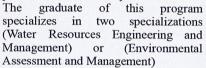
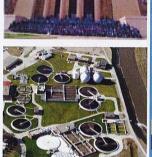
PROGRM AIMS:

Besides civil engineering, the program aims to specialize in the use of engineering, mathematical and scientific methods to design systems that help solve environmental problems, mitigate pollution damage, permanent monitoring and continuous control of air, land and water pollution centers, as well as practical ways to protect health and safety in facilities.





OUTSTANDING LEARNING ENVIROMENT:

Specialized, higher-calibre faculty members and up-to-date teaching facilities; academic advisors. Friendly campus life including various athletic, social and cultural activities with a limited number of accepted students.



PROMISING CAREER OPPORTIUNITIES

Excellent career opportunities in national and international organization





FOR MORE INFORMATIO CONTACT:

Office of Dean:

Tel: 03-5914475 Fax: 03-5921853

Email: eng-dean@alexu.edu.eg

Vice Dean for Education and Student Affairs: Tel: 03-5921854

Fax: 03-5907363

Email: eng-vds@alexu.edu.eg

STUDY PLAN

Level 0 Fall Semester Spring Semester Mathematics-1 Mathematics-2 Mechanics-1 Mechanics-2 Physics-1 Physics-2 **Engineering Drawing-1 Engineering Drawing-2 Engineering Chemistry Principles of Manufacting Engineering Computers & Programming English Language** History of Engineering & Technology

Fall Semester	Spring Semester		
Structural Analysis -1	Environmental Aquatic Chemistry		
Construction Surveying	Structural Analysis -2		
Environmental Organic Chemistry	Differential Equations		
Multi-variable Calculus	Environmental Microbiology		
Geology	Engineering Material and Stress Analysis		
Construction Engineering Drawings	Technical Writing		

Level 2

Fall Semester	Spring Semester
Hydraulics for Civil Engineering	Project Management
Fundamentals of Corrosion	Fundamentals of Hydrology
Pollution Prevention and Control	Numerical Methods
Probability & Statistics	Thermodynamics for Environmental Engineers
Design of Reinforced Concrete Structures-I	Mass Balance
Transportation Engineering and Urban	
Planning	Soil Mechanics

Level 3

Fall Semester	Spring Semester	
Ground Water Hydrology	Entrepreneurship	
Unit Operation for Environmental Engineers	Kinetics & Reactor Design	
Fundamentals of Modelling and Simulation	Desgin of Foundations and Retaining Structures	
Principles of Membrane Technology	Contemporary Issuses	
Design of Reinforced Concrete Structures-II	Elective-1	
Design of Steel Structures	Elective-2	
L	evel 4	

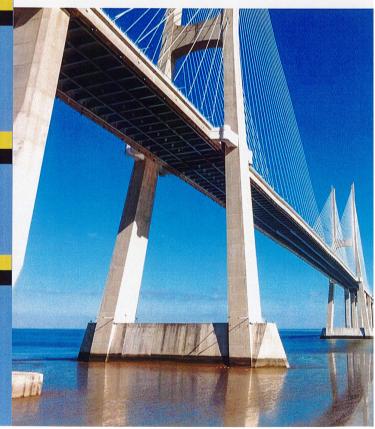
L	ever 4
Fall Semester	Spring Semester
ocess Design	Law and Engineering Ethics
& Wastewater Treatment Engineering	Process Control & Instrumentation
/e-3	Elective-5
/e-4	Water Desalination
acts, Quantities and Specifications	Critical Thinking
al Culture	Graduation Project





B.SC. IN CIVIL AND ENVIRONMENTAL ENGINEERING

Undergraduate specialized program for prospective students applying for admission to the Faculty of Engineering Alexandria University



- 1. Admission Requirements:
- Students must hold the Egyptian high school certificate (Thanaweya Amma) Mathematics section or an equivalent certificate accepted by the Supreme Council of Universities.
- Students are nominated for admission to the Faculty of Engineering through the university admission coordination office according to the rules of the Supreme Council of Universities.
- Students must fulfill all the program admission requirements and comply with the rules of the Faculty of Engineering.
- 2. Education system:
- English is the language of study. The credit hour (CH) system is adopted. All courses are assigned credit values.
- The academic year is basically divided into two semesters: Fall and Spring. Each semester runs for at least fourteen weeks. An additional Summer term is also offered and runs for at least seven weeks.
- Summer training is a degree requirement in all undergraduate programs of the Faculty of Engineering. This extends over a period of 60 days excluding weekends and official holidays. It must be undertaken in companies or establishments approved by the Faculty of Engineering. Students' performance is evaluated at the end of the training period by the company where training was undergone and by the program coordinator.
- Some selected courses may be offered in the Summer term. Students can register in no more than two courses in the Summer term according to the by-laws of the Faculty of Engineering, and without conflict with their summer training.
- To obtain the B.Sc. degree, undergraduates in all programs of the Faculty of Engineering are required to pass successfully.
- Successful students may terminate the full requirements in 10 semesters. Programs are designed to allow students to complete their course credit hour requirements within the 10 semesters.

- The flexibility of the system, however, allows students to increase or decrease their work load i.e. credit hours may extend from a minimum of 12 CHs to a maximum of 21 CHs.
- 3. Academic Supervision:

Each student is assigned an academic advisor to help with the registration procedure and provide guidance concerning the student's program of study.

