

QUICK GUIDE

FOR *FIRST YEAR*
ENGINEERING STUDENTS
FALL 2024



*“LAU engineering
is the art of finding
simple solutions to
difficult problems.”*

Dr. Michel E. Mawad, President

WELCOME to the LAU

School of Engineering

MISSION

To educate students and provide them with abilities to succeed as engineers and as responsible citizens, and to graduate them with distinctive skills that are sought after in the professional world and graduate schools.

VISION

The School of Engineering at LAU aspires to be top ranked in the region through excellence in teaching, research and scholarship, and service. Our graduates will be the engineering leaders of tomorrow who can tackle both local and global challenges.



PURPOSE OF THE QUICK GUIDE

The purpose of this quick guide is to provide pertinent information to first-year engineering students in a concise format. This document does not in any way diminish or replace the role of the advisor. While every effort will be made to keep it up-to-date, it is the students' responsibility to request their advisors to verify or double-check the information provided therein.





The School offers the **following programs:**

UNDERGRADUATE PROGRAMS

Bachelor of Engineering (BE) degrees in:

- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering
- Mechatronics Engineering
- Petroleum Engineering

With Minors in:

- Environmental Sciences
- Construction Management
- Climate change and sustainability Policy (CLIMASP)

GRADUATE PROGRAMS

Master of Science (MS) degrees in:

- Civil and Environmental Engineering
- Computer Engineering
- Industrial Engineering and Engineering Management
- International Construction Management (*Online*)
- Mechanical Engineering

DEAN'S OFFICE

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SOE OFFICE IN BEIRUT

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For general assistance, please email SOEsupport@lau.edu.lb



USEFUL LINKS

- For additional up-to-date information about school of engineering, visit <http://soe.lau.edu.lb>
- To learn more about your major or about engineering in general, visit <http://www.egfi-k12.org>
- For information about student life at LAU, visit <http://students.lau.edu.lb>
- To find the name of your advisor, visit <https://www.lau.edu.lb/experience/career-guidance/academic-advising.php>
- To view the Academic Catalog, visit <http://catalog.lau.edu.lb>
- For information on the Liberal Arts Curriculum and LAC courses, visit <https://catalog.lau.edu.lb/2023-2024/undergraduate/lac.php>
- To download an updated PDF copy of this document, visit <https://soe.lau.edu.lb/students/undergraduate/>

TO-DO LIST BEFORE YOU SEE YOUR ADVISOR

- 1** Bring your LAU acceptance letter with you
- 2** Consult this Quick Guide to get some idea about the courses you need to take in the first year
- 3** Enter your courses on the Banner
- 4** Print out the Banner courses and bring it with you

ACADEMIC ADVISING IN THE SCHOOL

Every student in the school of engineering is assigned an advisor. You should meet with your advisor on a regular basis but not less than once during the semester. The advisor should help you with curricular and career matters. This includes choosing your courses for each semester as well as deciding on your career path after graduation. You need to see your advisor during their office hours in order to have ample time for proper advising; rushing into your advisor's office for a signature or approval for courses does not count as advising. Names of advisors are posted on the LAU website <https://www.lau.edu.lb/experience/career-guidance/academic-advising.php>.

ENGINEERING ADVISORS IN BEIRUT

During the LAU scheduled advising and registration period, advisors will be available on the LAU Beirut campus in Gezairi Building, Rooms 1120-1127. In case you are not able to see your advisor, you can call them at their phone extension or you can send them an email.

ADVISING FOR CONDITIONAL ADMISSION (CA) STUDENTS

Students admitted on CA can refer to Ms. Joyce Feghali from Byblos Campus and Ms. Rima Rahal from Beirut campus as staff academic advisors from the Dean of Students' Office to follow-up on their conditional admission. Note that students admitted through petitions as CA must sign a consent letter at the Registrar's Office stating that they are aware of the CA requirements.

*“We at LAU believe
so much learning
happens outside
classroom walls.”*

Elise Salem, Vice President for Student
Development & Enrollment Management



SCHEDULE OF COURSES BY MAJOR

The recommended schedule of courses is designed so that you can graduate in four years, including three summers. This schedule is detailed in the academic catalog under The School of Engineering section. A bound copy of the academic catalog can be obtained from the admissions office; it is also posted on the LAU webpage.

