June 5, 2018

Dear Bruin Engineer:

It gives me great pleasure to welcome you to UCLA Samueli Engineering. Your academic and extracurricular excellence allowed you to succeed in an increasingly competitive admissions process. You are now a Bruin! We have prepared this manual to help you come up to speed quickly as you prepare to start classes in the fall. Take time to look thorough it before the quarter begins.

Engineering is a challenging program. To make your transition to college life easier, please follow these three basic guidelines:

- Plan to take no more than three classes plus a seminar (Engineering 96, departmental seminar, or fiat luxe) during your first quarter on campus. Put your TA and instructor office hours on your calendar just like a class, and attend them. Your tuition is paying for these experiences, and if you don’t go you are leaving hundreds of dollars on the table as you miss unique learning opportunities.

- Start your problem sets the day you receive them. Office hours are most helpful if you have already started the problem and can come with questions. Many of my undergraduate advisees report that this simple strategy raises their performance by a letter grade. Plus, you will end up spending less time on the homework overall, and have an easier time following the lectures by being up on the material. Because the quarter system is so fast, this early-bird strategy is much easier to maintain if you start it on the first day of classes.

You are joining a wonderful community of engineering students, faculty, and staff. Our community will support you with academic counselors, peer and alumni mentors, faculty advisors, thriving student organizations, tutors, and scholarship opportunities. I encourage you to take full advantage of these resources and let them make the challenging experience of becoming an engineer easier and more rewarding.

I also ask you to make our community stronger by your actions. Help your classmates to learn even as you are learning, and look for opportunities to be kind to someone who needs a smile. As you move through the program here, you can make significant contributions of your own by becoming a peer mentor, a peer tutor, or an officer in one of our amazing student organizations – actions that will become your lasting legacy at UCLA Samueli.

Sincerely,

Richard Wesel
Associate Dean of Academic and Student Affairs
Table of Contents

Academic Calendar ................................................................. 6
Academic Counselors ............................................................. 7
HSSEAS OASA ................................................................. 8
  Who we are ................................................................. 8
  How to find us ............................................................ 8
  What we do ................................................................. 8
Enrollment ................................................................. 9
  Grading ................................................................. 9
  Graduate Courses ..................................................... 9
  Transfer Courses ....................................................... 9
  Faculty Advising ....................................................... 9
HSSEAS Deadlines ........................................................... 10
Study Skills ................................................................. 10
University Requirements .................................................. 11
General Education Courses ................................................ 12
Technical Breadth ............................................................ 13
Subset Restrictions .......................................................... 13
Advance Placement Exam Credit ....................................... 14
International Baccalaureate Exam Credit ................................ 14
Course Evaluation ............................................................ 15
Education Abroad .............................................................. 15
Engineering Transfer Center ............................................ 16
Engineering Transfer Center ............................................ 17
Career Center ................................................................. 18
Engineering Research & Internship Programs .................... 19
Women in Engineering ...................................................... 20
HSSEAS External Affairs .................................................. 21
Engineering Welcome Day ................................................ 22
Additional Resources ....................................................... 23
## Summer Holidays 2018
- Independence Day holiday: Wednesday, July 4
- Labor Day holiday: Monday, September 3

## Fall Quarter 2018
- Quarter begins: Monday, September 24
- Instruction begins: Thursday, September 27
- Last day to drop a impacted course: Friday, October 12
- Study List deadline (becomes official): Friday, October 12
- Last day to drop a non-impacted course: Friday, October 26
- Veterans Day holiday: Monday, November 12
- Thanksgiving holiday: Thursday-Friday, November 22-23
- Instruction ends: Saturday-Sunday, December 8-9
- Final examinations: Monday-Friday, December 10-14
- Quarter ends: Friday, December 14
- Christmas holiday: Monday-Tuesday, December 24-25
- New Year's holiday: Monday-Tuesday, December 31-January 1
- Winter campus closure: TBD

## Winter Quarter 2019
- Quarter begins: Wednesday, January 2
- Instruction begins: Monday, January 7
- Last day to drop a impacted course: Friday, January 18
- Martin Luther King, Jr. holiday: Monday, January 21
- Study List deadline (becomes official): Friday, January 25
- Last day to drop a non-impacted course: Friday, January 25
- Presidents' Day holiday: Monday, February 18
- Instruction ends: Friday, March 15
- Common final exams: Saturday-Sunday, March 16-17
- Final examinations: Monday-Friday, March 18-22
- Quarter ends: Friday, March 22

## Spring Quarter 2019
- Quarter begins: Wednesday, March 27
- César Chávez holiday: Friday, March 29
- Instruction begins: Monday, April 1
- Last day to drop a impacted course: Friday, April 12
- Study List deadline (becomes official): Friday, April 12
- Last day to drop a non-impacted course: Friday, April 26
- Memorial Day holiday: Monday, May 27
- Instruction ends: Friday, June 7
- Common final exams: Saturday-Sunday, June 8-9
- Final examinations: Monday-Friday, June 10-14
- Quarter ends: Friday, June 14
- Commencement Ceremonies 2019: Check HSSEAS OASA website: www.seasoasa.ucla.edu
To schedule an appointment:
call (310) 825-9580
or stop by 6426 Boelter Hall

