A. Lecturer	**Module Leader's Qualification**	M.Sc.	
Module Tutor	M.Sc.maitham.hassan@alfarabiuc.edu.iq	**e-mail**	maitham.hassan@alfarabiuc.edu.iq	
Peer Reviewer Name	Dr.Bahjat R.shahin	**e-mail**	bahgat.rashad@alfarabiuc.edu.iq	
Review Committee Approval	1-8-2024	**Version Number**	2.0	

Relation With Other Modules

Prerequisite module	Architectural and graphic design 1	**Semester**	1
Co-requisites module	Integration of material with hand drawing materials and principles of art and architecture	**Semester**	2-1

Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	•The second semester begins by linking the basic design principles of the first semester, with its two- and three-dimensional expressive dimensions, to the human dimension and its environmental, urban and urban environment, and emphasizing the development of the mutual formative, formative and directing relationship between them, and preparing students to enter the world of design directing. • A review of the concepts of perception and taste of peripheral human material values within their spatial and temporal human scales, and within the limits of their motor paths, living locations, logistical services, and various virtual gatherings • Developing students' expressive language and artistic and creative sense, using analytical and synthetic thinking, of the interior architectural environment and its urban surroundings. •Organizing students' production capacity, to transform design ideas and architectural vocabulary into three-dimensional graphic drawings, paper or cartoon models, as well as internal and external expressive perspectives, using color gradations and adjusting the production balance between them, with ink pens or colored wooden pens, and collage.
Module learning Qutcomes	•Training students on field documentation of preserved archaeological buildings, historical and heritage buildings, within their urban surroundings, and converting them into measured three-dimensional artistic drawings, with their facades, plans, horizontal and vertical sections, and with distinguished artistic display. •Training students to implement 3D drawings: in isometric formats (Composition in Isometric) externally and internally, using ink pen techniques, colored wooden pens, or poster colors, and by producing color for binoculars and facades. By differentiating between surfaces to show the strength of the contrast between shadow, light and shadow . •Training students on self-learning methods for architectural values, within the reality of their urban environment, and through personal questions from beneficiaries, local residents, workers in the construction and logistics engineering services sector, or executive bodies responsible for central decisions
Indicative Contents	•Maximizing students' ability to continue self-development of professional knowledge in all architectural and urban engineering issues, training in community integration, and adhering to professional ethical responsibilities in the field of applying analysis and synthesis processes for design decisions, and meeting the needs of the labor market and beneficiary entities. •Introducing students to the most important rules of mandatory educational and learning guidance, in accordance with the announced national standards, which cover the requirements of

	societal aspects, local traditions, and human values, preserve Iraqi heritage components, improve the quality of life, and achieve the principles of environmental sustainability in the field of architecture and urbanism... The most important of them are : -The ability to produce architectural engineering designs that meet the needs of the labor market, thanks to the latest architectural technological developments and industrial planning and design innovations in the field of urban analysis and installation processes. -The ability to solve architectural problems, and commitment to the principles of reviving and preserving the authentic Iraqi architectural and urban heritage. -The ability to communicate effectively on-site with all beneficiaries, investors, and decision-makers, for various documentation, administrative, and practical purposes. -The ability to work effectively with all teams of specific engineering specializations (structural, electrical, mechanical, sanitary, etc.).

Learning and Teaching Strategies	
Strategies	•Training students in the collective critical school, within ceremonies or at field work sites, and organizing active participation in presenting personal opinions with the work team, with decision-makers, or with specialists in government institutions. •Introducing students to the importance of our architectural heritage, especially Baghdadi, and its archaeological, historical and heritage roots, learning about its most important architectural and urban sites, and emphasizing the importance of heritage preservation, revival and development of such sites. •Adherence to the foundations, controls and conditions of the European curriculum adopted for the Bologna track, based on the quality assurance guide in Iraqi universities, and maximizing students' ability to create and innovate on their own, outside of regular school hours, and during the spring and summer holidays.

tudent Workload (SWL) The student's academic load is calculated for 15 weeks			
Structured SWL (h/sem) Regular student academic load during the semester	155	**Structured SWL (h/w)** Regular student academic load during the week	10,3
Unstructured SWL (h/sem) Irregular student load during the semester	95	**Unstructured SWL (h/w)** Irregular student academic load during the week	6.4
Total SWL (h/sem) Student academic load during the semester	250		

Module Evaluation -					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Concept exercises**	2	10% (10)	2,9	LO # 1-6
	Development stages	7	10%(10)	2-7 & 9-13	LO # 1-6, 8 and 9
	Day-sketch	2	10% (10)	5, 10	LO # 1,3,4,5,and 6 forfirst day sketch And all for the second day-skech
	Studying Report	2	10% (10)	1,7,8	LO # 9
Mid-semester test 10%		1	10% (10)	12	
	Prelim - presentation	1	10% (10)	11	All

