

# **QUICK** GUIDE

FOR FIRST YEAR ENGINEERING STUDENTS FALL 2020

" 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:

- 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 ManagementMechanical Engineering

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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.eqfi-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/2020-2021/undergraduate/lac.php
- To download an updated PDF copy of this document, visit http://soe.lau.edu.lb/resources/public.php

# **TO-DO LIST BEFORE** YOU SEE YOUR ADVISOR



Bring your LAU acceptance letter with you

Enter your courses on the Banner



Consult this Quick Guide to get some idea about the courses you need to take in the first year





Print out the Banner courses and bring it with you

# ACADEMIC **ADVISING** IN THF 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 Orme Gray, Rooms 305/306. 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 Mr. Joseph Waked 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
"Must take it"	This course is a prerequisite to a course in the following semester or following year. Failure to take this course will result in a delay in your graduation.
"Take it"	This course forms a body of knowledge that is needed in the following semester or following year. Failure to take this course may affect your progress.



1st year CIVIL e	ngineering   FALL SEMESTER	(Credits = 16	;)
Number	Title	Cr	Remarks
COE201	Computer Proficiency	1	Must take it
MTH201	Calculus III	3	Must take it
	LAC Elective	3	
CHM201	Chemical Principles	3	
CIE200	Statics	3	Must take it
ENG202	Sophomore Rhetoric	3	Replace by remedial

1st year CIVIL engineering | SPRING SEMESTER

(Credits = 16)

Number	Title	Cr	Remarks
CIE212	Programming for Civil Engineers	3	Must take it
MEE211	Engineering Graphics	1	Take it
COM203	Oral Communication	3	Replace by remedial
CIE202	Mechanics of Materials	3	Must take it
MTH206	Calculus IV	3	Take it
BI0200/3	Basic Biology OR Introduction to Ecology	3	

1st year CIVIL engineering | SUMMER SEMESTER

(Credits = 7)

Number	Title	Cr	Remarks
MTH304	Differential Equations	3	Take it
MEE392	Machine Shop	1	Take it
	LAC Elective	3	

1st year COMPUTER engineering | FALL SEMESTER

(Credits = 17)

Number	Title	Cr	Remarks
COE201	Computer Proficiency	1	Must take it in 1st year
MTH 207	Discrete Structures I	3	Must take it in 1st year
ENG202	Advanced Academic English	3	Replace by remedial
MTH201	Calculus III	3	Must take it
PHY201	Electricity and Magnetism	4	Must take it
GNE212	Engineering Mechanics	3	

1st year COMPUTER engineering | SPRING SEMESTER

(Credits = 16)

Number	Title	Cr	Remarks
COE 211	Computer Programming	4	Must take it in 1st year
	LAC Elective	3	Replace by remedial
ELE201	Electrical Circuits I	3	Must take it
MTH206	Calculus IV	3	Must take it
MTH304	Differential Equations	3	Must take it

1st year COMPUTER engineering | SUMMER SEMESTER (Credits = 6)

Number	Title	Cr	Remarks
	LAC Elective	3	
	LAC Elective	3	

### 1st year ELECTRICAL engineering | FALL SEMESTER

**Engineering Mechanics** 

(Credits = 17) Title Remarks Number Cr COE201 **Computer Proficiency** 1 Must take it in 1st year MTH 207 Discrete Structures I 3 Must take it in 1st year ENG202 3 Advanced Academic English Replace by remedial MTH201 Calculus III 3 Must take it PHY201 Electricity and Magnetism 4 Must take it

### 1st year ELECTRICAL engineering | SPRING SEMESTER

GNE212

(Credits = 16)

3

Number	Title	Cr	Remarks
COE 211	Computer Programming	4	Must take it in 1st year
	LAC Elective	3	Replace by remedial
ELE201	Electrical Circuits I	3	Must take it
MTH206	Calculus IV	3	Must take it
MTH304	Differential Equations	3	Must take it

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

Number	Title	Cr	Remarks
	LAC Elective	3	
	LAC Elective	3	

# **COMPUTER** ENGINEERING



INDUSTRIAL ENGINEERING

1st year INDU	STRIAL engineering   FALL SEMESTER	(Credits = 16	5)
Number	Title	Cr	Remarks
GNE212	Engineering Mechanics	3	Must take it
COE212	Engineering Programming	3	Must take it
MTH201	Calculus III	3	Must take it
ENG202	Advanced Academic English	3	Replace by remedial
MEE211	Engineering Graphics	1	
	LAC Elective	3	