Academic Counselors

Front Office Coordinator/ Counselor
- Anandrea Suarez

Aerospace Engineering
- Michel Moraga
- Vanessa Hernandez
- Jan LaBuda

Bioengineering
- Erkki Corpuz
- Ashley Grossfeld
- Victoria Moraga

Chemical Engineering
- Ashley Grossfeld
- Erkki Corpuz
- Julieta Ramirez

Civil Engineering
- Vanessa Hernandez
- Ashley Grossfeld
- Erkki Corpuz
- Jan LaBuda

Computer Engineering
- Cynthia Moraga
- Alina Haas
- Jan LaBuda
- Victoria Moraga
- Julieta Ramirez
- Mary Anne Geber
- James Washington

Computer Science
- Alina Haas
- Angelina Barger
- Mary Anne Geber
- Jan LaBuda
- Cynthia Moraga
- Michel Moraga
- Victoria Moraga
- James Washington

Computer Science & Engineering
- Alina Haas
- Angelina Barger
- Mary Anne Geber
- Jan LaBuda
- Cynthia Moraga
- Michel Moraga
- Victoria Moraga
- James Washington

Electrical Engineering
- Mary Anne Geber
- Alina Haas
- Jan LaBuda
- Cynthia Moraga
- Victoria Moraga
- Julieta Ramirez
- James Washington

Materials Engineering
- James Washington
- Erkki Corpuz
- Jan LaBuda

Mechanical Engineering
- Michel Moraga
- Angelina Barger
- Vanessa Hernandez
- Jan LaBuda

Please contact the OASA academic counselors via the MyUCLA
Message Center – scan QR Code below.
UCLA Engineering

Office of Academic and Student Affairs (OASA)

The Office of Academic and Student Affairs provides academic advising and counseling for engineering undergraduate students. Our counseling and advising services include guidance with policies and procedures, advice on curriculum requirements, identification of resources for tutoring and study skill improvement, and the review of petitions. However, we also serve as a gateway to a myriad of campus resources, and welcome any engineering undergraduate student to stop by 6426 Boelter Hall for help with their concern.

In addition to student advising, OASA supports engineering students in a variety of ways throughout their UCLA experience, beginning before admission and continuing until degree completion and commencement.

OASA plays a central role in the admission of engineering undergraduates to UCLA, and welcomes and advises admitted students.

Some of our engineering students start out in another major at UCLA. We provide regular change of major workshops to guide students through this process. We also help direct engineering students to internship opportunities.

OASA works with the Office of External Affairs to publicize the large number of scholarships available to engineering students. Many of these scholarships are also administered by OASA.

For students approaching graduation, OASA provides a degree audit to clarify exactly which requirements remain to be fulfilled for degree completion. Students should be sure they understand this mandatory process at least two quarters prior to their degree expected term.

OASA works with the administration of each engineering department to ensure that curriculum offerings and course scheduling support timely degree progress for our students. These offerings are publicized in the most recent HSSEAS Announcement.

OASA administers the senior exit survey and provides extensive statistics about the school.

OASA also works with the numerous engineering student organizations.

APPointments

To schedule an appointment: call (310) 825-9580 or stop by 6426 Boelter Hall

Walk in Appointments: Wednesdays: 9:00 a.m. – 11:30 a.m. Thursdays: 1:00 p.m. – 4:00 p.m.

Adjusted hours during summer orientation

CONTACT HOURS

(Office hours may be adjusted due to holiday closures and staff meetings; it is advisable to call the office to verify hours before coming in) M, W, F – 8:00 a.m. – 5:00 p.m. (Closed 12 noon – 1:00 p.m.) T, Th – 9:00 a.m. – 5:00 p.m. (Closed 12 noon – 1:00 p.m.) www.seasoasa.ucla.edu
ENROLLMENT

Online enrollment is available for all continuing undergraduate students subject to the deadlines indicated on pg. 7, which also apply to the use of PTE numbers. The online Schedule of Classes contains complete instructions. Undergraduates must enroll in 12-21 units each quarter. Students wishing to enroll in less than 12 units or more than 21 units must obtain approval by petition to the Associate Dean, 6426 Boelter Hall, prior to enrollment.

PASSED/NOT PASSED (P/NP)
ELIGIBILITY

Required courses and major electives for all HSSEAS majors must be taken for a letter grade (unless the course is graded P/NP only).

