



2018 Bylaws Freshman Scenarios

Article (10): Placement Tests to newly admitted students.

The study at the Faculty of Engineering requires minimum level of English Language and Mathematics. The Faculty Council can organize a placement test for the students enrolled to the Faculty in English and Mathematics. The Faculty Council can ask the students who fail these tests to take zero credit courses in order to have equal opportunity with other students.

A placement test in Mathematics is organized for all accepted students except students with an Egyptian High School Diploma (Thanaweya Amma), IGCSE Certificate, BAC French Certificate, Abitur German Certificate, or graduated from STEM and Nile Schools. A placement test in English is organized for all accepted students. The Education and Student Affairs Committee can study any changes in these rules according to the study needs.

A student with an IELTS score more than 5.0 is exempted from the Placement Test, and qualifies to be exempted from ASU322 Language Course. His grade will be determined by the IELTS score.

To pass any test or course, the student should score more than or equal 60% of the total mark.

Article (18): Terms of Course Registration

- The student may register courses in the main semesters with a maximum total Credit Hours according to the following rules (after approval of the Academic Advisor):
 - Up to 21 Credit Hours or 7 courses, whichever is greater for a student with a GPA larger than or equal to 3.0
 - Up to 18 Credit Hours or 6 courses, whichever is greater for a student with a GPA larger than or equal to 2.0, but less than 3.0
 - Up to 14 Credit Hours or 5 courses, whichever is greater for a student with a GPA less than 2.0
- The student may register courses in the Summer semester in a maximum total Credit Hours according to the following rules (after approval of the Academic Advisor):
 - Up to 9 Credit Hours or 3 courses, whichever is greater for a student with a GPA larger than or equal to 3.0
 - Up to 8 Credit Hours or 2 courses, whichever is greater for a student with a GPA less than 3.0

Each student has to register at least 12 CH in the main semesters whenever there are available courses. If a student does not register the 12 CH in any main semester, it is considered an academic warning for him. Moreover, for Inter-Disciplinary Programs, the student has to pay the tuition fees corresponding to 12 CH every main semester.

Admission to Different Specializations for students enrolled in Specialized Programs

- The distribution of students among different Specializations, Mechanical, Architectural, Electrical and Civil, after the Summer Semester.
- Students in Specialized Programs need to earn at least 25 CH in order to be able to be admitted to a Specialization after Freshman Level.
- The GPA among these 25 CH from University and Faculty requirements in the Freshman Level is the main factor to differentiate between students plus the requirements for each specialization in the following table.

Specialization	Pre-Requisites	Percentage of Freshman Students	Max. number of students in Level 1
Mechanical	MDP011: Engineering Drawing	22%	500
Architectural	CEP011: Projection and Engineering Graphics + Aptitude Test	8%	200
Electrical	PHM021: Electricity and Magnetism PHM012: Mathematics (1)	35%	700
Civil	PHM031: Statics CEP011: Projection and Engineering Graphics	35%	700

1. Regular Scenario: passed English and Math Tests

Code	Course Title	Credits and SWL			Contact Hours				Pre-requisites
		CH	ECTS	SWL	Lec	Tut	Lab	TT	
Semester 1									
PHM012	Mathematics (1)	3	5	125	3	2	0	5	Eng/Math
PHM021	Vibration and Waves	3	5	125	3	1	1	5	Eng/Math
PHM031	Statics	3	5	125	2	2	1	5	Eng/Math
MDP011	Engineering Drawing	3	6	150	1	3	2	6	
CEP011	Projection and Engineering Graphics	3	6	150	1	3	2	6	
PHM041	Engineering Chemistry	3	5	125	2	1	2	5	Eng
MDP081	Production Engineering	3	5	125	2	0	3	5	Eng
CSE031	Computing in Engineering	2	4	100	2	0	0	2	
Total		17	41	1025	16	9	6	28	
Semester 2									
PHM013	Mathematics (2)	3	5	125	3	2	0	5	PHM012
PHM022	Electricity and Magnetism	3	5	125	3	1	1	5	Eng/Math
PHM032	Dynamics	3	5	125	2	2	1	5	PHM031
CEP011	Projection and Engineering Graphics	3	6	150	1	3	2	6	
MDP011	Engineering Drawing	3	6	150	1	3	2	6	
MDP081	Production Engineering	3	5	125	2	0	3	5	Eng
PHM041	Engineering Chemistry	3	5	125	2	1	2	5	Eng
ENG011	Fundamentals of Engineering	2	4	100	2	1	0	3	
Total		17	41	1025	16	13	11	40	

