



## **Information on Freshmen Fall 2018 Registration FOR THE COLLEGE OF ENGINEERING**

### **Welcome New Freshmen!**

Welcome to the University of Miami's College of Engineering. We are pleased that you have chosen to join our program and look forward to your arrival on campus.

The College of Engineering offers a variety of majors. Given below are the majors available in the College of Engineering.

- Aerospace Engineering
- Architectural Engineering
- Audio Engineering
- Biomedical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Engineering Science
- Environmental Engineering
- Industrial Engineering
- Mechanical Engineering
- Software Engineering
- Undeclared Engineering

More information about these majors can be found on the College of Engineering's website and the University Bulletin.

### **How is Freshmen Year in Engineering Different?**

You and every incoming student in the College of Engineering are in the IMPAcT (Integrated Mathematics, Physics and Chemistry/Communication Track) program. Students in this program take all/most of the classes together. This helps the freshmen to get to know each other much more quickly than would happen otherwise. This facilitates students seeking each other's help in

learning as well as coping with the transition from high school to university. The students form a learning community, which enhances their university experience and provides a support system during their freshmen year. The class groups are decided based on the mathematics class into which the student has been placed.

All engineering students have to meet with an advisor before their classes are finalized. This usually happens during the orientation week. We will send you more information about it in late July early August.

## **Advising in Engineering**

All engineering students during their freshmen and sophomore years are advised in the Undergraduate Advising office located in the Dean's office. This office deals with all the incoming freshmen during the period before the students enroll at the University of Miami too. The advising office makes sure all the new freshmen take the math placement test and are placed in the appropriate classes. All incoming transfer students also spend at least a semester at the Undergraduate Advising office. During the period the office makes sure that all the transfer credits are evaluated to determine the equivalent class at the University of Miami.

When the students have completed about half their curriculum, the Undergraduate Advising office transfers their files to the department, where a faculty member will advise the student until they graduate.

## **GENERAL INSTRUCTIONS FOR PLANNING YOUR COURSE SELECTIONS**

Engineering is a professional degree. As a result the curriculum in engineering is very structured. You can find the list of required classes for your major and the general order in which you have to take them in the University's Bulletin as well as the College of Engineering's website. The order is decided by your faculty and based on the knowledge required before you take certain classes. While there is a certain amount of flexibility, you have to meet the prerequisite for any class before you are allowed to take that class.

### **Courses needed for a first-semester Engineering freshman**

During the first semester most freshmen take a mathematics class, a science class, an introduction to engineering class and an English composition class. Depending on the specific courses you take, the number of credits is usually about 14 or 15 credits.

### **Mathematics**

- Domestic Students – Newly admitted student's Math Placement will be determined based on the SAT or ACT scores that have been submitted. If you would like to place in a

higher level, you may choose to take the ALEKS Math Placement exam on campus during one of the proctored sessions offered during the summer and during move-in dates in August. Visit <http://www.math.miami.edu/undergraduate/aleks-math-placement/> for the Placement Guide and proctored testing dates and times.

- **International Students** – International students will be required to complete the ALEKS Math Placement test on campus during one of the proctored sessions offered during the summer or during move-in dates in August prior to enrolling in any classes that require a math pre-requisite. Knowing that the transition to a US academic setting can be challenging, this will ensure that your enrollment is tailored to your abilities and will maximize your chances of academic success. Visit <http://www.math.miami.edu/undergraduate/aleks-math-placement/> for the Placement Guide and proctored testing dates and times.

Students who already have Calculus I credit from AP, IB (Higher Level), GCE, or dual enrollment classes, please send the engineering advising office a copy of your scores/transcript. However, please keep in mind that transcript may be late. So if you are taking the test this summer, you should take the ALEKS Math Placement if you are an international student.

## **AP/IB Exams, Dual Enrollment, Transfer Courses**

**AP/IB (Higher Level) exams:** Please send the engineering advising office the scores of the AP/IB (HL) tests you took in your freshman, sophomore and junior year at high school. For the AP/IB (HL) tests you are taking this year, you will need to make a judgment about the potential for receiving credits. Please make sure you accurately fill out the information form and e-mail it to the advising office. Let us know which exams you have or will have taken. Upon receipt of the results, please inform the Engineering Advising office by e-mail at [advising@eng.miami.edu](mailto:advising@eng.miami.edu). You may check the AP/IB (HL) [score tables online](#) in order to determine the exam scores necessary for the awarding of University of Miami credit for specific courses.