Students are required to complete any English remedial courses (ENG009, ENG101, or/and ENG102 as stated on the letter of acceptance) sequentially starting with the first semester at LAU. Students are also required to complete any math or/and science remedial courses (MTH101, MTH102, CHM101 or/and PHY111 as stated on the letter of acceptance).

The schedule of courses for the first year is included in the tables below. A remark column has been added to emphasize critical courses that affect student progress through the curriculum.

REMARK	MEANING
<i>Must Take it</i>	This course is a prerequisite to a course in the following semester or the following year. Failure to take this course will result in delay in the student's graduation.
<i>Must Take in First Year</i>	This course's knowledge is needed in the following semester or the following year. Failure to take this course will affect the student's progress.
<i>LAS Electives (12 Credits)</i>	Digital Culture: 3cr Change Makers: 6cr Arts & Humanities: 3cr.

CHEMICAL ENGINEERING

1st year CHEMICAL ENGINEERING | FALL SEMESTER (Credits = 17)

Number	Title	Cr	Remarks	Guidelines
BIO201	General Biology I	3		
CHM005	Preparatory Chemistry	0	<i>Students must take CHM005 as co-requisite to CHM205</i>	<i>CRN's of CHM005 & CHM205 must be added together</i>
CHM201	Chemical Principles	3	<i>Must Take it</i>	
GNE212	Engineering Mechanics	3		
MTH201	Calculus III	3	<i>Must Take it</i>	<i>Students who have MTH102 as remedial cannot take MTH201</i>
COE201	Computer Proficiency	1	<i>Must Take it</i>	
MEE211	Engineering Graphics	1		
ENG202	Advanced Academic English	3		<i>Replace it by the first level of required English</i>

1st year CHEMICAL ENGINEERING | SPRING SEMESTER (Credits = 15)

Number	Title	Cr	Remarks	Guidelines
CHE200	Intro. to Chemical Eng.	3	<i>Must Take it</i>	
MTH206	Calculus IV	3		
MTH304	Differential Equations	3	<i>Must Take in First Year</i>	
COE212	Engineering Programming	3		
-----	LAS Elective (1/4)	3		

1st year CHEMICAL ENGINEERING | SUMMER SEMESTER (Credits = 9)

Number	Title	Cr	Remarks	Guidelines
GNE331	Probability and Statistics	3		
GNE333	Engineering Analysis	3		
-----	LAS Elective (2/4)	3		

CIVIL ENGINEERING

1st year CIVIL ENGINEERING | FALL SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
ENG202	Advanced Academic English	3		Replace it by the first level of required English
CIE200	Statics	3	Must Take it	Students who have MTH102 and/or PHY111 as remedial cannot take CIE200
CHM005	Preparatory Chemistry	0	Students must take CHM005 as co-requisite to CHM205	CRN's of CHM005 & CHM205 must be added together
CHM205	Fundamentals in Chemistry	3		
MTH201	Calculus III	3	Must Take it	Students who have MTH102 as remedial cannot take MTH201
COE201	Computer Proficiency	1	Must Take it	
-----	LAS Elective (1/4)	3		

1st year CIVIL ENGINEERING | SPRING SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
CIE202	Mechanics of Materials	3	Must Take it	
CIE212	Computer Programming for Civil Engineers	3	Must Take it	
MTH206	Calculus IV	3	Must Take in First Year	
BIO200	Basic Biology*	3	*or BIO203 Introduction to Ecology	
MEE211	Engineering Mechanics	1	Must Take in First Year	
COM203	Art of Public Communication	3		

1st year CIVIL ENGINEERING | SUMMER SEMESTER (Credits = 9)

Number	Title	Cr	Remarks	Guidelines
MTH304	Differential Equations	3		
-----	LAS Elective (1/4)	3		
-----	LAS Elective (2/4)	3		

1st year COMPUTER ENGINEERING | FALL SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
ENG202	Advanced Academic English	3		Replace by Remedial, if required
PHY201	Electricity & Magnetism	3	Must Take in First Year	CRN's of PHY 201 & MTH 201 must be added together.
MTH201	Calculus III	3	Must Take it	CRN's of PHY201& MTH201 must be added together. Students who have MTH102 as remedial cannot take MTH201
MTH207	Discrete Structures I	3	Must Take in First Year	
COE201	Computer Proficiency	1	Must Take in First Year	
GNE212	Engineering Mechanics	3		Students who have MTH 102 and PHY 111 as remedial cannot take GNE 212