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

Number	Title	Cr	Remarks
MTH206	Calculus IV	3	Must take it
MTH304	Differential Equations	3	Take it
ELE305	Introduction to Electrical Engineering	3	
	LAC Elective	3	
	LAC Elective	3	

### 1st year INDUSTRIAL engineering | SUMMER MODULE

Number	Title	Cr	Remarks
GNE333	Engineering Analysis I	3	Must take it
	Science Elective	3	
GNE331	Probability and Statistics	3	Must take it

(Credits = 9)

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

Number	Title	Cr	Remarks
COE212	Engineering Programming	3	Must take it
ENG202	Advanced Academic English	3	Replace by remedial
MEE211	Engineering Graphics	1	
MTH201	Calculus III	3	Must take it
CIE200	Statics	3	Must take it
	LAC Elective	3	

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

Number	Title	Cr	Remarks
ELE305	Introduction to Electrical Engineering	3	Take it
MTH304	Differential Equations	3	Must take it
MTH206	Calculus IV	3	Must take it
MEE241	Dynamics	3	Must take it
	LAC Elective	3	

### 1st year MECHANICAL engineering | **SUMMER MODULE** (Credits = 9)

Number	Title	Cr	Remarks
GNE333	Engineering Analysis I	3	Must take it
GNE331	Probability and Statistics	3	Must take it
	LAC Elective	3	

MECHANICAL ENGINEERING



(Credits = 17)

Number	Title	Cr	Remarks
COE201	Computer Proficiency	1	Must take it
MTH201	Calculus III	3	Must take it
ENG202	Advanced Academic English	3	Replace by remedial
PHY201	Electricity and Magnetism	4	Must take it
CIE200	Statics	3	It is ok to delay for 5-year schedule
MTH207	Discrete Structure I	3	Must take it

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

Number	Title	Cr	Remarks
MTH206	Calculus IV	3	Must take it
MEE241	Dynamics	3	It is ok to delay for 5-year schedule, or may substitute with MEE320
COE211	Computer Programming	4	Must take it
MEE211	Engineering Graphics	1	
ELE201	Electrical Circuits I	3	Must take it
MTH304	Differential Equations	3	Must take it

### 1st year MECHATRONICS engineering | **SUMMER MODULE** (Credits = 9)

Number	Title	Cr	Remarks
	LAC Elective	3	
	LAC Elective	3	
GNE331	Probability and Statistics	3	

(Credits = 16)

(Credits = 15)

### 1st year PETROLEUM engineering | FALL SEMESTER

Number	Title	Cr	Remarks
PTE200	Introduction to Petroleum Engineering	3	Must take it
MTH201	Calculus III	3	Must take it
ENG202	Advanced Academic English	3	Replace by remedial
CIE200	Statics	3	Must take it
COE201	Computer Proficiency	1	
CHM205	Fundamentals of Chemistry	3	

### 1st year PETROLEUM engineering | SPRING SEMESTER

Number	Title	Cr	Remarks
MTH206	Calculus IV	3	Take it
CIE202	Mechanics of Material	3	Must take it
PTE204	Geology for Petroleum Engineers	3	Must take it
MEE241	Dynamics	3	Take it
	LAC Elective	3	

### 1st year PETROLEUM engineering | **SUMMER MODULE** (Credits = 9)

Number	Title	Cr	Remarks
	LAC Elective	3	
	LAC Elective	3	
MTH304	Differential Equations	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:



**Remedial** courses as stated in the acceptance letter







Liberal arts curriculum courses (LAC courses)

**Engineering** courses outside the major



# 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://www.lau.edu.lb/experience/careerauidance/academic-advisina.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: http://students.lau.edu.lb/

SOE: http://soe.lau.edu.lb/career-services/ students-alumni/

# 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:

http://students.lau.edu.lb/hhw/counseling/

# FOLLOW US ON SOCIAL MEDIA

- Linkedin: https://www.linkedin.com/showcase /school-of-engineering-lau/
- Twitter: https://twitter.com/LAUengineering
- **Facebook:** https://www.facebook.com/ LAUSchoolofEngineering/

# **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*
- Civil Engineering department, Bassil 309, Ext. 2483
- Mechatronics program coordinator, Bassil 109, Ext. 2451
- Petroleum program coordinator, ELRC 6015D, Ext. 2167
- Office of the Dean of Students, Information and Advising Center, *Ext. 1668*
- Registrar's Office, Tohme-Rizk Building Level 2, Ext. 2889

### **IN BEIRUT**

- School of Engineering office, Orme-Gray 305, *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.