GE courses may be taken P/NP unless the course is offered for a letter grade only. A student may take one course, maximum 5 units, per quarter on a P/NP basis if the student meets all the following conditions:

1. In good academic standing (2.0 or higher term and cumulative GPA)
2. Enrolled in at least 9 graded units for the quarter. Not including the course to be taken on a P/NP basis
3. Has not received two NP grades. Students who have received two NP grades shall be excluded from electing courses on a P/NP basis for one quarter
4. Not repeating a course in which a grade of C-, D+, D, D- or F has been earned

During Summer Sessions, to enroll in one grading option course (up to 5 units) as P/NP a student must be additionally enrolled in 9 letter graded units for that same session. (e.g. if a student wants to take a GE for P/NP in Session A, that student must also be enrolled in an additional 9 letter graded units for Session A)

EXCEPTIONS

All petitions for exceptions to enrollment rules or for changes to study lists after the deadlines must be submitted to the Office of Academic and Student Affairs, 6426 Boelter Hall. IF approved, the student must additionally file an enrollment petition with the Registrar, 1113 Murphy Hall. The student’s BAR account will be charged for any fee. For other exceptions see a HSSEAS academic counselor. (Exceptions are not normally approved)

TRANSFER CREDIT for continuing students

Continuing HSSEAS students who have completed 105 or more quarter units of college coursework (excluding AP/IB/A-Levels) may not earn any additional credit from any community college, nor can they receive any additional lower-division credit from any 4-year institution unless it is a UC campus. UCLA prohibits concurrent enrollment at another college or university during the regular school year (fall, winter, spring), and students who take courses at other schools during a term in which they are also enrolled at UCLA, will not get credit for the work completed at the other school. Students must submit transcripts and evaluation materials no later than the end of the first term at UCLA after completing the work, for credit to be applied to HSSEAS degree requirements.

FACULTY ADVISING

Each student in the School of Engineering is assigned a Faculty Advisor, a Professor in the department of that student’s major. Faculty Advisors are for asking questions about careers, research, graduate school, and other specific topics that your Academic Counselor does not have detailed knowledge of. It is a requirement that you meet with your Faculty Advisor once every academic year. Failure to do so will result in a hold being placed on that student’s record until he or she has met with a Faculty Advisor.

REPETITION OF COURSES

Courses taken at the University MAY BE repeated at UCLA only subject to the following:

1. Student received a grade of C- or lower in the course
2. Course may not be repeated more than once without the approval of the Associate Dean

3. For undergraduates who repeat a total of 16 units or less, only the most recently earned letter grades and grade points will be computed into the grade-point average. After repeating 16 units, the GPA will be based on all letter grades assigned and total units attempted. (See General Catalog for additional details.)

REMOVAL OF GRADE OF INCOMPLETE

IF YOU RECEIVE A GRADE OF “I” DO NOT RE-ENROLL IN THE COURSE

An incomplete (I) grade may be assigned under the following conditions: the student must ask the Instructor for the I grade, the student’s work must be of passing quality and the reasons for requesting the I grade must be of sufficient gravity to warrant an incomplete grade. Do NOT re-enroll in the course if you receive an I. See a Counselor, 6426 BH, for more details. Once the work is satisfactorily completed, the instructor will submit a UCLA Report of Academic Revision. Students should have a clear understanding with the instructor regarding the work to be completed, the time frame, and the responsibilities each of them has. If the work is not completed by the end of the next quarter in residence, the grade I will automatically lapse to a grade of F or NP as appropriate.

GRADUATE LEVEL COURSES

(Courses numbered 200 and above).

HSSEAS undergraduate students are not allowed to enroll in graduate level courses without first obtaining approval by petition at 6426 BH.
Before Enrolling in Classes

Know your catalog year (2018-2019). Catalog Year is important because you will follow the curriculum requirements in effect that year.

Get a list of classes you need to take and plan your schedule ahead of time. Familiarize yourself with the Engineering Catalog (Announcement). Plan on studying abroad? Joining the marching band? Plan ahead.

Always keep your HSSEAS OASA academic counselor informed. Know yourself, your study habits, and what kind of teaching styles you excel at. Scope out your professors and their teaching styles (note that you will not have the option to choose your professor for most engineering classes).

Before Lecture

Buy/Rent Textbooks/Lecture notes early. Be prepared by reading the chapter you will go over in class ahead of time, if you have questions ask in lecture. Review your notes from past lectures and ask questions on what you don’t understand.

After Lecture

Re-read your notes the same day after lecture and highlight important ideas. Take advantage of emailing your Professor, TA and ATTENDING OFFICE HOURS! Always introduce yourself to your professor in office hours. Come in prepared with questions; bring a classmate for support if needed. Find one or two people in each course to form a study group (ask for emails/phone numbers).

Set Goals

Write them out, work toward them, and reflect on them often. Plan/Set a routine. Make lists of priorities and manage your time wisely. Remember UCLA runs on a quarter system. Each quarter is ten weeks.

Studying

Start with the most difficult subject first. Study at the same time daily. Study in an environment you feel comfortable in. Use your weekends wisely. Review material, meet with study group, do homework, and prepare for the week ahead.

CHANGE IN STUDY LIST DEADLINES

Deadline for HSSEAS students to drop non-impacted courses is end of 4th week

<table>
<thead>
<tr>
<th>Year</th>
<th>Term</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Impact courses may NOT be dropped after 5PM October 12 Fri 2nd wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*All courses must be ADDED by 5PM October 19 (fees apply) Fri 3rd wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Non-impacted courses may NOT be DROPPED after 5PM October 26 (fees apply) Fri 4th wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Change of credit detail (P/NP) may be changed until 5PM November 09 (fees apply) Fri 6th wk</td>
<td></td>
</tr>
<tr>
<td>Winter</td>
<td>Impact courses may NOT be dropped after 5PM January 18 Fri 2nd wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*All courses must be ADDED by 5PM January 25 (fees apply) Fri 3rd wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Non-impacted courses may NOT be DROPPED after 5PM February 1 (fees apply) Fri 4th wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Change of credit detail (P/NP) may be changed until 5PM February 15 (fees apply) Fri 6th wk</td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>Impact courses may NOT be dropped after 5PM April 12 Fri 2nd wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*All courses must be ADDED by 5PM April 19 (fees apply) Fri 3rd wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Non-impacted courses may NOT be DROPPED after 5PM April 26 (fees apply) Fri 4th wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Change of credit detail (P/NP) may be changed until 5PM May 10 (fees apply) Fri 6th wk</td>
<td></td>
</tr>
</tbody>
</table>