- 4. Registration Procedure: A. Normal Registration: Students are required to register at the beginning of each semester during the specified registration period. Students select courses after consulting the academic advisor who must approve their work load before registration. The registration office provides students with the by-laws as well as a list of procedures to be followed., B. Late Registration: : Students are allowed to register one week after the registration deadline, According to the approval Calendar. C. Adding and Dropping Courses: Students may add or drop a course, or more, during the period announced by the registration office provided that the student's work load remains within the acceptable limits.
- 5. Withdrawal:Students may withdraw from an academic semester during the allowed period announced by the registration office.
- 6. Absence Policy: If the absence of the student exceeds 25% of the total classes in any course throughout the semester (with or without excuse) he/she must drop the course. Otherwise, the student acquires a grade of F in the course.
- 7. Examinations and Grading System:
- A. Examination:
- 1. The final grade a student obtains in a course is usually based on the grades of the two examinations held during the semester in the fifth and ninth weeks in addition to the grade of the final examination at the end of the semester. Such grades are distributed as follows: at most 60% for the two semester evaluation exams at least 40% for the final examination
- 2. A minimum of 60% in the final grade is required for the student to pass the course. B. Grading System: The Grade Point Average (GPA) of the student is based on a

point ladder of 4.0 points. Grades are assigned according to the following table:

СН	l System	
Points	Letter Grade	Percentage
4.00	A⁺	From 97 to 100%
4.00	Α	From 93 to <97%
3.70	A ⁻	From 89 to <93%
3.30	В*	From 84 to <89%
3.00	В	From 80 to <84%
2.70	B.	From 76 to <80%
2.30	C,	From 73 to <76%
2.00	С	From 70 to <73%
1.70	C	From 67 to <70%
1.30	D ⁺	From 64 to <67%
1.00	D	From 60to <64%
0.00	F	From 0 to <60%

- (E) is given to students absent in the final examination who present an accepted excuse. While (Abs) is given to those who are absent during the final examination without excuse or with a non-approved excuse.
- 8. GPA: The current GPA of a student (for a given semester) and the cumulative GPA are calculated as shown below:

Course	CHs	Grade	Grade Point	Quality Point = CHs * Grade Point
1	3	- A	4.00	12.00
2	3	В	3.00	9.00
3	4	D	1.00	4.00
4	2	С	2.00	4.00
5	2	E		
6	4	F	0.00	0.00
	16			29.00

- 9. Graduation Requirements: Students are required to pass all courses offered in the curriculum with grade (D) or higher.
- 10. Repetition of courses: A student must repeat courses in which he/she has obtained (F), (E) or (Abs). The maximum grade for a repeated course in which the student previously obtained an (F) or (Abs) grade is (B+).

PROGRAM AIMS

To apply knowledge of computing, mathematics, physics and logical skills. Appropriate to the computer and communications engineering areas.



To know the technology required to design, build, operate and maintain computer and communication systems.

To analyze a problem, identify and define the computing requirements.



Appropriate to Problem solution, use current advanced techniques, skills, and tools necessary for computer and communication systems. To be able to understand environmental, economics and community Impacts of development of computer and communication systems.



OUTSTANDING LEARNING ENVIRONMENT

Specialized, higher-caliber faculty members and up-to-date teaching facilities; academic advisors. Friendly campus life including various athletic, social and cultural activities with a limited number of accepted students.



PROMISING CAREER OPPORTIUNITIES

Excellent career opportunities in national and international organizations.



FOR MORE INFORMATION CONTACT:

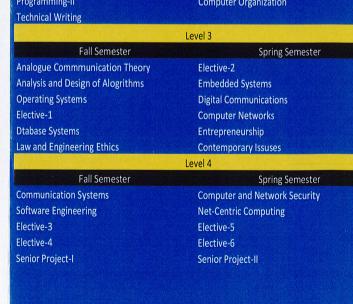
Office of Dean:

Tel: 03-5914475 Fax: 03-5921853

Vice Dean for Education and Student Affairs:

Tel: 03-5921854 Fax: 03-5907363

STUDY PLAN		
Jor.	1.12	
Fall Semester	Level 0	
Mathematics-1	Spring Semester Mathematics-2	
Mechanics-1	Mechanics-2	
Physics-1	Physics-2	
Engineering Drawing-1	Engineering Drawing-2	
Engineering Chemistry	Principles of Manufacting Engineering	
Computers & Programming	English Language	
compaction a riogianining	History of Engineering & Technology	
	Level 1	
Fall Semester	Spring Semester	
Linear Algebra	Differential Equations	
Programming-I	Data Structure-I	
Modern Physics	Analysis of Electrical Circuits	
Electric Circuits	Digital Logic Circuits-I	
Discrete Structures for Computing	Probability & Statistics	
Technical Writing	Critical Thinking	
	Level 2	4
Fall Semester	Spring Semester	
Control Systems	Data Structure-II	
Signal and Systems	Digital Signal Processing	
Electronic Circuit Analysis	Systems Programming	
Digital Logic Circuits-II	Microprocessors Systems	
Programming-II	Computer Organization	
Technical Writing		
	Level 3	7
Fall Semester	Spring Semester	
Analogue Commmunication Theory	Elective-2	
Analysis and Design of Alogrithms	Embedded Systems	
Operating Systems	Digital Communications	
Elective-1	Computer Networks	

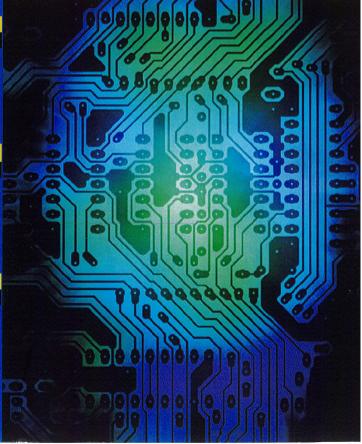






B.SC. IN COMPUTER AND COMMUNI-CATION ENGINEERING

Undergraduate specialized program for prospective students applying for admission to the Faculty of Engineering **Alexandria University**



- 1. Admission Requirements:
- Students must hold the Egyptian high school certificate (Thanaweya Amma) Mathematics section or an equivalent certificate accepted by the Supreme Council of Universities.
- Students are nominated for admission to the Faculty of Engineering through the university admission coordination office according to the rules of the Supreme Council of Universities.
- Students must fulfill all the program admission requirements and comply with the rules of the Faculty of Engineering.
- 2. Education system:
- English is the language of study. The credit hour (CH) system is adopted. All courses are assigned credit values.
- The academic year is basically divided into two semesters: Fall and Spring. Each semester runs for at least fourteen weeks. An additional Summer term is also offered and runs for at least seven weeks.
- Summer training is a degree requirement in all undergraduate programs of the Faculty of Engineering. This extends over a period of 60 days excluding weekends and official holidays. It must be undertaken in companies or establishments approved by the Faculty of Engineering. Students' performance is evaluated at the end of the training period by the company where training was undergone and by the program coordinator.
- Some selected courses may be offered in the Summer term. Students can register in no more than two courses in the Summer term according to the by-laws of the Faculty of Engineering, and without conflict with their summer training.
- To obtain the B.Sc. degree, undergraduates in all programs of the Faculty of Engineering are required to pass successfully.
- Successful students may terminate the full requirements in 10 semesters. Programs are designed to allow students to complete their course credit hour requirements within the 10 semesters.