1st year COMPUTER ENGINEERING | SPRING SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
COE211	Computer Programming	4	Must Take in First Year	
MTH206	Calculus IV	3	Must Take it	
MTH304	Differential Equations	3	Must Take it	
-----	LAS Elective (1/4)	3		
-----	LAS Elective (2/4)	3		

1st year COMPUTER ENGINEERING | SUMMER SEMESTER (Credits = 9)

Number	Title	Cr	Remarks	Guidelines
-----	LAS Elective (3/4)	3		
-----	Free Elective	3		
COM203	Art of Public Communication	3		

COMPUTER ENGINEERING

ELECTRICAL ENGINEERING

1st year ELECTRICAL ENGINEERING | FALL SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
ENG202	Advanced Academic English	3		Replace it by the first level of required English
PHY201	Electricity & Magnetism	3	Must Take in First Year	
MTH201	Calculus III	3	Must Take it	Students who have MTH102 as remedial cannot take MTH201
MTH207	Discrete Structures I	3	Must Take in First Year	
GNE212	Engineering Mechanics	3		Students who have MTH102 and PHY 111 as remedial cannot take GNE212
COE201	Computer Proficiency	1	Must Take in First Year	

1st year ELECTRICAL ENGINEERING | SPRING SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
COE211	Computer Programming	4	Must Take it	
MTH206	Calculus IV	3	Must Take in First Year	
MTH304	Differential Equations	3	Must Take it	
-----	LAS Elective (1/4)	3		
-----	LAS Elective (2/4)	3		

1st year ELECTRICAL ENGINEERING | SUMMER SEMESTER (Credits = 6)

Number	Title	Cr	Remarks	Guidelines
-----	LAS Elective (3/4)	3		
COM203	Art of Public Communication	3		

1st year INDUSTRIAL ENGINEERING | FALL SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
ENG202	Advanced Academic English	3		Replace it by the first level of required English
COE212	Engineering Programming	3	Must Take in First Year	COE 212 is also offered during Spring terms
MTH201	Calculus III	3	Must Take it	Students who have MTH102 as remedial cannot take MTH201
GNE212	Engineering Mechanics	3		Students who have MTH 102 and PHY 111 as remedial cannot take GNE 212
MEE211	Engineering Graphics	1		
-----	LAS Elective (1/4)	3		

1st year INDUSTRIAL ENGINEERING | SPRING SEMESTER (Credits = 15)

Number	Title	Cr	Remarks	Guidelines
ELE305	ELE305 Introduction to Electrical Engineering	3		
MTH206	Calculus IV	3		
GNE331	Probability and Statistics	3	Must Take it	
GNE333	Engineering Analysis	3	Must Take it	
-----	LAS Elective (2/4)	3		

1st year INDUSTRIAL ENGINEERING | SUMMER SEMESTER (Credits = 9)

Number	Title	Cr	Remarks	Guidelines
MTH304	Differential Equations	3		
-----	LAS Elective (3/4)	3		
-----	Science Elective*	3		

* Science Electives (3 Credits) ENV200: 3cr | MTH207: 3cr | CHM205: 3cr | BIO201: 4cr | BIO202: 4cr
CHM201: 3cr | CHM202: 3cr

1st year MECHANICAL ENGINEERING | FALL SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
ENG202	Advanced Academic English	3		Replace it by the first level of required English
COE212	Engineering Programming	3	Must Take in First Year	
MTH201	Calculus III	3	Must Take it	Students who have MTH102 as remedial cannot take MTH201
CIE200	Statics	3	Must Take it	Students who have MTH102 & PHY111 as remedial cannot take CIE200
MEE211	Engineering Graphics	1	Must Take in First Year	
-----	LAS Elective (1/4)	3		

1st year MECHANICAL ENGINEERING | SPRING SEMESTER (Credits = 15)

Number	Title	Cr	Remarks	Guidelines
MEE241	Dynamics	3	Must Take it	
MTH206	Calculus IV	3		
MTH304	Differential Equations	3	Must Take in First Year	
ELE305	Introduction to Electrical Engineering	3	Must Take in First Year	
-----	LAS Elective (1/4)	3		

1st year MECHANICAL ENGINEERING | SUMMER SEMESTER (Credits = 9)