Summative assessment %50	**Pre-final presentation**	1	20% (20)	14	All
	Final presentation	1	20% (20)	15	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	A review of the basic design principles for the first semester, on the concepts of two- and three-dimensional expressive dimensions, and the rules for producing them graphically and using the virtual integration method, for their various formations, and a presentation of the .most important outputs of distinguished students in this field
Week 2	A lecture on clarifying the relationship between two- and three-dimensional virtual forms and the scales of the human dimension, and its relationship to the urban environment internally and externally, and limiting it to the spatial and temporal human scales, intellectually, conceptually and practically. He presented a set of local, Arab and ...international examples in this field
Week 3	Informing students about how to transform three-dimensional virtual formations into horizontal, vertical and perspective projections, within simplified architectural standards with their simplified dimensions, and their relative human standards with the possibilities of internal uses in the fields of movement, furniture projection and the locations of door and window openings, and with a review of distinguished examples and models in this field... With simplified homework for students
Week 4	A group student discussion with the subject supervisors of the students' proposals, and confirmation of the most important evaluative positives and negatives of the projects proposed by the students and their evaluation
Week 5	(4-1) Daily test (Day - Sketch) for the outcomes of the competition weeks
Week 6	An intensive review by the subject supervisors, on the concept of mass and space and its formative possibilities (open and semi-open space and closed and semi-closed space), and linking them with functional values and their expressive rules, and horizontal and vertical movement paths. The student is asked to provide horizontal, vertical and visual perspective projections About the reality of his residential living environment, both internally and externally, and leaves the student the freedom to choose the desired location according to his actual presence
Week 7	A group student discussion with the subject supervisors about the reality of students' personal living projects, and emphasizing the most important positives and negatives of the methods of presenting and producing their designs
Week 8	Providing a simplified design curriculum for students, with no more than three overlapping structural spaces, within their external surroundings, for example (a bus stop, a flower showroom, a small commercial store, or a pharmacy...Etc.), including a horizontal projection, a vertical section, a facade, and a perspective with a cartoon or paper block model, and leaves the student free to produce with inking pens or colored drawing pens
Week 9	Student group discussion with subject supervisors about the proposed projects, their pros and cons, methods of graphic production and modeling, and conducting evaluation
Week 10	A quick daily test for the middle of the second semester (Mid) for a quick and simplified ...project with its functional spaces
Week 11	Group student discussion of the test project, presenting some evaluative negatives and positives between students and subject supervisors, and conducting an evaluation of the projects

Week 12	Giving a design curriculum for a (public service) project with no more than three internal spaces overlapping each other, with their external surroundings, and on one floor, for example (a Baghdadi café on the shores of the Tigris, or a tourist marina for riverboats and tourist yachts, or a coastal barbecue restaurant...Etc.), provided that the students are divided into groups for the numbers of field documentary studies of the site. Collecting similar examples and presenting analytical and evaluative ideas in this field.
Week 13	Group discussion - student, with the participation of subject supervisors about the outcomes of the field study for student groups... And make the calendar.
Week 14	Initial presentation of design ideas presented by students, correcting negative errors, and confirming positives and general projects.
Week 15	Pre-final submission... Pointing out the most important pros and cons of each project... And conduct evaluation
Week 16	Final submission (Final) and project evaluation.

Note: During the last weeks of the second semester, some field documentation tasks are distributed to student groups related to one of the archaeological, historical and heritage sites of Baghdad city center, next to Rusafa or Karkh, for the purposes of documentation, photography and analytical study of the reality of the region and its landmarks... It must be submitted at the beginning of the **.(3)** third semester of the architectural design subject

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	-Ernst Neufert, Architects' Data, 2012 -Francis D. K. Ching, Steven P. Juroszek, Architecture:Form, Space, and Order, 2004	yes
Recommended Texts	-Recommended books and references (scientific journals,reports...): -Many local and international projects, and many examples	yes
Websites	-: https://www.archdaily.com/ -: https://www.arch2o.com/ -: https://thearchspace.com/ -: https://www.dezeen.com/ -: https://architizer.com/ -: https://www.arcign.com/projects/	

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTOR FORM

Module Information					
Module Title	Principles of Art & Architecture2			**Module Delivery**	
Module Type	CORE			☒ **Theory** ☒**Lecture** ☐ **Lab** ☐ **Tutorial** ☒ **Practical** ☒ **Seminar**	
Module Code	ARCE1206				
ECTS Credits	3				
SWL (hr/sem)	75				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Arch		**College**	CEC	
Module Leader	Sabah Fakhruldin		**e-mail**	sabah.fakhr@alfarabiuc.edu.iq	
Module Leader's Acad. Title	Prof.		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Sabah Fakhruldin		**e-mail**	sabah.fakhr@alfarabiuc.edu.iq	
Peer Reviewer Name	Dr.Bahjat R.shahin		**e-mail**	bahgat-rashad@alfarabiuc.edu.iq	
Review Committee Approval	01/12/2024		**Version Number**	1.0	