- The flexibility of the system, however, allows students to increase or decrease their work load i.e. credit hours may extend from a minimum of 12 CHs to a maximum of 21 CHs
- 3. Academic Supervision:

Each student is assigned an academic advisor to help with the registration procedure and provide guidance concerning the student's program of study.

- 4. Registration Procedure: A. Normal Registration: Students are required to register at the beginning of each semester during the specified registration period. Students select courses after consulting the academic advisor who must approve their work load before registration. The registration office provides students with the by-laws as well as a list of procedures to be followed., B. Late Registration: : Students are allowed to register one week after the registration deadline, According to the approval Calendar. C. Adding and Dropping Courses: Students may add or drop a course, or more, during the period announced by the registration office provided that the student's work load remains within the acceptable limits.
- 5. Withdrawal:Students may withdraw from an academic semester during the allowed period announced by the registration office.
- 6. Absence Policy: If the absence of the student exceeds 25% of the total classes in any course throughout the semester (with or without excuse) he/she must drop the course. Otherwise, the student acquires a grade of F in the course.
- 7. Examinations and Grading System:
- A. Examination:
- 1. The final grade a student obtains in a course is usually based on the grades of the two examinations held during the semester in the fifth and ninth weeks in addition to the grade of the final examination at the end of the semester. Such grades are distributed as follows: at most 60% for the two semester evaluation exams at least 40% for the final examination
- 2. A minimum of 60% in the final grade is required for the student to pass the course. B. Grading System: The Grade Point Average (GPA) of the student is based on a

point ladder of 4.0 points. Grades are assigned according to the following table:

CI	H System	
Points	Letter Grade	Percentage
4.00	A*	From 97 to 100%
4.00	Α	From 93 to <97%
3.70	A.	From 89 to <93%
3.30	B+	From 84 to <89%
3.00	В	From 80 to <84%
2.70	B.	From 76 to <80%
2.30	C+	From 73 to <76%
2.00	С	From 70 to <73%
1.70	C	From 67 to <70%
1.30	D+	From 64 to <67%
1.00	D	From 60to < 64%
0.00	F	From 0 to <60%

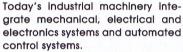
- (E) is given to students absent in the final examination who present an accepted excuse. While (Abs) is given to those who are absent during the final examination without excuse or with a non-approved excuse.
- 8. GPA: The current GPA of a student (for a given semester) and the cumulative GPA are calculated as shown below:

Course	CHs	Grade	Grade Point	Quality Point = CHs * Grade Point
1	3	Α	4.00	12.00
2	3	В	3.00	9.00
3	4	D	1.00	4.00
4	2	С	2.00	4.00
5	2	E		
6	4	F	0.00	0.00
	16			29.00

- 9. Graduation Requirements: Students are required to pass all courses offered in the curriculum with grade (D) or higher.
- 10. Repetition of courses: A student must repeat courses in which he/she has obtained (F), (E) or (Abs). The maximum grade for a repeated course in which the student previously obtained an (F) or (Abs) grade is (B+).

PROGRAM AIMS

Prepare an Electro-Mechanical Engineers equipped with the skills and knowledge to design, install and maintain a wide range of equipment in the modern industrial world.





OUTSTANDING LEARNING ENVIRONMENT

Specialized, higher-caliber faculty members and up-to-date teaching facilities; academic advisors. Friendly campus life including various athletic, social and cultural activities with a limited number of accepted students.

PROMISING CAREER OPPORTIUNITIES

Excellent career opportunities in national and international organizations.







FOR MORE INFORMATION CONTACT:

Dean - Faculty of Engineering

Tel: 03 597-4475 Fax: 03 592-1853 e-mail; eng-dean@alexu.edu.eg Vice Dean for Education and Student Affairs **Faculty of Engineering** Tel: 03 592-1854 Fax: 03 590-7363 e-mail: eng-vds@alexu.edu.eg

STUDY PLAN

FIRST YEAR

Fall Semester

- Mathematics I Mechanics I
- Engineering Graphics I
- Engineering Chemistry
- Physics I
- Human Rights
- English language

- Mathematics II
- Mechanics II
- Engineering graphics II
- Production Engineering
- Computer Programming
- Physics II
- History of Engineering Sciences

SECOND YEAR

Fall Semester

- Mathematics III
- Machine Drawing
- Thermodynamics I
- Properties and Testing of **Electro Mechanical Materials**
- Electric Circuits
- Electrical Measurements and instrumentation
- Technical Writing

Spring Semester

Spring Semester

- Strength of Materials I
- Logic Circuits and Microprocessors
- Fluid Mechanics I
- Math IV
- Analysis and Simulation of **Electric Circuits**
- Electronic Devices and Circuits
- Engineering Economics
- **THIRD YEAR**

Fall Semester

Spring Semester

- Fluid Mechanics II
- Mechanics of Machinery
- Heat Transfer
- Electrical Power Systems
- Design of Mechanical Systems
- Project Management

- Thermodynamics II
- Mechanical Vibrations
- Industrial Electronics
- Electrical Machines
- Theory of Combustion
- Humanities

FOURTH YEAR

Fall Semester

Spring Semester

- Thermal Power Plants
- Fluid Machinery
- Automatic Control of **Electromechanical Systems**
- Measuring Systems and **Data Acquisition**
- Elective 1
- Law & Engineering Ethics

- Internal Combustion Engines
- Protection of Electromechanical **Systems**
- Electromechanical Drives
- Elective II
- Elective III
- Humanities

