Pre-approved Technical Elective (TE) Courses.

ENG 100D/100L*  TIES program (6 units)
ESYS 150  Environmental Perils
SE 142  Design of Composites Structures
SE 150  Design of Steel Structures
SE 151A-B  Design of Structural Concrete
SE 152  Seismic Design of Structures
SE 154  Design of Timber
SE 160A-B  Aerospace Structural Design
SE 163  Nondestructive Evaluation and Design
SE 165  Structural Health Monitoring
SE 168  Structural System Testing and Model Correlation
SE 171  Aerospace Structures Repair
SE 180  Earthquake Engineering
SE 181  Geotechnical Engineering
SE 182  Foundation Engineering
SE 184  Ground Improvement
SE 200-289**  graduate courses
MAE 101C  Heat Transfer
MAE 104  Aerodynamics
MAE 105  Introduction of Mathematical Physics
MAE 110A-B  Thermodynamics
MAE 122  Flow and Transport in the Environment
MAE 118  Introduction to Energy Systems
MAE 124/ESYS 103  Environmental Challenges: Science and Solutions
MAE 131C  Solid Mechanics III: Small Deflection Theory of Plates
MAE 140  Linear Circuits
MAE 143A  Signals and Systems
MAE 143B  Linear Control
MAE 143C  Digital Control Systems
MAE 149  Sensor Networks
MAE 150  Computer-Aided Design (Can only be taken in Fall by non-MAE students. Must have MAE
3 pre-requisite completed)
MAE 160  Mechanical Behavior of Materials
MAE 165  Fatigue and Failure Analysis of Engineering Components
MAE 166  Nanomaterials
MAE 167  Wave Dynamics of Materials
MAE 180A  Spacecraft Guidance I
MAE 181  Space Mission Analysis and Design
USP 171***  Sustainable Development
USP 177***  Urban Design Practicum
USP 179***  Urban Design, Theory, and Practice
USP 180***  Urban Transportation
USP 191***  GIS for Urban and Community Planning

* ENG 100D and one ENG 100L course must be taken together for a total of 6 units to count as one technical elective. TIES can only be used for a total of one TE.
** Students wishing to take graduate courses must have a minimum 3.0 overall GPA and obtain instructor approval prior to enrolling. Graduate students will have priority enrollment. You may not count a graduate course as a TE if you took the undergraduate equivalent and vice versa (i.e. – SE 160A/SE 260A, SE 160B/SE 260B, SE 165/SE 265, SE 168/SE 268, SE 171/SE 262).
*** USP majors have priority registration for these courses. Attend the first two weeks of the course you wish to enroll in. At the end of week 2, if there is room, the instructor may be able to allow you to register and you may do so with an ADD card. Make sure to speak with the instructor during the first two weeks of class and let him or her know that you would like to register for the course.