Relation With Other Modules			
Prerequisite module	Principles of Art & Architecture2	**Semester**	1
Co-requisites module	Supporting material for architectural design, graphics, and hand drawing	**Semester**	1+2+3

Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	• The second semester aims at the principles of art and architecture: moving to the concepts of architecture and urbanism - and their complementary relationship, with the plastic, sculptural, and printing arts, which the student learned about in the first semester. This semester includes Greek and Roman architecture, specifically between the fifth century BC to represent (Greek architecture) until the third century AD to begin (Roman architecture), whose roots differed from Greek architecture... It was represented by temples, theatres, castles, churches and royal palaces, which were distinguished by their spatial and temporal majesty with their entrances, facades, arches, domes, statues and giant arches. • The chapter moves on to Romanesque architecture, Renaissance architecture, the emergence of Gothic architecture between the twelfth century and the sixteenth century AD, and the emergence of various European cathedrals and churches, with a review of some distinguished examples such as (Notre Dame de Paris Cathedral). • The transition to classical architecture (Renaissance architecture) and the era of the rise of the European bourgeoisie, between the seventeenth and nineteenth centuries AD, and the emergence of the first theorists in Western literature and pioneers of modern classical architecture, and what is called (the new birth of classical - Greek - Roman civilization), characterized by the thinker, philosopher, economist (Adam Smith) and Spanish architect (Anthony Gaudí), Which is distinguished by its achievements in the region (Catalonia - Barcelona) of the Church (Sagrada Familia - Holy Family), which was prepared as part of the World Heritage, and the Casa Mila and Casa Bathio buildings, which were distinguished by elegance, luxury, and decorative crafts, such as porcelain, stained glass, and treatment with ceramic mosaics, as if they were from Another world. • During this semester, the student also learns about a group of successive architectural schools, during the nineteenth and twentieth centuries until the twenty-first century, starting with (modern architecture) and what is called functional architecture during the years (1890 - 1945), followed by (the late modernist school). And what is called (High Thick Architecture), during the years (1945-1980), then (Postmodern School). And the new modernity, starting from the year (1980) until the present day... During these time periods, the international style (International Style) appeared, such as the Bauhaus school in Germany, Steele's parents in the Netherlands, and constructivism in Russia. • Finally, the second semester deals with the history of Iraqi architecture since its birth in the year (1921), including most of its architectural pioneers (foreigners and Iraqis), starting with the contribution of a group of British architects such as: Major James

	Molson Wilson, engineer Mason, and British architect Jared Brake Cooper. A group of architects also returned to Iraq during this period such as: Ahmed Mukhtar, Hazem Namiq, Jaafar Allawi, and Arshad Al-Omari Medhat Ali Mazloum, Muhammad Makiya, Rifa'a Al-Jaderji, and Abdullah Ihsan Kamel, who left their authentic mark in the art of architecture and urbanism, as the urban movement and construction were active in Iraq in general, and in the city of Baghdad in particular, to include the mountains of Karkh and Rusafa, such as Adhamiya and Eastern Karrada, and new shops began to appear, such as Al-Batawin, Al-Alawiya, Park Al-Saadoun, and New Baghdad, and a group of streets were created parallel to the Tigris River During the fifties, a group of foreign architects participated, such as (LukorboziaFrank Lloydright, Alvaralto, and Walterkropius).
Learning and Teaching Strategies	
Strategies	The main strategy to be adopted in introducing this module is to encourage students' participation in exercises, while at the same time improving and expanding their critical thinking skills. This will be achieved through academic lectures, intellectual discussions with students, submission of reports, assignments, field visits and making architecturalodels.

Student Workload (SWL) The student's academic load is calculated for 15 weeks			
Structured SWL (h/sem) Regular student academic load during the semester	48	**Structured SWL (h/w)** Regular student academic load during the week	3,2
Unstructured SWL (h/sem) Irregular student load during the semester	27	**Unstructured SWL (h/w)** Irregular student academic load during the week	1.8
Total SWL (h/sem) Student academic load during the semester	75		

Module Evaluation					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	20% (20)	6, 15	LO # 3 and 11
	Assignments	1	5% (5)	6-15	LO # 3 and 11
	Projects/model	1	5% (5)	6-11	All
	Report	1	10% (10)	15	LO # 11
Summative assessment	**Midterm Exam**	2 hr.	10% (10)	11	LO # 1-6
	Final Exam	3 hr.	50% (50)	16	All
Total assessment		100% (100 Marks)			