Number	Title	Cr	Remarks	Guidelines
GNE331	Probability and Statistics	3		
GNE333	Engineering Analysis	3		
-----	LAS Elective (2/4)	3		

1st year MECHATRONICS ENGINEERING | FALL SEMESTER (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
ENG202	Advanced Academic English	3		Replace it by the first level of required English
PHY201	Electricity & Magnetism	3	Must Take in First Year	
MTH201	Calculus III	3	Must Take it	Students who have MTH102 as remedial cannot take MTH201
MTH207	Discrete Structures I	3	Must Take in First Year	
COE201	Computer Proficiency	1	Must Take in First Year	
CIE200	Statics	3	Must Take it	Students who have MTH102 and/or PHY111 as remedial cannot take CIE200

1st year MECHATRONICS ENGINEERING | SPRING SEMESTER (Credits = 17)

Number	Title	Cr	Remarks	Guidelines
COE211	Computer Programming	4	Must Take it	
MTH206	Calculus IV	3	Must Take in First Year	
MTH304	Differential Equations	3	Must Take it	
MEE241	Dynamics	3		
MEE211	Engineering Graphics	1		
-----	LAS Elective (1/4)	3		

1st year MECHATRONICS ENGINEERING | SUMMER SEMESTER (Credits = 7)

Number	Title	Cr	Remarks	Guidelines
GNE331	Probability & Statistics	3		
-----	LAS Elective (2/4)	3		
-----	Free Elective	1		

1st year PETROLEUM ENGINEERING | **FALL SEMESTER** (Credits = 16)

Number	Title	Cr	Remarks	Guidelines
MTH201	Calculus III	3	Must Take it	Students who have MTH102 as remedial cannot take MTH201
CHM005 CHM205	Preparatory Chemistry Fundamentals in Chemistry	3	Must Take in First Year Students must take CHM005 as co-requisite to CHM205	CRN's of CHM005 & CHM205 must be added together
CIE200	Statics	3	Must Take it	Students who have MTH102 and/or PHY111 as remedial cannot take CIE200
PTE200	Introduction to Petroleum Engineering	3	Must Take it	
COE201	Computer Proficiency	1	Must Take in First Year	
ENG202	Advanced Academic English	3		Replace it by the first level of required English

1st year PETROLEUM ENGINEERING | **SPRING SEMESTER** (Credits = 15)

Number	Title	Cr	Remarks	Guidelines
CIE202	Mechanics of Materials	3	Must Take it	
MTH206	Calculus IV	3	Must Take it	
MEE241	Dynamics	3	Must Take it	
PTE204	Geology for Petroleum Engineers	3	Must Take it	
-----	LAS Elective (1/4)	3		

1st year PETROLEUM ENGINEERING | **SUMMER SEMESTER** (Credits = 9)

Number	Title	Cr	Remarks	Guidelines
GNE331	Probability and Statistics	3		
MTH304	Differential Equations	3		
-----	LAS Elective (2/4)	3		