FIFTH YEAR

Fall Semester

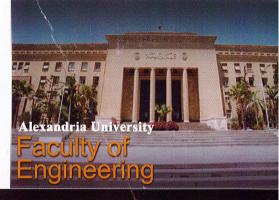
- Safety of Electromechanical Systems
- Solid State Drives
- Elective IV
- Fluid Power Systems
- Humanities
- Project I

Computer Applications in Industry

Spring Semester

- Elective V
- Refrigeration and Air Conditioning
- Elective VI
- Humanities
- Project II





B.SC. IN **ELECTROMECHANICAL** ENGINEERING

Undergraduate specialized program for prospective students applying for admission to the Faculty of Engineering **Alexandria University**



- 1. Admission Requirements:
- Students must hold the Egyptian high school certificate (Thanaweya Amma) Mathematics section or an equivalent certificate accepted by the Supreme Council of Universities.
- Students are nominated for admission to the Faculty of Engineering through the university admission coordination office according to the rules of the Supreme Council of Universities.
- Students must fulfill all the program admission requirements and comply with the rules of the Faculty of Engineering.

Education system:

- English is the language of study. The credit hour (CH) system is adopted. All courses are assigned a credit hour value. Generally each lecture hour per week is equivalent to one CH. Two hours of (Tut/lab) sessions weekly are equivalent to one CH, unless otherwise specified.
- The academic year is basically divided into two semesters: Fall and Spring. Each semester runs for at least fourteen weeks. An additional Summer term is also offered and runs for at least seven weeks.
- Summer training is a degree requirement in all undergraduate programs of the Faculty of Engineering. This extends over a period of 60 days excluding weekends and official holidays. It must be undertaken in companies or establishments approved by the Faculty of Engineering. Students' performance is evaluated at the end of the training period by the company where training was undergone and by the program coordinator.
- Some selected courses may be offered in the Summer term. Students can register in no more than two courses in the Summer term according to the by-laws of the Faculty of Engineering, and without conflict with their summer training.
- To obtain the B.Sc. degree, undergraduates in all programs of the Faculty of Engineering are required to pass successfully at least 178credit hours.
- Successful students may terminate the full requirements in 10 semesters. Programs are designed to allow students to complete their course credit hour requirements within the 10 semesters.

- The flexibility of the system, however, allows students to increase or decrease their work load i.e. credit hours may extend from a minimum of 12 CHs to a maximum of 21 CHs.
- 3. Academic Supervision:

Each student is assigned an academic advisor to help with the registration procedure and provide guidance concerning the student's program of study.

- 4. Registration Procedure: A. Normal Registration: Students are required to register at the beginning of each semester during the specified registration period. Students select courses after consulting the academic advisor who must approve their work load before registration. The registration office provides students with the by-laws as well as a list of procedures to be followed., B. Late Registration: : Students are allowed to register one week after the registration deadline, According to the approval Calendar . C. Adding and Dropping Courses: Students may add or drop a course, or more, during the period announced by the registration office provided that the student's work load remains within the acceptable limits.
- 5. Withdrawal:Students may withdraw from an academic semester during the allowed period announced by the registration office.
- 6. Absence Policy: If the absence of the student exceeds 25% of the total classes in any course throughout the semester (with or without excuse) he/she must drop the course. Otherwise, the student acquires a grade of F in the course.
- 7. Examinations and Grading System:
- A Examination
- 1. The final grade a student obtains in a course is usually based on the grades of the two examinations held during the semester in the fifth and ninth weeks in addition to the grade of the final examination at the end of the semester. Such grades are distributed as follows: at most 60% for the two semester evaluation exams at least 40% for the final examination
- 2. A minimum of 60% in the final grade is required for the student to pass the course. B. Grading System: The Grade Point Average (GPA) of the student is based on a

point ladder of 4.0 points. Grades are assigned according to the following table:

CI	H System	
Points	Letter Grade	Percentage
4.00	A ⁺	From 97 to 100%
4.00	Α	From 93 to <97%
3.70	A ⁻	From 89 to <93%
3.30	B*	From 84 to <89%
3.00	В	From 80 to <84%
2.70	B.	From 76 to <80%
2.30	C+	From 73 to <76%
2.00	С	From 70 to <73%
1.70	C-	From 67 to <70%
1.30	D+	From 64 to <67%
1.00	D	From 60to <64%
0.00	F	From 0 to <60%

- (E) is given to students absent in the final examination who present an accepted excuse. While (Abs) is given to those who are absent during the final examination without excuse or with a non-approved excuse.
- 8. GPA: The current GPA of a student (for a given semester) and the cumulative GPA are calculated as shown below:

Course	CHs	Grade	Grade Point	Quality Point = CHs * Grade Point
1	3	Α	4.00	12.00
2	3	В	3.00	9.00
3	4	D	1.00	4.00
4	2	С	2.00	4.00
5	2	E		
6	4	F	0.00	0.00
	16			29.00

- 9. Graduation Requirements: Students are required to pass all courses offered in the curriculum with grade (D) or higher.
- 10. Repetition of courses: A student must repeat courses in which he/she has obtained (F), (E) or (Abs). The maximum grade for a repeated course in which the student previously obtained an (F) or (E) or (Abs) grade is (B+).

PROGRAM AIMS

Prepare graduates capable of designing various projects architecturally and structurally - and to prepare graduates to take the lead in the communities that need to know the methods and techniques in modern construction with considering architectural aspects.

Maximize the ability of graduates to absorb the basic sciences in various fields (engineering construction and architectural, electrical, mechanical and project management) as well as the extraction and analysis of results from scientific work.

Provide graduate with scientific basis, which enables him to successfully complete his higher education and research in the field of architecture and construction.

Train graduates to work in a team of different disciplines and to analyze and solve engineering problems as well as the acquisition of management skills necessary to lead teams in the implementation of projects.

Increase graduate awareness of the impact of engineering solutions on the environment and society.

PROMISING CAREER OPPORTIUNITIES

Excellent career opportunities in national and international organizations.