Highly Effective Habits

Before Enrolling in Classes

Know your catalog year (2018-2019). Catalog Year is important because you will follow the curriculum requirements in effect that year. Get a list of classes you need to take and plan your schedule ahead of time. Familiarize yourself with the Engineering Catalog (Announcement). Plan on studying abroad? Joining the marching band? Plan ahead.

Always keep your HSSEAS OASA academic counselor informed. Know yourself, your study habits, and what kind of teaching styles you excel at. Scope out your professors and their teaching styles (note that you will not have the option to choose your professor for most engineering classes).
University Requirements

All UC students must satisfy TWO University of California Requirements before they graduate!! (Note: These are separate requirements from your major and School requirements; you are responsible for making sure you have fulfilled both BEFORE you graduate)

**UC REQUIREMENT ONE: Entry Level Writing Requirement or ESL Requirement**

UC Analytical Writing Placement Exam (Passing this exam satisfies Entry Level Writing). If you passed the UC Analytical Writing Placement Exam (AWPE) or you have AP English credit, then on the Record of Interview you will have a notation indicating “SATISFIED”.

If AWPE was not passed and you have no AP English or other credit, then you will have a notation of “REQUIRED” or you may be noted specific exam results (e.g. English 2 Required).

If you are required to take the UC AWPE, please visit the following link to view the Fall exam schedule: http://www.wp.ucla.edu/ OR call the Writing Programs Office at 310-206-1145 for questions

ESL Placement Exam (Passing this exam satisfies ESL Requirement). If you passed the ESL exam you will have a notation of “SATISFIED” or you may be noted specific exam results (e.g. ESL 33 required). If required to take the ESL exam, then visit the following link to register for the exam:

http://www.wp.ucla.edu/index.php/placement-exam-schedule/eslppe OR e-mail tara@humnet.ucla.edu for questions

**UC REQUIREMENT TWO: American History and Institutions Requirement (AHI)**

If you have taken one year of American History and/or Government courses in High School and received an average grade of “B” or better, then you will have a notation indicating “SATISFIED”. (Please make sure that The Office of Undergraduate Admissions receives your High School Transcripts)

If you do not have high school credit or other type of credit for this requirement you will have a notation of “REQUIRED”.

If you are an F1 visa holder you may be exempt from this requirement. You will need to contact an undergraduate History Department counselor in 6248 Bunche Hall, 310-825-3720, to receive exemption for this requirement.

FOR MORE INFORMATION

Please visit the registrar’s website. https://www.registrar.ucla.edu/
General Education Requirements

Engineering majors are required to take five GE courses (24 units minimum). These courses are to be selected from the categories below, with each course satisfying a different subgroup:

**Foundations of the Arts and Humanities (FAH)**

Two 5-unit courses selected from two different subgroups:

1. Literary and Cultural Analysis (LCA)
2. Philosophical and Linguistic Analysis (PLA)
3. Visual and Performance Arts Analysis and Practice (VPA)

Courses in this area offer perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, the courses provide the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities, and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**Foundations of Society and Culture (FSC)**

Two 5-unit courses, one from each subgroup:

1. Historical Analysis (HAN)
2. Social Analysis (SAN)

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. The courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

Note: some specific classes may count for one of multiple GE categories. You must be sure to take five different classes to satisfy five different GE categories (all of those listed above except for one FAH category). Please ask a counselor if you have ANY questions about your GE requirements.

**Foundations of Scientific Inquiry (FSI)**

One course from the Life Sciences subgroup:

1. Life Sciences

DO NOT TAKE a Physical Sciences GE. It is already satisfied for all engineering students.

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of the physical and biological world. The courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, earth and environmental sciences, and astrophysics and cosmology.

This requirement is automatically satisfied for Bioengineering and Chemical Engineering majors. The requirement is satisfied for Civil Engineering majors by the natural science requirement - one natural science course must be taken from Civil and Environmental Engineering 58SL, Earth, Planetary, and Space Sciences 3, 15, 16, 17, 20, Environment 12, Life Sciences 1, 2, 7A, Microbiology, Immunology, and Molecular Genetics 5, 6, or Neuroscience 10

**GE Clusters**

While engineering students are allowed to take GE Clusters, they may be difficult to complete because a student must complete a fixed 3-quarter sequence of classes to receive credit for the 3 to 4 GE categories. We advise that you speak to an OASA counselor if you are considering taking any GE clusters.
Technical Breadth Requirement and Restrictions

Students must satisfy a single Technical Breadth Area (TBA) outside their major's department.

