## **Dual Degree Engineering**

#### OVERVIEW OF THE DUAL-DEGREE ENGINEERING PROGRAM:

The Dual-Degree Engineering Program at The College of Idaho gives students the opportunity to experience both a liberal arts and an engineering education. Students in the Dual-Degree Engineering Program complete their PEAK program at The College of Idaho and then move on to one of our partner schools. Students can typically do complete the Dual Degree Engineering Program in five years: three years at The College of Idaho, and two years at one of our partner schools. At the end of the program, students get two degrees: a degree from The College of Idaho, and an engineering degree from the partner school.

Students who complete the Dual-Degree Engineering Program satisfy two PEAKs: the Natural Science/Mathematics PEAK and the Professional Studies/Enhancements PEAK. Please note that the PSE PEAK is only completed if the student actually enrolls in an engineering program at a partner university.

During their junior year at The C of I, students must apply for admission to a Dual Degree Program at a partner school. Our partner schools have signed agreements that guarantee admission to their programs if the C of I student has met certain admissions criteria. For example, as of 2017 Columbia University requires an overall GPA of 3.3 and specifies that the minimum grade for each pre-engineering science or math course must be a B (3.0) or better on the *first* attempt. Washington University requires a GPA of B+ (3.25) or better, both overall and in science and mathematics courses, for admission to their program. Both universities will consider students who do not meet the GPA guidelines on a case-by-case basis, but admission is not guaranteed.

Currently, The College of Idaho has formal partnerships with the following engineering schools:

- Washington University in Saint Louis, MO
- Columbia University in New York City, NY

These universities have exceptional engineering programs and programs in place to help liberal arts students transition into an engineering program.

## **Responsibilities of Dual-Degree Advisors:**

Finishing the College of Idaho PEAK curriculum in three years is possible, although it takes careful advising and a responsible student. Below are responsibilities that the Dual-Degree student must accept, as well as what s/he can expect of his/her advisor.

## First-Year Advisor Responsibilities:

- Help the student navigate this document.
- Enroll the student in the appropriate fall semester math course.
- Prior to winter/spring registration, send the student to meet Dr. Dull or Dr. Devine in Physics to answer questions about the Dual Degree Engineering Program.

## Major Advisor Responsibilities:

- Help students determine which Math/Physics courses are needed prior to moving to an engineering program.
- Help students decide on appropriate PEAK minors.
- Assist students with scheduling the PEAK program into three years.

• Inform students about agreements with partner schools and show students how to find more information about these schools' programs.

## **RESPONSIBILITIES OF DUAL-DEGREE Students:**

The timeline below is recommended if the student plans to spend three years at The College of Idaho before moving to another school to finish his/her engineering coursework. If the student plans to spend four years at The C of I, the Freshman Year guidelines become Sophomore Year, Sophomore Year becomes Junior Year, etc. To stay on track for a three-year plan, the student should:

#### **FRESHMAN YEAR:**

- Take Applied Calculus (MAT-150) or a higher level Calculus course fall semester of his/her freshman year.
- Early in the Fall Semester, meet with Dr. Dull or Dr. Devine in Physics to ask questions about the Dual Degree Engineering Program.
- Students with strong mathematical preparation and/or prior physics experience should consider enrolling in Analytical Physics and its lab (PHY-271/L, 5 cr) during fall semester of their freshman year.
- Decide on PEAK minors to ensure on-time (three-year) completion of the C of I dual-degree coursework. PEAK minors should be selected prior to registering for Winter/Spring courses in the freshman year.
- Recognize that acceptance to Dual-Degree programs is GPA dependent, and maintain the required GPA and course grades specified by the partner school.

### **SOPHOMORE YEAR:**

- If the student did not take Analytical Physics I and II and its lab (Phy-271/L, 5 cr and Phy-272/L, 5cr) during the freshman year s/he should take these courses in the sophomore year.
- Make continued progress towards the HFA and SSH PEAK minors.
- Learn about the program(s) that s/he wishes to join after completing C of I coursework. The earlier a student decides on the program(s) to which s/he plans to apply, the better s/he can decide which courses to take at The C of I. It is recommended that students start deciding on possible programs prior to registration for sophomore year spring semester courses.
- Maintain the required GPA and course grades specified by the partner school.

## JUNIOR YEAR:

- File a graduation application by the end of mid-term break of fall semester. This ensures the student will have met his/her PEAK major/minor requirements by the time s/he leaves The C of I.
- Complete the HFA and SSH PEAK minors by the end of spring semester.
- Decide on the programs to which s/he will apply, and monitor the deadlines for application to these programs. Students must meet all the application deadlines. In 2017, the deadline for Washington University was February 28th, and the deadline for Columbia University was February 15th.
- Investigate fellowships and scholarships awarded by partner schools, and apply for these fellowships if desired.
- Make financial aid arrangements with the partner/transfer school as needed.
- Maintain the required GPA and course grades specified by the partner school.

## **Frequently Asked Questions:**

# Q: CAN I DO MY ENGINEERING COURSEWORK AT A SCHOOL THAT IS NOT ONE OF OUR PARTNER SCHOOLS?

A: No. Our affiliation agreements with Washington University and Columbia University ensure that students will have programs in place to help them transition into an engineering program and finish in two years.

# Q: I AM SIGNING UP FOR MY FIRST SEMESTER OF COURSES, AND I'M NOT READY FOR CALCULUS. WHAT DO I DO?

A: To stay on-track to finish in three years, it is highly recommended that you start in Applied Calculus or a higher level math class fall semester of your freshman year; starting in a lower level math class may require you to spend four years at The C of I.

## Q: CAN I CHANGE MY MIND ABOUT LEAVING AFTER MY THIRD YEAR AT THE C OF I?

A: Yes. The student can either complete four years at The C of I and then go on to a Dual Degree program, or the student can elect to graduate only from The C of I. If the student decides not to go on to a Dual Degree program, s/he will need to select and complete an alternate PSE PEAK.

## Q: DO I HAVE TO MAJOR IN MATH OR MATH/PHYSICS TO DO THE DUAL-DEGREE ENGINEERING PROGRAM?

A: No. You may major in any field, although Math and Math/Physics majors are the easiest to complete while completing the Dual-Degree Engineering Program. Depending on the major, a major that is not Math or Math/Physics may require the student to spend four, rather than three, years at The College of Idaho.

## Q: WHY ISN'T BOISE STATE/UNIVERSITY OF WASHINGTON/MONTANA STATE/ETC. ONE OF OUR PARTNER SCHOOLS?

A: We are partnered with schools that have a well-established Dual Degree program in place. This allows us to tell students that there is a way for them to complete both the liberal arts and engineering coursework in five years (a typical length of time for many engineering degrees).

## **Q: HOW DO I APPLY FOR A DUAL-DEGREE PROGRAM?**

A: You must apply to the programs after completing their admission requirements. Applications for the dual-degree programs are typically due in the winter of junior year. Please check with the individual programs to obtain admission requirements and deadline information.

## **Q: WHEN DO I NEED TO SUBMIT MY GRADUATION APPLICATION?**

A: Graduation applications are due to the registrar by the end of fall break during your junior year if you plan to leave after the end of your junior year. If you plan to leave at the end of your senior year, you should submit your graduation application in May of your junior year at the normal deadline.