FOR MORE INFORMATION CONTACT:

Dean - Faculty of Engineering

Tel: 03 597-4475 Fax: 03 592-1853 e-mail; eng-dean@alexu.edu.eg Vice Dean for Education and Student Affairs -**Faculty of Engineering**

Tel: 03 592-1854 Fax: 03 590-7363 e-mail: eng-vds@alexu.edu.eg

STUDY PLAN

FIRST YEAR

Fall Semester

- Mathematics-1
- Engineering Mechanics-1
- Engineering Graphics-1
- Engineering Chemistry
- Physics-1
- English Language
- Human Rights

Spring Semester

- Mathematics-2
- Engineering Mechanics-2
- Engineering Graphics-2
- Computer Programming
- Physics-2
- Production Engineering
- History of Engineering Sciences

SECOND YEAR

Fall Semester

- Structural Analysis-1
- Construction Surveying
- Mathematics-3
- History and theory of Architecture-1
- Technical Writing Architectural Drafting
- Building Technology

Spring Semester

- Engineering Material and Stress Analysis
- Mathematics-4
- Construction Materials-1
- Engineering Economics
- Visual Design
- Environment-1 (Climate and **Environment**)
- Architectural Design Fundamentals

THIRD YEAR

Fall Semester

- Structural Analysis-2
- Design Studio-1
- Project Management
- Hydraulics for Civil Engineers
- Transportation Engineering & Urban planning
- Construction Management-1
- Construction Engineering Drawings

Spring Semester

- Design Studio-2
- History and Theory of Architecture-2
- Elective Course-1
- Soil Mechanics
- Elective Course-2
- Tender-1 (Cost Estimation &Control)
- Urban Design and Landscape

FOURTH YEAR

Fall Semester

Spring Semester

- Design of R.C. Structures-1
- Environment-2 (Environmental & Sanitary Engineering)
- Methods & Equipment for Construction-1
- Law and Engineering Ethics
- Design of Metallic Structures-1
- Design studio-3

- Theory of Architecture-1
- Design of Foundations &
- Retaining Structures
- Design of R.C. Structures-2 Environment-3 (Fund, of Mech.
- & Elec. System) Computer Applications
- in Construction Eng. • Elective Course-3

FIFTH YEAR

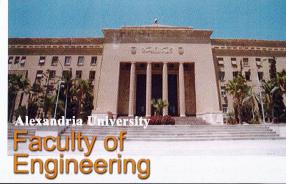
Fall Semester

Spring Semester

- Elective Course-4
- Theory of Architecture-2
- Elective Course-5
- Elective Course-6
- Elective Course-7
- Elective Course-11 • Project-1

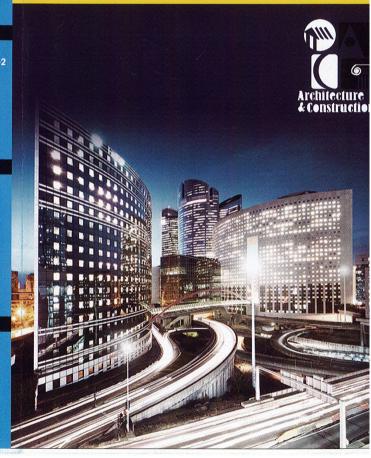
- Methods & Equipment for Construction-2
- Quality Control, and Repair of
- Structures
- Elective Course-8 • Elective Course-9
- Elective Course-10
- Project-2





B.SC. IN ARCHITECTURE AND CONSTRUCTION ENGINEERING

Undergraduate specialized program for prospective students applying for admission to the Faculty of Engineering **Alexandria University**



- 1. Admission Requirements:
- Students must hold the Egyptian high school certificate (Thanaweya Amma) Mathematics section or an equivalent certificate accepted by the Supreme Council of Universities.
- Students are nominated for admission to the Faculty of Engineering through the university admission coordination office according to the rules of the Supreme Council of Universities.
- Students must fulfill all the program admission requirements and comply with the rules of the Faculty of Engineering.
- 2. Education system:
- English is the language of study. The credit hour (CH) system is adopted. All courses are assigned a credit hour value. Generally each lecture hour per week is equivalent to one CH. Two hours of (Tut/lab) sessions weekly are equivalent to one CH, unless otherwise specified.
- The academic year is basically divided into two semesters: Fall and Spring. Each semester runs for at least fourteen weeks. An additional Summer term is also offered and runs for at least seven weeks.
- Summer training is a degree requirement in all undergraduate programs of the Faculty of Engineering. This extends over a period of 60 days excluding weekends and official holidays. It must be undertaken in companies or establishments approved by the Faculty of Engineering. Students' performance is evaluated at the end of the training period by the company where training was undergone and by the program coordinator.
- Some selected courses may be offered in the Summer term. Students can register in no more than two courses in the Summer term according to the by-laws of the Faculty of Engineering, and without conflict with their summer training.
- To obtain the B.Sc. degree, undergraduates in all programs of the Faculty of Engineering are required to pass successfully at least 178credit hours.
- Successful students may terminate the full requirements in 10 semesters. Programs are designed to allow students to complete their course credit hour requirements within the 10 semesters.

- The flexibility of the system, however, allows students to increase or decrease their work load i.e. credit hours may extend from a minimum of 12 CHs to a maximum of 21 CHs.
- 3. Academic Supervision:

Each student is assigned an academic advisor to help with the registration procedure and provide guidance concerning the student's program of study.