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	The second semester begins with a comprehensive retrospective of what the first semester contained about the principles of art and beauty, the characteristic of taste and perception of the rules of lines and directions, the dominance of color, and the balance of forms across ancient historical civilizations, passing through the Renaissance and the era of realistic arts and their impressionistic, expressive, cubist, and experimental transformations, the modern art movement and its complementary relationships between architecture and construction, and its reflections in the practices of the architectural styles of successive schools in time and space. With group student interventions.
Week 2	The integration of art and architecture during the ancient classical styles in Greek art, Roman civilization, Nile Valley (Pharaonic) civilization, Mesopotamia, and Greek civilization, which was characterized by the construction of temples, theaters, and public places (in addition to public baths, villas, and presidential palaces, which were unique in their artistic creativity in choosing materials, decorative elements, and touches of beauty, elegance, luxury, and high luxury for all their internal and external spaces, with a review of the most prominent pioneers of architecture during these ancient historical eras.
Week 3	Roman architecture, which began during the third century AD, included the ancient Roman empires, whose capital was Rome... In addition to the Eastern Roman Empire, whose center was (Syria), whose roots differed from Greek architecture, especially after the Romans conquered many countries and subjected them to their authority, which extended from Rome to Asia Minor, Syria, and the regions of North Africa.... Which was represented by temples, castles, churches, water canals, roads, arches, bridges, reservoirs, residential and authority buildings, which were biased by their new architectural elements such as: arches, vaults, and domes, in addition to their spatial dominance, their openness to public squares, and their acquisition of spacious and wide halls to accommodate giant statues, weapons, and spoils of war, such as: (Temple of Venus, Roman Colosseum Theater, and huge triumphal arches).
Week 4	Functionalist architecture, which began to appear during the nineteenth century and was later associated with the Swiss/French architectural pioneer (Charles-Édouard Jannerier-Chris). Nicknamed - Le Corbozbe, during the first half of the twentieth century, and during the interwar period in response to the rising needs of the people, and adhering to the principle that says: (The design of any building must reflect its functional purpose in form and content) which expresses (the Vitruvian Triad), including the classical traditional goals of architecture (comfort, utility, suitability and beauty), which were linked to the ideas of socialist principles and modern humanism, and covered the countries of Czechoslovakia, Germany and Poland The Soviet Union, the Netherlands, as well as Scandinavia, Finland... At that time, the pioneer of American architecture in Chicago (Louis Sullivan) expressed it with his famous phrase (form follows function)
Week 5	Gothic architecture - a European style that flourished during the High and Late Middle Ages. This stage was followed by the gradual decline of the Gothic style, and throughout Europe. Then Gothic architecture returned and flourished from the late eighteenth century, and throughout the nineteenth century. It is a style that

	developed from Romanesque architecture and Renaissance architecture and spread widely in cathedrals and churches such as (Notre Dame de Paris Cathedral, and Sines Cathedral), to include the emergence stage Then it was followed by the stage of High Gothic architecture, then the stage of radiant Gothic architecture, then flaming Gothic architecture, reaching the vertical style of Gothic architecture during the nineteenth century, which was characterized by many decorations, the use of stained glass, the use of supporting shoulders: the abundance of windows and the increase in the sides of ceiling arches, and the halls in it were decorated with statues of angels.
Week 6	Review previous architectural eras, and conduct a test of the outputs of weeks (1-5).
Week 7	Modern architecture, which includes a group of architectural schools that have the characteristics of simplification in forms and rejection of decoration.... Which lasted for three decades and included the Modernist School of Architecture (Modernism), which began from the year (1820) until (1945), followed by (Late Modernism) between the years (1945-1980), followed by (Postmodernism), starting from the year (1980), followed by New Modernism (New Modernism), during which a group of architectural pioneers became famous.... Note that modernist architecture was influenced by the Industrial Revolution and the problems of World War I from the last century until the fifties and sixties, especially after the death of its first pioneer (Le Corbusier) in the year (1965), so that its spiritual and emotional values that were linked to European society faded. Among the pioneers of modernism are (Le Corbusier, Walter Gropius, Frank Lloydwright, and Mies van der Rohe), as the schools of (international style – (International Style, appeared during these eras Which included several schools, including: the Bauhaus School, which appeared in Germany, the De Stijl School, which appeared in the Netherlands, and the Constructivist School, which appeared in Russia
Week 8	Postmodern architecture and neo-modernism - which emerged during the second half of the twentieth century: Its most important founders are: (Charles Jenks, Jean Baudrillard, François Lyotard, Michel Foucault: and Christopher Alexander...Etc.), which was characterized by self-awareness, cognitive and moral relativism and pluralism, formed a set of views in critical theory, and was interconnected with the economic and historical element of postmodernism. Postmodern architecture and neo-modernism - which emerged during the second half of the twentieth century: Its most important founders are: (Charles Jenks, Jean Baudrillard, François Lyotard, Michel Foucault: and Christopher Alexander...Etc.), which was characterized by self-awareness, cognitive and moral relativism and pluralism, formed a set of views in critical theory, and was interconnected with the economic and historical element of postmodernism. It began to reflect the dominant cultural logic of late capitalism, which began early in the Cold War, continued until now, and became called (financial capitalist architecture). Or after the Industrial Revolution, or the architecture of globalization, and the most popular trends were (deconstruction and post-structuralism), during which many disagreements were raised between philosophers and pioneers of architecture, especially when (postmodern philosophy) was confused with (postmodernism as an architectural engineering idea), in which the foundations of a theory that was opposite and hostile to the user were adopted, and this proposal was topped by the most influential thinkers