Example: Students in the Bioengineering major cannot choose the TBA in Bioengineering.

Technical Breadth Areas
- Bioengineering
- Chemical and Biomolecular Engineering
- Civil and Environmental Engineering
- Computer Science
- Electrical and Computer Engineering
- Materials Science and Engineering
- Mechanical and Aerospace Engineering
- Computational Genomics
- Energy and the Environment
- Engineering Mathematics
- Engineering Science
- Nanotechnology
- Pre-Med
- Technology Management
- Urban Planning

Exceptions
Students in the Computer Engineering major have the choice to select a technical breadth area in either the department of Electrical and Computer Engineering or Computer Science since this major is jointly administered by both departments. Students do have the option to choose a course offered by their major's department if the course is part of a schoolwide TBA (e.g. Engineering Mathematics) and not being used to satisfy other degree requirements. Example: the TBA in Engineering Mathematics lists COM SCI 112 which is not required for the Computer Science and Engineering major, therefore, a student in Computer Science and Engineering major can choose COM SCI 112 to satisfy that TBA.

Courses chosen to satisfy the TBA cannot be used to satisfy other degree requirements. Students are responsible for meeting requisites of courses selected. Students may petition, at 6426BH, to use one lower division course to satisfy a technical breadth elective if that lower division course is a requisite for at least one of the two upper division technical breadth courses that the student takes from the same area (and that lower division course is not being applied toward another degree requirement). The Technical breadth requirement is a 12 unit requirement. To complete the requirement with only three courses, those three courses must add up to at least 12 units.

Subset Restrictions
It is not permitted to use more than one course from the same subset in meeting the degree requirements of any HSSEAS major unless an additional course from that subset is explicitly specified as recommended or is listed as a prerequisite in the catalog description of the course in the same subset.

ie: Civil Engineering students must take C&EE 110 as part of their major requirements. This course is in Subset 1 (Probability and Statistics), they may not take any other course in this subset (STATS 110A, EC ENGR 131A, MATH 170A, STATS 100A) to satisfy a Technical Breadth, as the content covered in the courses of a subset contain too much overlap.

Subset 1: Probability and Statistics course subset (C&EE 110, STATS 110A, EC ENGR 131A, MATH 170A, STATS 100A)
Subset 2: Numerical Computing course subset (EC ENGR 133A, C&EE 103, CH ENGR 102, MATH 151A)
Subset 3a: Structural Mechanics Subset (C&EE 110, MECH&AE 101 (formerly 96)) Subset 3b: Statics Subset (C&EE 102, MECH&AE 101 (formerly 96)) Subset 3c: Dynamics Subset (C&EE 102, MECH&AE 102)
Subset 4a: Introductory Thermodynamics subset (CH ENGR 102A, MECH&AE 105A)
Subset 4b: Transport Phenomena (CH ENGR 102B, MECH&AE 105D)
Subset 5a: Systems (EC ENGR 102, MECH&AE 107) Subset 5b: Controls (CH ENGR 107, EC ENGR 141, MECH&AE 171A)
Subset 6: Circuits (EC ENGR 10, EC ENGR 100), (EC ENGR 100, EC ENGR 110)
Subset 7: Differential Equations (MATH 33B, MECH&AE 82)

For more information on subset restrictions and TBAs. Please refer to: (https://www.seasoasa.ucla.edu/undergraduate-technical-breadth-area-tba/)
## AP/IB Exams

### AP Examination

<table>
<thead>
<tr>
<th>Exam Name</th>
<th>Score</th>
<th>Subject</th>
<th>Title/Course #</th>
<th>Units</th>
<th>Requirements Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>3</td>
<td>CHEM</td>
<td>Introductory</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 or 5</td>
<td>CHEM</td>
<td>General</td>
<td>8</td>
<td>Chem 20A</td>
</tr>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8 unit max for both exams)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Language/Composition</td>
<td>3</td>
<td>ENGL</td>
<td>Unassigned</td>
<td>8</td>
<td>EW</td>
</tr>
<tr>
<td></td>
<td>4 or 5</td>
<td>ENGL</td>
<td>Unassigned</td>
<td>8</td>
<td>EW, W1, Eng Comp 3</td>
</tr>
<tr>
<td>- Literature/Composition</td>
<td>3</td>
<td>ENGL</td>
<td>Unassigned</td>
<td>8</td>
<td>EW</td>
</tr>
<tr>
<td></td>
<td>4 or 5</td>
<td>ENGL</td>
<td>Unassigned</td>
<td>8</td>
<td>EW, W1, Eng Comp 3</td>
</tr>
<tr>
<td>Government and Politics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- US</td>
<td>3, 4, or 5</td>
<td>POL SCI</td>
<td>United States</td>
<td>4</td>
<td>AH</td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- US</td>
<td>3, 4, or 5</td>
<td>HIST</td>
<td>United States</td>
<td>8</td>
<td>AH</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8 unit max for both exams)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Calculus AB</td>
<td>3 or 4</td>
<td>MATH</td>
<td>Calculus</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>MATH</td>
<td>4 units which may be applied to Math 31A</td>
<td>4</td>
<td>Math 31A</td>
</tr>
<tr>
<td>- Calculus BC</td>
<td>3</td>
<td>MATH</td>
<td>Calculus</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>MATH</td>
<td>4 units which may be applied to Math 31A</td>
<td>8</td>
<td>Math 31A</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>MATH</td>
<td>Math 31A + 4 units which may be applied to Math 31B</td>
<td>8</td>
<td>Math 31A, Math 31B</td>
</tr>
<tr>
<td>Physics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8 unit max for all physics exams)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Physics C: Mechanics</td>
<td>3</td>
<td>PHYSICS</td>
<td>General &quot;C&quot;</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>- Physics C: Mechanics</td>
<td>4 or 5</td>
<td>PHYSICS</td>
<td>May be used to satisfy Phys 1A</td>
<td>4</td>
<td>Physics 1A</td>
</tr>
</tbody>
</table>