- 4. Registration Procedure: A. Normal Registration: Students are required to register at the beginning of each semester during the specified registration period. Students select courses after consulting the academic advisor who must approve their work load before registration. The registration office provides students with the by-laws as well as a list of procedures to be followed., B. Late Registration: : Students are allowed to register one week after the registration deadline, According to the approval Calendar. C. Adding and Dropping Courses: Students may add or drop a course, or more, during the period announced by the registration office provided that the student's work load remains within the acceptable limits.
- 5. Withdrawal:Students may withdraw from an academic semester during the allowed period announced by the registration office.
- 6. Absence Policy: If the absence of the student exceeds 25% of the total classes in any course throughout the semester (with or without excuse) he/she must drop the course. Otherwise, the student acquires a grade of F in the course.
- 7. Examinations and Grading System:
- A. Examination:
- 1. The final grade a student obtains in a course is usually based on the grades of the two examinations held during the semester in the fifth and ninth weeks in addition to the grade of the final examination at the end of the semester. Such grades are distributed as follows: at most 60% for the two semester evaluation exams at least 40% for the final examination
- 2. A minimum of 60% in the final grade is required for the student to pass the course. B. Grading System: The Grade Point Average (GPA) of the student is based on a

point ladder of 4.0 points. Grades are assigned according to the following table:

СН	System	
Points	Letter Grade	Percentage
4.00	A⁺	From 97 to 100%
4.00	Α	From 93 to <97%
3.70	A ⁻	From 89 to <93%
3.30	B⁺	From 84 to <89%
3.00	В	From 80 to <84%
2.70	B.	From 76 to <80%
2.30	C+	From 73 to <76%
2.00	С	From 70 to <73%
1.70	Ċ	From 67 to <70%
1.30	D⁺	From 64 to <67%
1.00	D	From 60to <64%
0.00	F	From 0 to <60%

- (E) is given to students absent in the final examination who present an accepted excuse. While (Abs) is given to those who are absent during the final examination without excuse or with a non-approved excuse.
- 8. GPA: The current GPA of a student (for a given semester) and the cumulative GPA are calculated as shown below:

Course	CHs	Grade	Grade	Quality Point =
Course	Cita	Grade	Point	CHs * Grade Point
1	3	Α	4.00	12.00
2	3	В	3.00	9.00
3	4	D	1.00	4.00
4	2	С	2.00	4.00
5	2	E		
6	4	F	0.00	0.00
	16			29.00

- 9. Graduation Requirements: Students are required to pass all courses offered in the curriculum with grade (D) or higher.
- 10. Repetition of courses: A student must repeat courses in which he/she has obtained (F), (E) or (Abs). The maximum grade for a repeated course in which the student previously obtained an (F) or (E) or (Abs) grade is (B+).

PROGRAM AIMS

Graduation of a new generation of professional engineers able to:

Use scientific and engineering principles to conduct experiments in the field of specialization.

Make necessary calculations and use specialized computer programs in the field.

Deal with the problems of the design and operation of offshore platforms, whether fixed or mobile, as well as the design and planning problems of coastal structures.

Work efficiently in the areas of exploration, drilling and production of oil and natural gas from the sea.

Design and plan harbours and shore protection.

OUTSTANDING LEARNING ENVIRONMENT

Specialized, higher-callber faculty members and up-to-date teaching facilities; academic advisors. Friendly campus life including various athletic, social and cultural activities with a limited number of accepted students.

PROMISING CAREER OPPORTIUNITIES

Excellent career opportunities in national and international organizations.



FOR MORE INFORMATION CONTACT:

Dean - Faculty of Engineering

Tel: 03 597-4475 Fax: 03 592-1853 e-mail: eng-dean@alexu.edu.eg Vice Dean for Education and Student Affairs -Faculty of Engineering Tel: 03 592-1854

Fax: 03 590-7363 e-mail: eng-vds@alexu.edu.eg

STUDY PLAN

FIRST YEAR

Fall Semester

- Mathematics I
- Mechanics I
- Engineering Graphics
- Engineering Chemistry
- Physics I
- English Language
- Human Rights

Spring Semester

- Mathematics II
- Mechanics II
- Production Engineering
- Computer Programming
- Physics II
- History of Engineering Sciences

SECOND YEAR

Fall Semester

- Mathematics III
- Fluid Mechanics I
- Buoyancy and Stability
- Civil and Marine Drawing
- Principles of Material Science & Engineering
- Technical Writing

Spring Semester

- Mathematics IV
- Thermodynamics I
- Marine Hydraulics
- Marine Structural Analysis I
- Advanced Programming & Applications
- Engineering Economics

THIRD YEAR

Fall Semester

- Probability and Statistics for Engineers
- Marine Foundations
- Water Wave Theory
- Marine Hydrodynamics I
- Electric Circuits
- Project Management

Spring Semester

- Harbor Planning & Coastal Structures
- Marine Structural Analysis II
- Marine Machinery & Systems
- Intro. to Oceanography
- Elective Course (1)
- Elective Course (2)

FOURTH YEAR

Fall Semester

- Advanced Coastal Struct.I
- Sediment Transport & Littoral Processes
- Measurements and Control Systems
- Intro. to Offshore Eng.
- Elective course (3)
- Law and Eng.Ethics

Spring Semester

- Marine Hydrodynamics II
- Construction of Marine & Offshore Structures
- Design of Reinforced Concrete
 &Steel Structures
- Physical Modeling
- Elective Course (4)
- Elective Course (5)

FIFTH YEAR

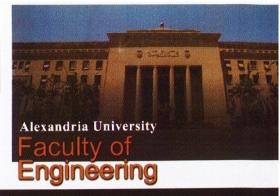
Fall Semester

- Offshore Oil& Gas Production
- Design of Offshore Platforms
- Computer Applications in the Marine Field
- Elective Course (6)
- Project I
- Elective Course (7)

Spring Semester

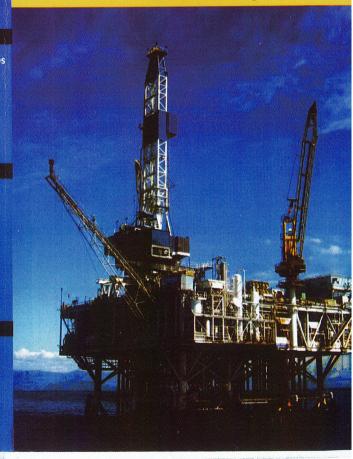
- Surveying in the Marine Field
- Marine Production Technology
- Elective Course (8)
- Elective Course (9)
- Project II
- Elective Course (10)





B.SC. IN OFFSHORE AND COASTAL ENGINEERING

New undergraduate specialized program for prospective students applying for admission to the Faculty of Engineer Alexandria University