	in the world of anthropology, such as: Michel Foucault and Peter Eisenman Jacques Derrida, along with some pioneers of philosophy such as Hegel, Marx, Nietzsche, and Freud, proposed from this standpoint the French philosopher (Jacques Derrida) to dismantle what is called the centrality of the mind, especially in the areas of conflicts between right and wrong, the body and mind, society and the individual, presence and absence, control and submission, and the masculine and feminine. Finally, let us point out that postmodern philosophy is nothing but a continuation of modernist thinking, but in different ways.
Week 9	World architecture during the second half of the twentieth century. At the end of the sixties of the last century, modern architecture lost much of its ideological power, especially after the death of its first pioneer (Le Corbusier), in the year (1965), and only some of its roots remained in some academic schools: what is called (late Meuse architecture, or Louis Kahn architecture), who revived some of its principles such as (future trends) or what is called (late modern architecture) all the way to post-modern architectureFolding architecture and metaphorical architecture, which later developed into expressive architecture, which was characterized by inspiration and similarity to natural plant and animal life such as trees, plants, snails, whales and insects, for example: World architecture during the second half of the twentieth century. At the end of the sixties of the last century, modern architecture lost much of its ideological power, especially after the death of its first pioneer (Le Corbusier), in the year (1965), and only some of its roots remained in some academic schools: what is called (late Meuse architecture, or Louis Kahn architecture), who revived some of its principles such as (future trends) or what is called (late modern architecture) all the way to post-modern architectureAnd folding architecture, and metaphorical architecture, which later developed to transform into expressive architecture, which was characterized by inspiration and similarity to natural plant and animal life such as trees, plants, snails, whales and insects such as: (The Palm Mosque at King Saud University, by designer Basil Al-Bayati, and the Lotus Temple in New Delhi by designer Friben Mahba, inspired by the lotus flower, and the architecture of (high-tech) also appeared during these eras, as these methods appeared during the eighties of the last century Which was first presented by the architect and urban planner (Denise Scott Brown) and the architectural theorist (Robert Venturi) in their book (Learning from Las Vegas). The studies also included (high-tech architecture, new futuristic architecture, and deconstructive architecture), so that postmodern ideas form a set of points of view that use critical theory...It included architecture, literature, drama, cinema, journalism and design... It continued until the end of the twentieth century.
Week 10	The most important pioneers of postmodern architecture - The postmodern movement flourished during the eighties of the twentieth century, especially in the works of (Robert Venturi), who is considered one of the prominent theorists of the postmodern era, and among his most important works are (the Gildha W. Building in Philadelphia, the Vanna Venturi House and Fire Station in Columbus, the Trabant Center at the University of Delaware, and the Episcopal Academic Church) and the Campus Center at Princeton University As well as the postmodernist theorist, architect Charles, whose most famous works include (Italia Square in Newa and Linz, and the Beverly Hills Civic Center, in which he