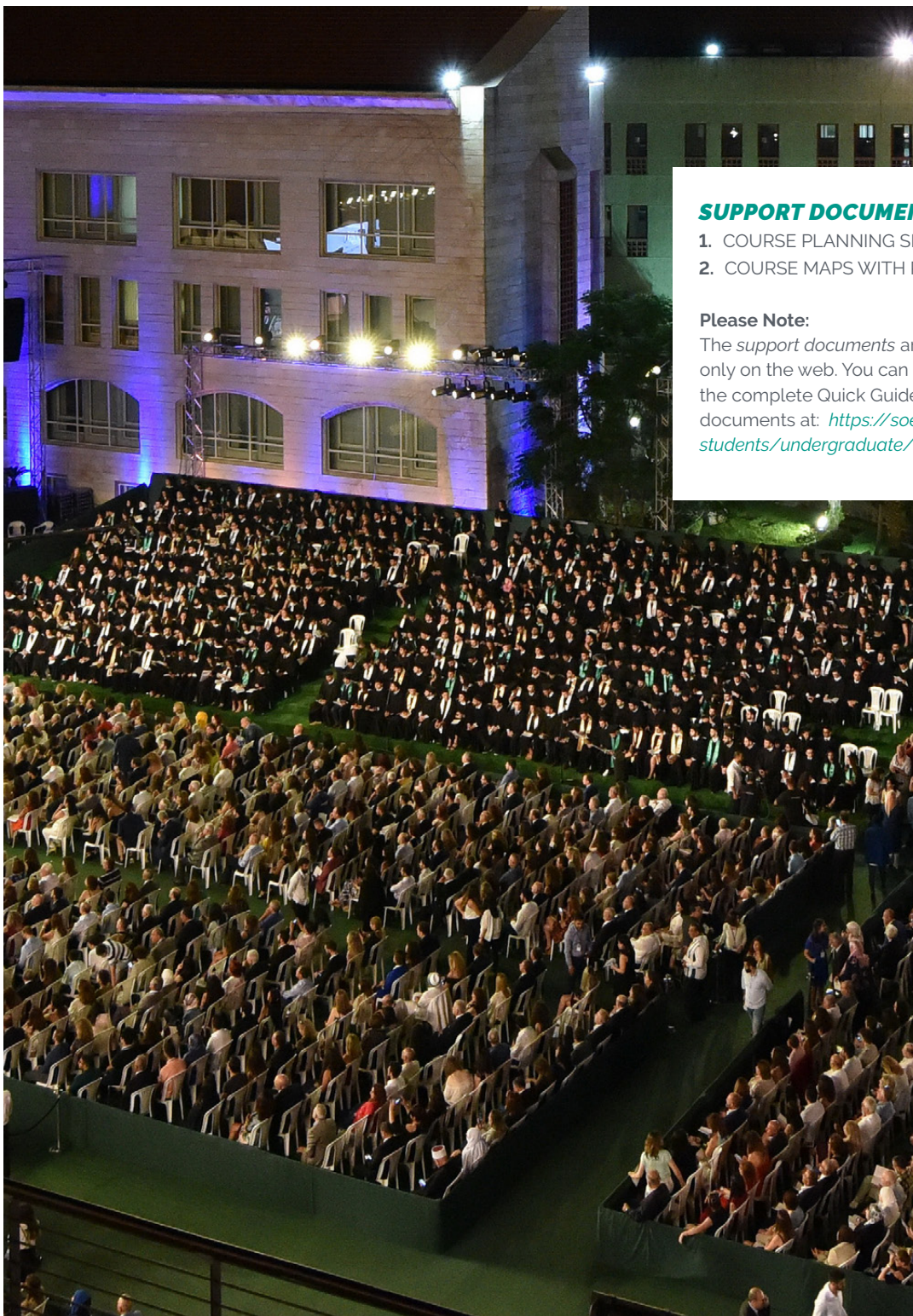


COURSES REQUIRED FOR GRADUATION

THE PLANNING SHEET (PROGRAM OF COURSES)

There is a planning sheet for each major. The sheet is an organized list of all the courses that are required for graduation. It is organized into five categories as follows:

- 1 Remedial** courses as stated in the acceptance letter
- 2 Liberal Arts and Sciences curriculum** courses (*LAS courses*)
- 3 Math and basic science** courses
- 4 Engineering** courses outside the major
- 5 Major** courses