- 1. Admission Requirements:
- Students must hold the Egyptian high school certificate (Thanaweya Amma) Mathematics section or an equivalent certificate accepted by the Supreme Council of Universities.
- Students are nominated for admission to the Faculty of Engineering through the university admission coordination office according to the rules of the Supreme Council of Universities.
- Students must fulfill all the program admission requirements and comply with the rules of the Faculty of Engineering.
- 2. Education system:
- English is the language of study. The credit hour (CH) system is adopted. All courses are assigned a credit hour value. Generally each lecture hour per week is equivalent to one CH. Two hours of (Tut/lab) sessions weekly are equivalent to one CH, unless otherwise specified.
- The academic year is basically divided into two semesters: Fall and Spring. Each semester runs for at least fourteen weeks. An additional Summer term is also offered and runs for at least seven weeks.
- Summer training is a degree requirement in all undergraduate programs of the Faculty of Engineering. This extends over a period of 60 days excluding weekends and official holidays. It must be undertaken in companies or establishments approved by the Faculty of Engineering. Students' performance is evaluated at the end of the training period by the company where training was undergone and by the program coordinator.
- Some selected courses may be offered in the Summer term. Students can register in no more than two courses in the Summer term according to the by-laws of the Faculty of Engineering, and without conflict with their summer training.
- To obtain the B.Sc. degree, undergraduates in all programs of the Faculty of Engineering are required to pass successfully at least 178credit hours.
- Successful students may terminate the full requirements in 10 semesters. Programs are designed to allow students to complete their course credit hour requirements within the 10 semesters.

- The flexibility of the system, however, allows students to increase or decrease their work load i.e. credit hours may extend from a minimum of 12 CHs to a maximum of 21 CHs.
- 3. Academic Supervision:

Each student is assigned an academic advisor to help with the registration procedure and provide guidance concerning the student's program of study.

- 4. Registration Procedure: A. Normal Registration: Students are required to register at the beginning of each semester during the specified registration period. Students select courses after consulting the academic advisor who must approve their work load before registration. The registration office provides students with the by-laws as well as a list of procedures to be followed., B. Late Registration: : Students are allowed to register one week after the registration deadline, According to the approval Calendar. C. Adding and Dropping Courses: Students may add or drop a course, or more, during the period announced by the registration office provided that the student's work load remains within the acceptable limits.
- Withdrawal:Students may withdraw from an academic semester during the allowed period announced by the registration office.
- 6. Absence Policy: If the absence of the student exceeds 25% of the total classes in any course throughout the semester (with or without excuse) he/she must drop the course. Otherwise, the student acquires a grade of F in the course.
- 7. Examinations and Grading System:
- A. Examination:
- 1. The final grade a student obtains in a course is usually based on the grades of the two examinations held during the semester in the fifth and ninth weeks in addition to the grade of the final examination at the end of the semester. Such grades are distributed as follows: at most 60% for the two semester evaluation exams at least 40% for the final examination
- 2. A minimum of 60% in the final grade is required for the student to pass the course. B. Grading System: The Grade Point Average (GPA) of the student is based on a

point ladder of 4.0 points. Grades are assigned according to the following table:

Cl	l System		
Points	Letter Grade	Percentage	
4.00	A ⁺	From 97 to 100%	
4.00	Α	From 93 to <97%	
3.70	A ⁻	From 89 to <93%	
3.30	B+	From 84 to <89%	
3.00	В	From 80 to <84%	
2.70	B.	From 76 to <80%	
2.30	C+	From 73 to <76%	
2.00	С	From 70 to <73%	
1.70	C C	From 67 to <70%	
1.30	D+	From 64 to <67%	
1.00	D	From 60to <64%	
0.00	F	From 0 to <60%	

- (E) is given to students absent in the final examination who present an accepted excuse. While (Abs) is given to those who are absent during the final examination without excuse or with a non-approved excuse.
- 8. GPA: The current GPA of a student (for a given semester) and the cumulative GPA are calculated as shown below:

Course	CHs	Grade	Grade Point	Quality Point = CHs * Grade Point
1	3	Α	4.00	12.00
2	3	В	3.00	9.00
3	4	D	1.00	4.00
4	2	С	2.00	4.00
5	2	E		
6	4	F	0.00	0.00
	16			29.00

- 9. Graduation Requirements: Students are required to pass all courses offered in the curriculum with grade (D) or higher.
- 10. Repetition of courses: A student must repeat courses in which he/she has obtained (F), (E) or (Abs). The maximum grade for a repeated course in which the student previously obtained an (F) or (E) or (Abs) grade is (B+).

PROGRAM AIMS

The program provides in-depth knowledge and understanding, of both the upstream and downstream aspects of the natural gas and petrochemical industries to the students through a study opportunity relying on research and practice, and prepares the graduates to the employment in the field of natural gas, petrochemical industries and related fields by giving them the required practical and professional skills.





OUTSTANDING LEARNING ENVIRONMENT

Specialized, higher-caliber faculty members and up-to-date teaching facilities; academic advisors. Friendly campus life including various athletic, social and cultural activities with a limited number of accepted students.



PROMISING CAREER OPPORTIUNITIES

Excellent career opportunities in national and international organizations.





FOR MORE INFORMATION CONTACT: Office of Dean:

Tel: 03-5914475 Fax: 03-5921853

Email: eng-dean@alexu.edu.eg

Vice Dean for Education and Student Affairs:

Tel: 03-5921854 Fax: 03-5907363

Email: eng-vds@alexu.edu.eg



Fall Semester Spring Semester Mathematics-1 Mathematics-2 Mechanics-1 Mechanics-2 Physics-1 Physics-2 **Engineering Drawing-1 Engineering Drawing-2 Engineering Chemistry Principles of Manufacting Engineering Computers & Programming English Language** History of Engineering & Technology

Level 1

Fall Semester Spring Semester Multi-variable Calculus **Differential Equations** Organic Chemistry-I Organic Chemistry-II **Physical Chemistry** Fundamentals of Energy Balance Fundamentals of Mass Balance Thermodynamics-I Principles of Materials Science and Engineering Technical Writing