	relied on the Spanish bio-architecture of the City Hall as a mixture of bio-architecture, art deco, and postmodern styles, including spaces, columns, parks, and buildings, in addition toThe most important pioneers of postmodern architecture - The postmodern movement flourished during the eighties of the twentieth century, especially in the works of (Robert Venturi), who is considered one of the prominent theorists of the postmodern era, and among his most important works are (the Gildha W. Building in Philadelphia, the Vanna Venturi House and Fire Station in Columbus, the Trabant Center at the University of Delaware, and the Episcopal Academic Church) and the Campus Center at Princeton University As well as the postmodern theorist, architect Charles, whose most famous works include (Italia Square in Newa and Linz, and the Beverly Hills Civic Center, in which he relied on the Spanish bio-architecture of the City Hall as a mixture of bio-architecture, art deco, and postmodern styles, including spaces, columns, parks, and buildings, in addition to (Haas Business School), In addition to the architect (Philip Johnson), who was previously considered a modernist architect, but during the years (1978 – 1982), he shifted significantly towards the postmodern style, such as (AT Infinity Building - currently called Madison Avenue 550), which added decorative details to its facades to distinguish it from the modernist skyscrapers near it in Ma Tahatar, and in the year (1995) he built a guard wing, based on the principle of postmodernism Near his residence in the (glass house), in which he used gray and red colored concrete, which set a precedent for contemporary sculptural architecture at the beginning of the twenty-first century... Among the most famous Arab architects who participated in changing the form of architecture around the world, most notably (the avant-garde architect Hassan Fathi, Jaafar Touqan, Zaha Hadid, Bernard Khoury, Basil Al-Bayati, Ammar Khammash, and Souad Al-Amiri).
Week 11	Half-semester test, on the outcomes of weeks (7-10).
Week 12	Iraqi architecture during the 1920s and 1930s. Signs of prosperity gradually began to crystallize in the nascent Iraqi state, where the urban and construction movement became active throughout Iraq, especially the capital, Baghdad, with the active contribution of a group of British architects. At the forefront of them was Major James Molsen Wilson (1887-1965), who became Director of Public Works in Baghdad in the year (1921), and who was distinguished by his creative works in modern Baghdad architecture, and in many Iraqi cities, which included the construction of bridges and paving roads, and the construction of office and administrative buildings, schools and hospitals. He also proposed a basic design for the city of Baghdad In the year (1923) he designed (the royal court) in Al-Kasra, and in the year (1924) he designed (the Royal Institute of English Architects Association), and in the year (1926) he designed (Al al-Bayt University), and only the College of Religious Sciences was implemented from it, and he used brick in the construction of his buildings, inspired by its inscriptions and arches from the Abbasid era, such as the Mustansiriya School In the year (1931) he designed the Basra Air Port building (Basra Airport), and in the year (1935) he designed and implemented the (St. George Church) project in Karada Maryam, and in the year (1947) he designed (the international train station in Baghdad), and many other projects. We also refer to the British architect John Brian Cooper (1899-1983), who succeeded the architect Mason in his position in the year (1935), and benefited

	greatly from the works of Salafism (Mason Wilson), and supervised the implementation of the (Royal Cemetery) in Adhamiya in Baghdad (1934-1936), which was designed as an Islamic building with three domes covered with blue tiles and decorated with Abbasid motifs. The architect Brian Cooper also designed: (Engineering School) in the year (1937) in Bab al-Muadham, and in the year (1936) he designed - and implemented - the Institute of Fine Arts in al-Kasra, the Royal Court building (Republican Palace) in Karada Maryam, the National Assembly building (National Council) in Karada Maryam in the years (1953 - 1958), and the Baghdad Bank building (1954).
Week 13	Iraqi architecture during the second half of the twentieth century The fifth decade of the twentieth century was characterized by new architectural ideas (modernist architecture), as they were dominant and popular in all architectural activities, especially after the return of young architects to the homeland, such as Ahmed Mukhtar Ibrahim, who was the first professional and academically qualified architect to return to Iraq in the year (1936), and among his most important works is the Olympic Club building in Adhamiya/Antar Square (1939) Hotel architecture in Baghdad / Judge's Square (1942) and the Iraqi Kingdom's pavilion at the Paris International Fair (1937), followed by architects Hazem Namiq (1936), architects Ja'far Alawi (1941), Medhat Ali Mazloum (1941), architects Abdullah Ihsan Kamel (1942), Dr. Muhammad Makiya (1946), Sami Kirdagh (1939), architects Qahtan Awni (1950), and Hazem Majeed Al-Tak (1952) Qahtan Al-Madfai (1951), and Hisham Mounir (1953). Most of them completed their postgraduate studies in England, and others in the United States of America, where by the fifties of the last century, fertile ground had emerged in the Iraqi economy: the result of the start of oil production, and the maximization of the large financial accumulation that resulted from that, came the creation of what is called (the Reconstruction Council), which became responsible for developing and expanding architectural activities, in addition to the cultural and artistic atmosphere Which was reflected in other fields of creativity such as drawing, sculpture, poetry and literature, such as: Jawad Salim, Faiq Hassan, Atta Jabri, Badr Shaker Al-Sayyab, Abdul Wahab Al-Bayati, Nazik Al-Malaika, and Ghaib Taama Farhan, who created new, unfamiliar creativity.
Week 14	Pioneers of Iraqi architecture during the second half of the twentieth century and major projects. The (Reconstruction Council), which was established in the fifties of the last century, invited a group of international foreign architects to participate in developing designs for major projects, for various jobs, and for all of Iraq. It commissioned the famous Swiss / French architect (Le Corbusier) to design the sports city in Karkh The pioneer of organic architecture (Frank Lloyd Wright) was also commissioned to design the Opera House on Umm al-Khanazir Island, the Dutch architect (Duduk) was commissioned to design the Ministry of Justice building in the proposed civil center of Baghdad, the architect (Alpha Alto) was commissioned to design the Fine Arts Exhibition and Museum, and the Telegraph and Post Directorate in the civil center. The famous Italian architect (Gubonte) was also commissioned to design the Ministry and the Reconstruction Council (currently the Ministry of Planning) The American architect (Waltergruppis) was commissioned to prepare the designs for the University of Baghdad, and the Swiss architect (William Dunkel) was commissioned to design the Central Bank building on Rashid Street. The American Embassy building in Karada Maryam