To have AP and IB (HL) scores evaluated for UM credit, you must request that your scores be sent directly to the UM Office of Admission from the College Board or from your regional IB office---a notation on the high school transcript is not sufficient.

**All official test score reports should be sent to: University of Miami, Office of Admission, and P.O. Box 249117, Coral Gables, FL 33124-9117.**

**Dual Enrollment/Transfer credits:** If you took a course for college credit, you must submit official transcripts to the UM Office of Admission from the issuing College or University. A listing on the high school transcript is not sufficient to award college credit. A minimum grade of "C" is required for consideration of credit in all dual enrollment and transfer courses.

Please note: All grades earned in these courses are part of your permanent record.

**Official transcripts for credits earned from any college/university should be sent to: University of Miami, Office of Admission, and P.O. Box 249117, Coral Gables, FL 33124-9117.**

You can check on CaneLink about the transfer credits the University has received. Here is the link to [Cane Link Student Guide](#).

## **English Composition**

English Composition I (ENG 105) is a required course for all engineering students.

Your placement in English Composition in the University of Miami is determined according to your scores on AP or IB tests.

Should you receive the appropriate AP or IB scores, you will NOT need to take ENG 105 or ENG 106 and will earn 3 credits each. AP CREDITS FOR ENG 106 CAN SUBSTITUTE FOR ENG 107 (WRITING ABOUT SCIENCE) IN THE COLLEGE OF ENGINEERING.

Should you receive exemption from (not credit in) ENG 105 through appropriate SAT scores, *you will still need to take ENG105* in the COLLEGE OF ENGINEERING.

## **Science Requirement**

Most engineering students have to take at least one Chemistry course with laboratory and at least three University physics courses with two laboratories. During your freshmen year you will take the first physics or chemistry depending on your math placement. You have to be placed in Calculus I or above to be registered for the first University Physics.

## **Introduction to Engineering**

All engineering students have to take Introduction to Engineering I class. This class teaches the common computer tools that you will use as an engineer.

## **General Educational Requirements/Cognate requirements**

Depending on a variety of factors, some students might have to register for a cognate class. The details are given below.

## **Areas of Knowledge**

Beginning Fall 2014, students at the College of Engineering have to fulfill the Areas of Knowledge requirement by completing three *cognates*, one from each of the three areas of the university curriculum: Arts & Humanities; People & Society; and Science, Technology,

Engineering & Mathematics. **For students in the College of Engineering, their engineering major will count as a cognate in Science, Technology, Engineering & Mathematics.** All students have to complete one cognate in People & Society and one cognate in Arts & Humanities.

A cognate is a group of at least three courses for at least nine credits, related in a topical, thematic, interdisciplinary, sequential, or other fashion, so that completion of a cognate provides coherent depth of knowledge. Each cognate has course options that allow students to complete the cognate in a manner that meets their interests, while staying within the coherent focus of the cognate. All cognates completed by students are listed on the students' transcripts, thus certifying their depth of knowledge in those areas.

The university offers a large number and range of cognates. All approved cognates are visible in a cognate search engine (at [www.miami.edu/cognates](http://www.miami.edu/cognates)) that allows students to search for cognates based on cognate features, cognate courses, and keywords. Each cognate is administered by a department or program that is designated as the Responsible Academic Unit (RAU) for the cognate. Enquiries regarding a cognate should be directed to the cognate's RAU.

*Please look through the Cognates and pick one People & Society and one Humanities & Arts Cognate of interest to you and that you would like to pursue. Write the name of the cognates in the information form.*

CONGRATULATIONS! You have now all the information you need to start the course selection process and fill the information form for the College of Engineering. Please download the form, fill it and e-mail it to [advising@eng.miami.edu](mailto:advising@eng.miami.edu)

If you have any questions call: (305) 284-3100 or email [advising@eng.miami.edu](mailto:advising@eng.miami.edu).

**The Engineering Advising office will register all incoming freshmen in the required courses. We will do it after we get the "Information Form" from you. So please do this as soon as possible.**

**You will receive a copy of your fall 2018 schedule of classes during Orientation in August and will have an appointment with an advisor during that time – before classes begin.**

**Please note: SCHEDULES WILL CHANGE AS YOUR AP, IB and Dual Enrollment CREDITS ARE RECEIVED BY THE UNIVERSITY. SCHEDULES ARE NOT FINALIZED TILL YOU MEET WITH YOUR ADVISOR IN AUGUST.**