### IB Examination

<table>
<thead>
<tr>
<th>Exam Name</th>
<th>Score</th>
<th>Subject</th>
<th>Title/Course #</th>
<th>Units</th>
<th>Requirements Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>5, 6, 7</td>
<td>HIST</td>
<td>Americas</td>
<td>8</td>
<td>AH</td>
</tr>
<tr>
<td>*English</td>
<td>5, 6, 7</td>
<td>ENGL</td>
<td>Unassigned</td>
<td>8</td>
<td>EW, W1, Eng Comp 3</td>
</tr>
<tr>
<td>Language A1 (native)</td>
<td>5, 6, 7</td>
<td>ENGL</td>
<td>Unassigned</td>
<td>8</td>
<td>EW, W1, Eng Comp 3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>5</td>
<td>MATH</td>
<td>Math 1 + 4 units unassigned credit</td>
<td>8</td>
<td>Math 31A, Math 31B</td>
</tr>
<tr>
<td></td>
<td>6 or 7</td>
<td>MATH</td>
<td>Math 31A + 4 units which may be applied to Math 31B if IB Course covered topic 9</td>
<td>8</td>
<td>Math 31A, Math 31B</td>
</tr>
</tbody>
</table>

* A score of 6 or higher on the Standard Level (SL) English A: Literature exam and/or the Standard Level (SL) A1 English exam also satisfies EW, although it does not result in any course credit.

UCLA awards credit for Higher Level (HL) IB exams only.

For a full list of AP and IB scores UCLA accepts visit UCLA Admissions Prospective Students site. ([http://www.admission.ucla.edu/infoprospective.htm](http://www.admission.ucla.edu/infoprospective.htm))
Course Evaluations

If you are seeking course equivalence for a California Community College course, first check ASSIST (www.assist.org) to see if equivalence for the course already exists.

Continuing HSSEAS students who have completed 105 or more quarter units of college coursework (excluding AP/IB/A-Levels) may not earn any additional credit from any community college, nor can they receive any additional lower-division credit from any 4-year institution unless it is a UC campus.

NOTE on Simultaneous Enrollment: Attending UCLA regular session (Fall, Winter, or Spring) and another college (community college, UCLA Extension, or a four-year institution) at the same time - is not permitted. A student enrolled in UCLA Summer Sessions is allowed to transfer credit to UCLA for work done at another institution at the same time provided this work is part of the other institution's summer term and has an end date later than UCLA’s spring quarter end date. Rules for transfer credit eligibility still apply.

For Math, Physics, Chemistry, Life Science, Statistics or English Composition courses which do not appear on www.assist.org:

You must submit a copy of the course outline or syllabus (including a list of the topics covered and textbook(s) used) to the respective undergraduate counseling office of the Math, Physics, Chemistry and Biochemistry, Life Sciences, Statistics or Writing Programs department as appropriate for evaluation:

- Math - go to 6356 Mathematical Sciences Building
- Physics - go to 1-707A Physics and Astronomy Building
- Chemistry - go to 4006 Young Hall
- Life Sciences – go to 222 Hershey Hall
- Statistics – go to 8117A Mathematical Sciences Building
- English Composition – go to 146 Humanities Building

If the course(s) are deemed equivalent, you must obtain written verification of this from the department office and submit the verification, along with your name and student I.D. number, to 6426 Boelter Hall or email to course_eval@seas.ucla.edu

Engineering/CS courses from CA community colleges that have been previously approved may appear on ASSIST (www.assist.org), so it is important to check. If a course does indeed appear on ASSIST, you do NOT need to submit this evaluation form; however, an official sealed transcript from the community college must be submitted to our office at 6426 Boelter Hall in order for credit to be posted to your DPR/Degree Audit.

If you are planning to graduate within two quarters of completing the course(s) being evaluated, you MUST notify the degree auditors at degree_auditor@ea.ucla.edu of your plans in order to avoid a delay in receiving your degree.