	(1955) was also designed and implemented by the architect (Jose Louis Sert), the Republican Palace building (formerly the Royal Court), and the National Council building (formerly the National Assembly)It was designed and implemented by the British architect (John Brian Cooper), and also by the Greek architect (Doxiadis) By laying the foundation design for the city of Baghdad... In addition, the urban plan includes many housing plans for all governorates. We also point out the most important Iraqi architects, who distinguished themselves in their architectural creativity during the second half of the twentieth century, most notably the professor of architecture, Dr. Muhammad Makiya, who is considered the founder of the first department of architecture in Iraq - the University of Baghdad in Science (1959) He was distinguished by his practical projects, such as: the Great Archaeological Mosque of the Caliphs, which dates back to the ninth century AD. He participated in the competition for the Great State Mosque in Iraq, the Great State Mosque in Kuwait, the Great Sultan Qaboos Mosque, the Isa Town Gate in Bahrain, and many other works. One of the most prominent Iraqi architects is the architect Rifaat Al-Jaderji, who participated with the visual artist Jawad Salim in implementing the (Freedom Monument) in Tahrir Square in Baghdad He installed the Unknown Soldier in Al-Firdaws Square, and completed dozens of other projects, including the Post and Communications Building on Al-Rashid Street, the Iraqi Federation of Industries Building, the Workers Union Building, and the Iraqi Parliament Building. He also became an advisor in the Baghdad Municipality, and has many publications. We also point to the architect Zaha Hadid, who was distinguished by her unconventional proposals in reconstruction projects, and designed approximately (950 projects) around the world, including the Central Bank in Baghdad and the Technical Complex in Abu DhabiAnd Al Wakrah Stadium in Qatar, as we point to the architect Qahtan Awni, and among his most important works are: (Al-Mustansiriya University Complex) in Baghdad, and the electronic calculator building in Al-Midan Square, and the architect Hisham Munir, who established his office with the architect Nasser Al-Asadi, and implemented many projects inside and outside Iraq, and won first places in many architectural competitions, and is considered one of the founders of the Department of Architecture in the College of Engineering - University of Baghdad, and we also refer to the architect (Qahtan Al-Madfai), who was distinguished by his many projects and is one of the founders of the Iraqi Engineers Syndicate
Week 15	Retrospective nutrition for student complexes, general information for the second semester, and testing.
Week 16	final exam

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	1- The integration of art and architecture throughout history – 2022 – A.Dr.Sabah Fakhr El-Din, M.Hoda Sabah. 2- Principles of Art and Architecture – Sherine Ihsan Sherzad. -3Glimpses from the history of	

	architecture, architectural movements and their pioneers, Sherine Ihsan Sherzad	
Recommended Texts	Basic design principles of architecture\ Leonard S. Parker ,Hijun Yn	
Websites	Arch daily - Arch h2o- Arch space- Dezeen	

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

	Ministry of Higher Education and Scientific Research Al Farabi University college Department of Architectural Engineering	
	Ministry of Higher Education and Scientific Research Al Farabi University - College of Engineering Department of Architecture	

MODULE DESCRIPTOR FORM

Module Information

Module Title	PHYSICS / BUILDING MATERIALS	**Module Delivery**	
Module Type	CORE	☒ **Theory** ☒ **Lecture** **Lab Tutorial** **Practical** ☒ **Seminar**	
Module Code	ARCE1207		
ECTS Credits	4		
SWL (hr/sem)	100		

Module Level	1	**Semester of Delivery**	2
Administering Department	Architecture	**College**	Engineering
Module Leader	Dr. Fathi Fadel Abdul Amir	**e-mail**	fathi.fadel@alfarabiuc.edu.iq
Module Leader's Acad. Title	Dr. Fathi Fadel Abdul Amir	**Module Leader's Qualification**	Ph.D.
Module Tutor	Dr. Fathi Fadel Abdul Amir	**e-mail**	fathi.fadel@alfarabiuc.edu.iq
Peer Reviewer Name	Dr.Bahjat R.shahin	**e-mail**	bahgat-rashad@alfarabiuc.edu.iq
Review Committee Approval	01/11/2024	**Version Number**	1.0

