LAAS DEGREE REQUIREMENTS
MS plan A and B, and PhD

Summary
The program aims to educate and train students in the fundamentals of Earth system processes related to land and atmosphere and the coupled interactions between the two. Coursework consists of unifying core classes in “Land & Atmospheric Science” for all students, plus graduate electives spanning soil science, ecosystem processes, and atmospheric science.

The LAAS program offers no formal tracks. Students may choose either a Soil Science or the Atmospheric Science area of interest or, in consultation with their graduate committee, may design a rigorous course of study that spans across these areas, according to their own specific focus within Land & Atmospheric Science (for example, biogeochemical cycling, environmental chemistry, biometeorology, etc).

Students should work closely with their advisors to determine a suitable set of courses for their particular area of study. These courses should give the student skills to address scientific problems that are inherently multidisciplinary. Courses selected for the Degree Program form must be approved by the advisor and Director of Graduate Studies, preferably by the end of the first year after admission.

Unifying core classes
Goals:

1. Interdisciplinary yet rigorous introduction to Earth system processes related to land and atmosphere and the coupled interactions between the two

2. Opportunity to build strong connections with professors and peers

3. Building graduate student cohorts and morale
Course Credit Requirements

LAAS MS
Requires a total of 30 credits, including: 5 credits in required LAAS core courses; 9 credits in other LAAS (or related) courses relevant to the student’s research; 6 credits in minor/related courses; and 10 thesis credits. Students will need to work closely with their advisors to determine a suitable set of courses for their particular area of study. The Plan B MS degree (project/coursework option) requires at least 20 credits in core and minor courses along with the required LAAS core courses for a total of 30 credits.

Required Core Courses for the MS degree (5 credits)
LAAS 5050, Integrated Topics in Land & Atmospheric Science (3 cr, Fall)
LAAS 8128, Seminar (1.5 cr, Fall)
LAAS 8123, Research Ethics (0.5 cr, Spring)

LAAS PhD
Requires a total of 50 credits, including: 10 credits in required LAAS core courses; 6 credits in LAAS courses relevant to the student’s research; 10 credits in minor/related courses; and 24 thesis credits. The student’s graduate committee and graduate advisor will approve the selection of appropriate courses to meet this requirement; depending on the student’s emphasis and background, additional coursework may be required. An additional 24 doctoral thesis credits must be completed before receiving the Ph.D. degree; however, doctoral thesis credits may not be taken before completion of all program coursework requirements and advancement to candidacy.

Current PhD students who already hold an MS degree from the LAAS program are expected to complete all PhD program requirements. They are responsible for taking an additional 6 credits of course work including Research in Land and Atmospheric Science (2.0 credits) if it wasn’t taken during the MS. In addition, they are responsible for taking Seminar (1.5 credits), Ethics (0.5 credits), Teaching (3 credits), and an additional 24 credits of Thesis Research above the requirements for an MS.

Students who have already received credit for LAAS 8123 Research Ethics or GRAD 8101 Teaching in Higher Ed will be required to take additional courses such as Responsible Conduct of Research (RCR training) and Directed Teaching Experience (LAAS 8128). Equivalent substitutions will be considered by the program.

Required Core Courses for the PhD degree (10 credits)
LAAS 5050, Integrated Topics in Land & Atmospheric Science (3 cr, Fall)
LAAS 5051, Thesis Proposal Writing for Land & Atmospheric Science (2 cr, Spring)
LAAS 8128, Seminar (1.5 cr, Fall)
GRAD 8101, Teaching in Higher Ed (3 cr, Fall, Spring)
LAAS 8123, Research Ethics (0.5 cr, Spring)