Level 2

Fluid Mechanics-I

Critical Thinking

Fall Semester Spring Semester **Probability & Statistics Numerical Methods Applied Thermodynamics Engineering Metallurgy** PrincipleS of of Polymer Eng & Science Separation Processes-II Separation Processes-I Fundamentals of Heat Transfer **Electric Circuits** Elective-1 **General Culture** Contemporary Issuses

Level 3

Fall Semester Spring Semester Kinetics and Reactions Engineering Hazardous Process & Safety Engineering **Corrosion Engineering** Petrochemical Industries-I Introduction to Natural Gas Engineering Modeling and Simulation Petroleum Refining Engineering Natural gas Production & Measurements Elective-2 Elective-3 Entrepreneurship Level 4

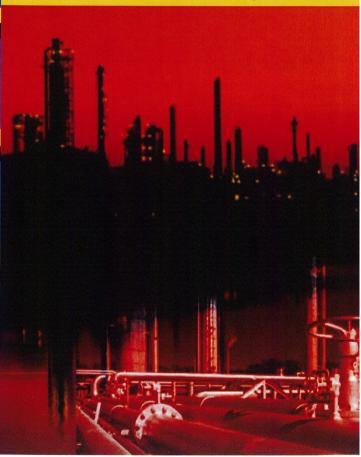
Fall Semester Spring Semester Petrochemical Industries-II **Process Design Process Dynamics and Control** Natural gas Liquefaction Natural Gas Treatment and Purification Elective-5 Elective-4 Law and Engineering Ethics Project-1 Project-2





B.SC. IN GAS AND PETROCHEMICALS **ENGINEERING**

New undergraduate specialized program for prospective students applying for admission to the Faculty of Engineering **Alexandria University**



- 1. Admission Requirements:
- Students must hold the Egyptian high school certificate (Thanaweya Amma) Mathematics section or an equivalent certificate accepted by the Supreme Council of Universities.
- Students are nominated for admission to the Faculty of Engineering through the university admission coordination office according to the rules of the Supreme Council of Universities.
- Students must fulfill all the program admission requirements and comply with the rules of the Faculty of Engineering.
- 2. Education system:
- English is the language of study. The credit hour (CH) system is adopted. All courses are assigned credit values.
- The academic year is basically divided into two semesters: Fall and Spring. Each semester runs for at least fourteen weeks. An additional Summer term is also offered and runs for at least seven weeks.
- Summer training is a degree requirement in all undergraduate programs of the Faculty of Engineering. This extends over a period of 60 days excluding weekends and official holidays. It must be undertaken in companies or establishments approved by the Faculty of Engineering. Students' performance is evaluated at the end of the training period by the company where training was undergone and by the program coordinator.
- Some selected courses may be offered in the Summer term. Students can register in no more than two courses in the Summer term according to the by-laws of the Faculty of Engineering, and without conflict with their summer training.
- To obtain the B.Sc. degree, undergraduates in all programs of the Faculty of Engineering are required to pass successfully.
- Successful students may terminate the full requirements in 10 semesters. Programs are designed to allow students to complete their course credit hour requirements within the 10 semesters.

- The flexibility of the system, however, allows students to increase or decrease their work load i.e. credit hours may extend from a minimum of 12 CHs to a maximum of 21 CHs.
- 3. Academic Supervision:

Each student is assigned an academic advisor to help with the registration procedure and provide guidance concerning the student's program of study.

- 4. Registration Procedure: A. Normal Registration: Students are required to register at the beginning of each semester during the specified registration period. Students select courses after consulting the academic advisor who must approve their work load before registration. The registration office provides students with the by-laws as well as a list of procedures to be followed., B. Late Registration: : Students are allowed to register one week after the registration deadline, According to the approval Calendar . C. Adding and Dropping Courses: Students may add or drop a course, or more, during the period announced by the registration office provided that the student's work load remains within the acceptable limits.
- 5. Withdrawal:Students may withdraw from an academic semester during the allowed period announced by the registration office.
- 6. Absence Policy: If the absence of the student exceeds 25% of the total classes in any course throughout the semester (with or without excuse) he/she must drop the course. Otherwise, the student acquires a grade of F in the course.
- 7. Examinations and Grading System:
- A. Examination:
- 1. The final grade a student obtains in a course is usually based on the grades of the two examinations held during the semester in the fifth and ninth weeks in addition to the grade of the final examination at the end of the semester. Such grades are distributed as follows: at most 60% for the two semester evaluation exams at least 40% for the final examination
- 2. A minimum of 60% in the final grade is required for the student to pass the course. B. Grading System: The Grade Point Average (GPA) of the student is based on a

point ladder of 4.0 points. Grades are assigned according to the following table:

CH	System	
Points	Letter Grade	Percentage
4.00	A⁺	From 97 to 100%
4.00	Α	From 93 to <97%
3.70	A [.]	From 89 to <93%
3.30	B,	From 84 to <89%
3.00	В	From 80 to <84%
2.70	В.	From 76 to <80%
2.30	C ⁺	From 73 to <76%
2.00	С	From 70 to <73%
1.70	C	From 67 to <70%
1.30	D⁺	From 64 to <67%
1.00	D	From 60to <64%
0.00	F	From 0 to <60%

- (E) is given to students absent in the final examination who present an accepted excuse. While (Abs) is given to those who are absent during the final examination without excuse or with a non-approved excuse.
- 8. GPA: The current GPA of a student (for a given semester) and the cumulative GPA are calculated as shown below:

Course	CHs	Grade	Grade Point	Quality Point = CHs * Grade Point
1	3	Α	4.00	12.00
2	3	В	3.00	9.00
3	4	D	1.00	4.00
4	2	С	2.00	4.00
5	2	E		
6	4	F	0.00	0.00
	16			29.00

- Graduation Requirements: Students are required to pass all courses offered in the curriculum with grade (D) or higher.
- 10. Repetition of courses: A student must repeat courses in which he/she has obtained (F), (E) or (Abs). The maximum grade for a repeated course in which the student previously obtained an (F) or (Abs) grade is (B+).