Relation With Other Modules

Prerequisite module	None	**Semester**	
Co-requisites module	Building construction 1	**Semester**	3

Module Aims, Learning Outcomes and Indicative Contents	
Module Aims	Introducing first-year students in the Department of Architecture to the various building materials used locally and internationally, with a focus on local building materials and related construction work (connecting and installing these materials together).
Module Learning Outcomes	1- Identify local and international building materials / identify the factors affecting the quality of materials and methods of selecting them. 2- The student will learn structural concepts / walls, partitions / foundations/floors, ceilings. 3- The student will learn brick construction / types of bricks / uses of bricks in construction operations / bonding to bricks. 4- The student will learn stone construction / types of stones / types of stone walls / joints in connecting stone blocks. 5- The student will learn to build with concrete blocks (block). 6- The student learns about the different bonding materials used to bond blocks and building units 7- Learn how to develop architectural design ideas into a realistic design project that can be implemented on the ground. 8-Developing their ability to develop a design that meets costs.
Indicative Contents	The guidance content includes the following. Local and international building materials, structural concepts / walls, pavements, partitions / foundations / floors, ceilings, bricks / types of bricks / uses of bricks in construction processes / bonding to bricks and bonding to stone / types of stones / types of stone walls / joints in bonding stone blocks, concrete blocks, various bonding materials used in bonding blocks and building units in walls

Learning and Teaching Strategies	
Strategies	- Use practical models and real samples of materials in the classroom so that students can examine and analyze them. This helps to better understand the properties of materials and their application methods. - Field tours and scientific visits: Organizing visits to construction sites or factories that produce building materials so that students can see how these materials are used in reality, which enhances their understanding of theoretical concepts. - Group discussions and brainstorming: Encourage students to participate in group discussions about the different properties of materials and their impact on the environment and sustainability, which promotes critical thinking and deep understanding. - Use presentations and educational videos to illustrate how to analyze and select appropriate materials for different types of engineering projects.

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

Structured SWL (h/sem) Regular student academic load during the semester	63	**Structured SWL (h/w)** Regular student academic load during the week	4
Unstructured SWL (h/sem) Irregular student load during the semester	37	**Unstructured SWL (h/w)** Irregular student academic load during the week	2.47
Total SWL (h/sem) Student academic load during the semester	100		

Module Evaluation

		Time/ Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	4, 15	LO #1, 2, 10 and 11
	Assignments	1	10% (10)	2	LO # 3, 4, 6 and 7
	Seminar	2	20% (20)	7,14	All
Summative assessment	**Midterm Exam**	3 hr	10% (10)	8	LO # 1-7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	**Identifying local and international building materials / identifying factors affecting material quality and methods of selecting them**
Week 2	**Structural Concepts / Walls, Piers and Separators / Foundations / Floors and Ceilings, Assignment 1**
Week 3	**Brickwork / Types of bricks**
Week 4	**Uses of bricks in construction / brick bonding processes, Test 1**
Week 5	**Stone construction / types of stones / types of stone walls / joints in the bonding of stone blocks**
Week 6	**Concrete block construction (block)**
Week 7	**Seminar 1**
Week 8	**Mid-term exam**
Week 9	**Different bonding materials used to bond blocks and building units to walls / definition/characteristics / types.**
Week 10	**Wood / its uses in construction / its structural properties / its disadvantages / wood-bearing walls / timber (framing)**
Week 11	**Iron and steel / their uses in construction / their structural properties / structural systems**
Week 12	**Finishing materials and works / Materials used and exterior and interior wall finishing works / Materials used and exterior and interior floor finishing works**

Week 13	**Heat transfer methods / thermal insulation treatments in buildings / fire resistance, second test**
Week 14	**Seminar 2**
Week 15	**Anti-wet materials / Definition of types of anti-wet materials and their most important features / How to protect buildings from moisture leakage from the ground through foundations and floors, through walls and through ceilings**
Week 16	**final exam**

Learning and Teaching Resources

	TEXT	Available in the Library?
Required Texts	Ernst Neufert, Architects' Data, 2012 Francis D. K. Ching, Steven P. Juroszek, Architecture:Form, Space, and Order, 2004 Building Installation – Atef Muharab Al-Suhairi	Yes
RecommendedTexts		No
Websites	Different architectural websites. -Arch daily : https://www.archdaily.com/-Arch h2o : https://www.arch2o.com/-Arch space : https://thearchspace.com/ -Dezeen : https://www.dezeen.com/-Architizer : https://architizer.com/- : https://www.arcign.com/projects/	

Grading Scheme

Group	Grade	Marks %	Definition
Success Group(50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(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 markof 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 automaticrounding outlined above.