This scenario assumes the student has passed all courses in Semester 1. If a student fails any of the courses, then he should follow the following recommendations:

Failed Course	Recommendation
Mathematics (1)	It is strongly advised to register Mathematics (1) again and do not register Mathematics (2). Please note that Mathematics (1) is the pre-requisite for Electrical Engineering Specialization.
Vibration and Waves	This course is not offered again in Semester 2. This means that the student should register Electricity and Magnetism. Please note that Electricity and Magnetism is the pre-requisite for Electrical Engineering Specialization.
Statics	It is strongly advised to register Statics again and do not register Dynamics. Please note that Statics is the pre-requisite for Civil Engineering Specialization.
Engineering Drawing	If the student plans to join Mechanical Engineering Specialization, then he should register this course again. If he is planning to join Civil or Architecture Engineering Specializations, then he should not register this course and registers Projection and Engineering Graphics.
Projection and Engineering Graphics	If the student plans to join Civil or Architecture Engineering Specializations, then he should register this course again. If he is planning to join Mechanical Engineering Specialization, then he should not register this course and registers Engineering Drawing.
Engineering Chemistry	It is advised to register Production Engineering with the rest of his group to simplify the student schedule.
Production Engineering	It is advised to register Engineering Chemistry with the rest of his group to simplify the student schedule.
Computing in Engineering	This course will not be offered in Semester 2.

PS: It is not advised to register both Mathematics (1) and Mathematics (2) or register both Statics and Dynamics at the same time in Semester (2).

2. Alternative Scenario 1: failed both English and Math Tests

Code	Course Title	Credits and SWL			Contact Hours				Pre-requisites
		CH	ECTS	SWL	Lec	Tut	Lab	TT	
Semester 1									
MDP011	Engineering Drawing	3	6	150	1	3	2	6	
CEP011	Projection and Engineering Graphics	3	6	150	1	3	2	6	
CSE031	Computing in Engineering	2	4	100	2	0	0	2	
ASU011	Technical English Language	0	4	100	2	2	0	4	
PHM011	Basic Mathematics	0	4	100	2	2	0	4	
Total		8	24	600	8	10	4	22	
Semester 2									
PHM012	Mathematics (1)	3	5	125	3	2	0	5	Eng/Math
PHM022	Electricity and Magnetism	3	5	125	3	1	1	5	Eng/Math
PHM031	Statics	3	5	125	2	2	1	5	Eng/Math
MDP081	Production Engineering	3	5	125	2	0	3	5	Eng
PHM041	Engineering Chemistry	3	5	125	2	1	2	5	Eng
ENG011	Fundamentals of Engineering	2	4	100	2	1	0	3	
Total		17	29	725	14	7	7	28	
Semester 3 or Summer Semester between Semesters 2 and 3									
PHM013	Mathematics (2)	3	5	125	3	2	0	5	PHM012
PHM021	Vibration and Waves	3	5	125	3	1	1	5	Eng/Math
PHM032	Dynamics	3	5	125	2	2	1	5	PHM031

+ courses from Level 1 based on the Program the student is enrolled in. Registration for courses in Summer Semesters is against fees for all students (1300 EGP/CH).

The above scenario assumes the student has passed all courses in Semester 1. If a student fails any of the courses, then he should follow the following recommendations:

Failed Course	Recommendation
Technical English Language	It has to be registered again.
Basic Mathematics	It has to be registered again.
Engineering Drawing	If the student plans to join Mechanical Engineering Specialization, then he should register this course again. Otherwise, he continues with the Mathematics (1), Statics and Electricity and Magnetism based on his results in the Technical English and Basic mathematics courses.
Projection and Engineering Graphics	If the student plans to join Civil or Architecture Engineering Specializations, then he should register this course again. Otherwise, he continues with the Mathematics (1), Statics and Electricity and Magnetism based on his results in the Technical English and Basic mathematics courses.
Computing in Engineering	This course will not be offered in Semester 2.