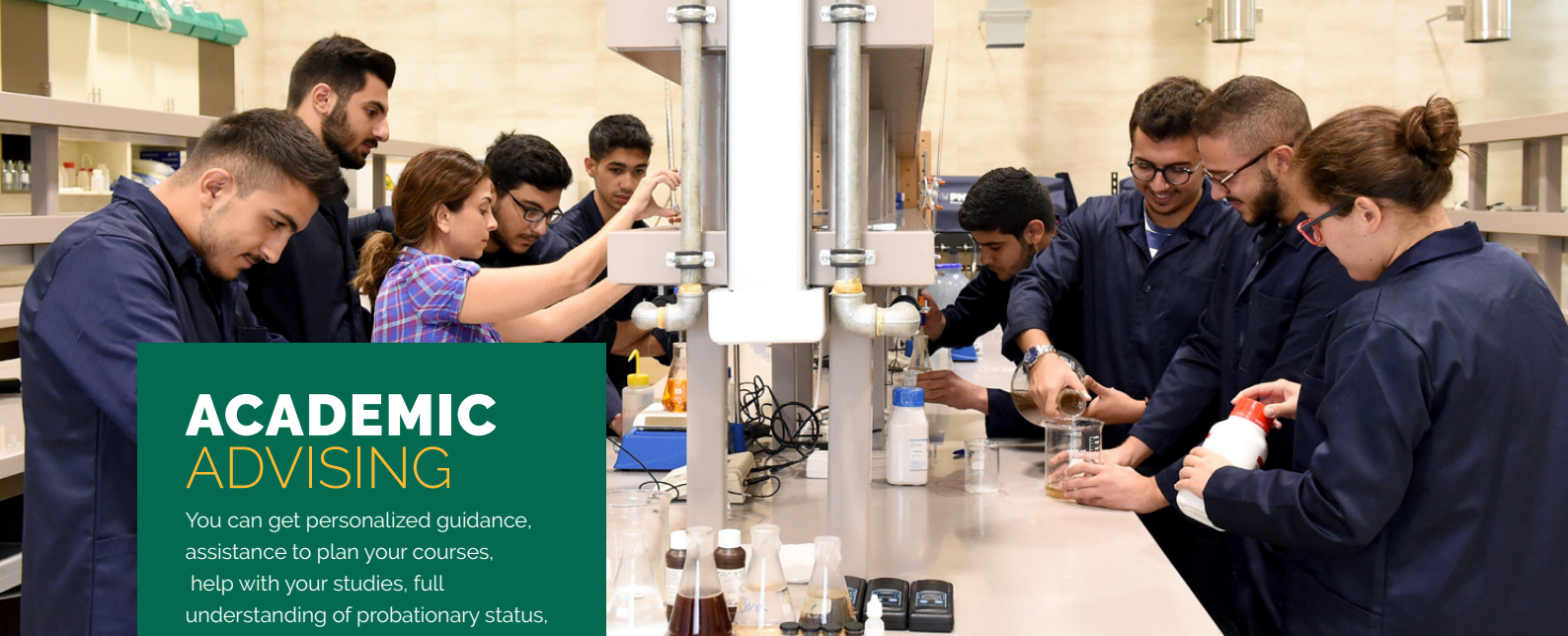


SUPPORT DOCUMENTS

1. COURSE PLANNING SHEETS
2. COURSE MAPS WITH PREREQUISITES

Please Note:

The *support documents* are available only on the web. You can download the complete Quick Guide with the documents at: <https://soe.lau.edu.lb/students/undergraduate/>



ACADEMIC ADVISING

You can get personalized guidance, assistance to plan your courses, help with your studies, full understanding of probationary status, tutoring services for undergraduate students for several core introductory and intermediate courses at no cost, and much more. Visit:

<https://lau.starfishsolutions.com/starfish-ops>

<https://www.lau.edu.lb/experience/career-guidance/academic-advising.php>

CAREER GUIDANCE

You can schedule an appointment with the Career Guidance Office if you have doubts about your major, or if you're having trouble figuring out your career goals and getting started with your job search. Career Guidance will give you access to workshops, internship/career fairs and advisors to help you improve your CV, prepare for job interviews, and connect with potential employers. Visit:

LAU: <https://www.lau.edu.lb/experience/career-guidance/>

SOE: <https://soe.lau.edu.lb/students/resources/career-center.php>

COUNSELING

Having a hard time adapting to university life? Do you have any academic or personal problems standing in the way of your success?

If so, visit: <https://www.lau.edu.lb/experience/health/counseling.php>

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@ Instagram: https://www.instagram.com/lau_engineering/

▶ YouTube: <https://www.youtube.com/@lauengineering4692/>

USEFUL OFFICES

IN BYBLOS

- Office of the Dean, ELRC 6105, *Ext. 2236*
- Electrical and Computer Engineering department, Bassil 109, *Ext. 2451*
- Industrial and Mechanical Engineering department, Bassil 209, *Ext. 2894*
- Chemical Engineering program, Bassil 309, *Ext. 2483*
- Civil Engineering department, Bassil 309, *Ext. 2483*
- Mechatronics program coordinator, Bassil 109, *Ext. 2451*
- Petroleum Engineering program, Bassil 309, *Ext. 2483*
- Office of the Dean of Students, Information and Advising Center, *Ext. 2117*
- Registrar's Office, Tohme-Rizk Building – Level 2, *Ext. 2889*

IN BEIRUT

- School of Engineering office, Gezairi 1125, *Ext. 1532*
- Office of the Dean of Students, WKSC – Level 4, *Ext. 1679*
- Registrar's Office, Irwin Hall – Level 1, *Ext. 1318*

Should you require additional info, please do not hesitate to contact your department or the Office of the Dean.