If you’re unsure as to whether the course you are requesting to have evaluated is UC EAP (Education Abroad Program) approved, consult with the EAP Office and/or web site (http://www.ieo.ucla.edu/Eap/) about your options prior to submitting the course for evaluation. If the course is found to NOT be a UC EAP approved course, it will NOT be evaluated for UCLA credit. Please note that credit for an approved UC EAP course will be automatically posted to your DPR/Degree Audit by undergraduate admissions after you submit an official sealed transcript indicating that you’ve completed the course; however, this may take up to two months. You are advised to contact the engineering credit evaluators at course_eval@seas.ucla.edu when the credit appears on your DPR/Degree Audit so that engineering may appropriately update credit for approved course evaluations or petitions submitted to HSSEAS/6426 BH. Please also note that no more than 5 approved UC EAP courses may be applied to major requirements (i.e. engineering, computer science, technical electives from other departments). To receive full credit for a course taken abroad, the course must be approved and transfer as at least 3 quarter units.

Evaluation deadlines: There is really no “deadline”, per se; however, the sooner you provide the information, the sooner you will find out the result of the evaluation. Thus, you will be able to decide upon the courses you will need to take.

It is expected that students take required courses and major electives on a letter grade basis (NOT pass/no pass).

Education Abroad

Consult with the EAP Office and/or web site about your options (i.e. where can you go to take engineering/CS courses, or GE courses, courses for an approved minor, or courses for your own interest, etc) When you have a plan and are ready to start the application process. Get an Academic Planning Form (and other application materials if appropriate) from the International Education Office (IEO).

Non-UC Education Abroad Programs:
Students who wish to study abroad in non-UC Education Abroad Programs should: Visit the International Education Office (http://www.ieo.ucla.edu/nonucprograms/ B-300 Murphy Hall) for information.
UCLA ENGINEERING TRANSFER CENTER

Boelter Hall 6288
UCLA Henry Samueli School of Engineering & Applied Science

The Engineering Transfer Center at UCLA Samueli Engineering provides resources and support to current engineering transfer students, visibility and advocacy for the transfer community in the School, and works with local community colleges to support the engineering pipeline.

For more information:
Visit our website or send us an email!
etransfercenter.seas.ucla.edu | etransfercenter@hsseas.ucla.edu
The Engineering Transfer Center provides resources that: a) support successful transition and academic success for our transfer students, b) access to enhanced learning experiences and professional development that help transfer students maximize their experience and prepare them for life after graduation, c) create a Bruin Engineering community that will offer support, visibility, and advocacy for transfer students, and d) support the educational pipeline from community college to Samueli Engineering. For more information please visit our website or contact Wes Uehara, Community College Outreach Coordinator and Director of the eTransfer Center at wuehara@seas.ucla.edu.

Networking Opportunities
- Fall Kick-off & welcome reception for transfer students
- Peer mentoring from MentorSEAS
- Study breaks at the Center

Transfer Accelerator - Bridge Program
- August 2018 - 40 spots
- 2 week program provides incoming transfer students with a solid foundation to make the most of their UCLA Samueli experience

Monthly Professional Development Workshop Series
- Study strategies re-evaluated
- Preparation for the career fair and industry internships
- Summer academic research opportunities
- Importance of engineering organizations

Tutoring and Study Halls
- Study halls for upper division courses
- Study space

Community College Outreach
- Workshop series: pathways to UCLA Engineering, preparing your UC application
- Bridging student organizations
- Engineering Day for prospective transfer students
- Transfer Student Summer Research Program
The Career Center partners with the Samueli School of Engineering to provide engineering-specific career services for all undergraduate students. We provide the following services:

**ENGINEERING CAREER COUNSELING SERVICES:**
Monday through Friday, undergraduate engineering students can schedule an appointment with a STEM-focused counselor by logging onto their Handshake account (ucla.joinhandshake.com).

*Engineering Career Liaison—Erin Haywood: ehaywood@career.ucla.edu*

**ENGINEERING CAREER DROP-INS:**
Engineering students can participate in career drop-ins where they can meet with a Career Engagement Educator to discuss topics such as resumes, cover letters, and job/internship search strategies.

*Every quarter (Weeks 1–4)*
*Thursdays, 12:30 PM–2:30 PM*
*Boelter Hall 6288*

**ENGINEERING CAREER DEVELOPMENT WORKSHOPS:**
In our engineering-specific workshops, students will be able to develop their skills, connect with industry professionals, and explore career opportunities. Some examples of programming are: How to Ace the Technical Interview, Tech Talks, and Inside Engineering.

To explore and RSVP for programs, log on to your Handshake account and click on the “Events” tab.

Are you looking for engineering-specific jobs or internships? Join Handshake, UCLA’s career discovery platform designed to match you with opportunities based on your interests and skills. Log on to Handshake today to:

- Schedule an appointment with a counselor
- Register for career workshops
- Attend one of our recruiting events
- Explore career resources and assessments
- Connect with employers and your peers

Log on: ucla.joinhandshake.com | Learn more: career.ucla.edu/handshake
Program Goals
- Facilitate 1st and 2nd year engineering students’ securing of a summer experience by the end of 2nd year.
- Before graduation, provide all HSSEAS undergraduate students with either research or an industry internship (currently 79% of seniors do either research or received an internship, with 21% doing both).

Undergraduate Research Program (URP)
- 38% of 2017 seniors completed undergraduate research.
- 33% of the above seniors continued to graduate programs.
- 331 engineering undergraduate students enrolled in research courses.