3. Alternative Scenario 2: failed English Test and passed Math Test

Code	Course Title	Credits and SWL			Contact Hours				Pre-requisites
		CH	ECTS	SWL	Lec	Tut	Lab	TT	
Semester 1									
MDP011	Engineering Drawing	3	6	150	1	3	2	6	
CEP011	Projection and Engineering Graphics	3	6	150	1	3	2	6	
CSE031	Computing in Engineering	2	4	100	2	0	0	2	
ASU011	Technical English Language	0	4	100	2	2	0	4	
Total		8	20	500	6	8	4	18	
Semester 2									
PHM012	Mathematics (1)	3	5	125	3	2	0	5	Eng/Math
PHM022	Electricity and Magnetism	3	5	125	3	1	1	5	Eng/Math
PHM031	Statics	3	5	125	2	2	1	5	Eng/Math
MDP081	Production Engineering	3	5	125	2	0	3	5	Eng
PHM041	Engineering Chemistry	3	5	125	2	1	2	5	Eng
ENG011	Fundamentals of Engineering	2	4	100	2	1	0	3	
Total		17	29	725	14	7	7	28	
Semester 3 or Summer Semester between Semesters 2 and 3									
PHM013	Mathematics (2)	3	5	125	3	2	0	5	PHM012
PHM021	Vibration and Waves	3	5	125	3	1	1	5	Eng/Math
PHM032	Dynamics	3	5	125	2	2	1	5	PHM031

+ courses from Level 1 based on the Program the student is enrolled in. Registration for courses in Summer Semesters is against fees for all students (1300 EGP/CH).

The above scenario assumes the student has passed all courses in Semester 1. If a student fails any of the courses, then he should follow the following recommendations:

Failed Course	Recommendation
Technical English Language	It has to be registered again.
Engineering Drawing	If the student plans to join Mechanical Engineering Specialization, then he should register this course again. Otherwise, he continues with the Mathematics (1), Statics and Electricity and Magnetism based on his results in the Technical English and Basic mathematics courses.
Projection and Engineering Graphics	If the student plans to join Civil or Architecture Engineering Specializations, then he should register this course again. Otherwise, he continues with the Mathematics (1), Statics and Electricity and Magnetism based on his results in the Technical English and Basic mathematics courses.
Computing in Engineering	This course will not be offered in Semester 2.

4. Alternative Scenario 3: passed English Test and failed Math Test

Code	Course Title	Credits and SWL			Contact Hours				Pre-requisites
		CH	ECTS	SWL	Lec	Tut	Lab	TT	
Semester 1									
MDP011	Engineering Drawing	3	6	150	1	3	2	6	
CEP011	Projection and Engineering Graphics	3	6	150	1	3	2	6	
CSE031	Computing in Engineering	2	4	100	2	0	0	2	
PHM011	Basic Mathematics	0	4	100	2	2	0	4	
MDP081	Production Engineering	3	5	125	2	0	3	5	Eng
PHM041	Engineering Chemistry	3	5	125	2	1	2	5	Eng
Total		14	30	750	10	9	9	28	
Semester 2									
PHM012	Mathematics (1)	3	5	125	3	2	0	5	Eng/Math
PHM022	Electricity and Magnetism	3	5	125	3	1	1	5	Eng/Math
PHM031	Statics	3	5	125	2	2	1	5	Eng/Math
ENG011	Fundamentals of Engineering	2	4	100	2	1	0	3	
Total		14	24	600	13	7	3	23	
Semester 3 or Summer Semester between Semesters 2 and 3									
PHM013	Mathematics (2)	3	5	125	3	2	0	5	PHM012
PHM021	Vibration and Waves	3	5	125	3	1	1	5	Eng/Math
PHM032	Dynamics	3	5	125	2	2	1	5	PHM031

+ courses from Level 1 based on the Program the student is enrolled in. Registration for courses in Summer Semesters is against fees for all students (1300 EGP/CH).

The above scenario assumes the student has passed all courses in Semester 1. If a student fails any of the courses, then he should follow the following recommendations:

Failed Course	Recommendation
Technical English Language	It has to be registered again.
Basic Mathematics	It has to be registered again.
Engineering Drawing	If the student plans to join Mechanical Engineering Specialization, then he should register this course again. Otherwise, he continues with the Mathematics (1), Statics and Electricity and Magnetism based on his results in the Technical English and Basic mathematics courses.
Projection and Engineering Graphics	If the student plans to join Civil or Architecture Engineering Specializations, then he should register this course again. Otherwise, he continues with the Mathematics (1), Statics and Electricity and Magnetism based on his results in the Technical English and Basic mathematics courses.
Engineering Chemistry	It is advised to register it again.
Production Engineering	It is advised to register it again.
Computing in Engineering	This course will not be offered in Semester 2.