URP consists of:
- Journal Club
- Poster making workshops
- Undergraduate Research Poster Day
- Research published on engineering school website
- End of year awards ceremony

In the summer URP continues as the Summer Undergraduate Scholar Program.
For more info: https://tinyurl.com/uclaurp

Undergraduate Internship Program (UIP)
- 61% of 2017 graduates completed industry internships.
- 11 career fair related events with over 3,000 engineering students attending.
- Over 900 companies seeking UCLA engineering students.

UIP provides numerous career related opportunities:
- Career fairs
- Company information sessions
- Workshops (resume, LinkedIn, technical interviews, etc.)
- Career advising every Thursday from 1 - 4 PM in the Engineering Student Resource Center

For more info: https://tinyurl.com/uclauip

E-mail questions to Director William Herrera at williamh@seas.ucla.edu
The UCLA Women in Engineering Program

WE@UCLA

Engineering change

To enable the full participation, success, and advancement of women in engineering and computer science

The program facilitates academic and career success, including:

- Peer Mentorship
- Early Research/Internship
- Team Building Activities
- Professional/Leadership/Ethical development
- Alumni/Industry outreach

WE@UCLA is committed to maintaining an environment that enhances the personal and professional development of women, while pursuing an inclusive and supportive environment for all students in the UCLA Samueli School of Engineering

https://samueli.ucla.edu/women-in-engineering
Our mission is to build enduring relationships that promote advocacy and financial support for our students, faculty and research efforts.

**Why we do what we do, and how you can help:**

Tuition and state funds only cover 15% of your UCLA education. Private support is more important than ever to help bridge the gap, ensuring that you and future generations of Bruin Engineers receive a world-class experience.

Think about ways that you can give back to UCLA Samueli starting now and continue to do so when you become an alumnus.

1. **Join the UCLA Samueli Student Philanthropy Committee.** Advocate for your school while honing your leadership and interpersonal skills!

2. **Join the Boelter Society, UCLA Engineering’s leadership giving society.** With a gift of $100 each year, current students can get a head start on their philanthropic legacy while gaining access to a number of tangible benefits typically reserved for our most steadfast alumni donors, including invitations to our annual Boelter Society Celebration and the Dean’s holiday party. These events provide you with access to successful Bruin Engineers and the opportunity to connect with like-minded philanthropists.

3. **Like UCLA Engineering on Facebook and follow us on Twitter and Instagram @UCLAEngineering.**

To learn more about the Office of External Affairs and any student volunteer opportunities we offer, please contact us as hsseasgiving@support.ucla.edu.

Make your gift today, by visiting engineering.ucla.edu/giving.
ENGINEERING SOCIETY OF UCLA PRESENTS
ENGINEERING WELCOME DAY!
September 26, 2018
Akerman Grand Ballroom
10AM – 2PM
Additional Resources

Health and Wellness
UCLA Center for Accessible Education (CAE)
http://www.cae.ucla.edu/
Counseling and Psychological Services (CAPS)
http://www.counseling.ucla.edu
UCLA Arthur Ashe Student Health & Wellness Center
http://www.studenthealth.ucla.edu/default.aspx

Advising
Visit your Academic Counselor at 6426 Boelter Hall
http://www.seasoasa.ucla.edu/staff
Faculty advising
https://my.engineering.ucla.edu/user/loginHome.php
Degree Audit Report System (DARS)
http://www.seasoasa.ucla.edu/undergraduates/DARS
UCLA CCLE Shared System
https://ccle.ucla.edu/
My Engineering
https://my.engineering.ucla.edu/

Campus Resources
Career Center
http://www.career.ucla.edu/
Academic Advancement Program (AAP)
http://www.aap.ucla.edu/programs/counseling/
UCLA First to Go
http://firsttogo.ucla.edu/
MyUCLA
http://www.my.ucla.edu/
Dean of Students
http://www.deanofstudents.ucla.edu
UCLA Veteran Affairs
http://www.veterans.ucla.edu/
Student Legal Services
http://www.studentlegal.ucla.edu/
Athletics
International Education Office
http://www.ieo.ucla.edu/
Dashew Center for International Students and Scholars
http://www.internationalcenter.ucla.edu/

Transfer Student Resources
UCLA Transfer Center
http://www.transfers.ucla.edu/
Engineering Transfer Center
https://etransfercenter.seas.ucla.edu/

Registration Support
Registrars
http://www.registrar.ucla.edu/
Financial Aid
http://www.financialaid.ucla.edu/

Student Organizations
Tau Beta Pi Honor Society Tutoring
https://tbp.seas.ucla.edu/tutoring/
Engineering Student Groups
http://engineering.ucla.edu/student-clubs/

UCLA Samueli School of Engineering
UCLA Samueli School of Engineering
https://samueli.ucla.edu/
Women in Engineering (WE@UCLA)
https://samueli.ucla.edu/women-in-engineering/
Center for Excellence in Engineering and Diversity (CEED)
https://www.ceed.ucla.edu/
Scholarships
https://samueli.ucla.edu/scholarships
Office of Academic and Student Affairs
https://www.seasoasa.ucla.edu/
Office of Academic and Student Affairs
6426 Boelter Hall
For more information contact James Washington
jaw@seas.ucla.edu