A) Administration of the Graduate Program

1) The Graduate School:

The LAAS Graduate Program operates within the general policies and practices of the Graduate School. Details pertaining to the general regulations and organization of the Graduate School are outlined in the Constitution and Bulletin of the Graduate School; both faculty and graduate students should be familiar with these documents. Information summarized in this document is provided as an additional guide to those specifically concerned with advanced studies in Soil Science at the University of Minnesota.

2) The Graduate Advisory Committee and Director of Graduate Studies:

The general policies of the graduate program are established by the LAAS Graduate Faculty, and are administered by the Graduate Advisory Committee and the Directors of Graduate Studies. The Committee is concerned with a number of activities aimed at serving both faculty and graduate students in the maintenance of academic standards without impinging on the student-advisor relationship. Problems related to the progress of a graduate student may be directed to the Committee by either the student or faculty advisor. The Director(s) of Graduate Studies chairs the Graduate Advisory Committee, and is the facilitator for a range of program activities, and signatory for most program documents. Membership of the Graduate Advisory Committee is as follows: The graduate advisory committee for the Land and Atmospheric Sciences program is made up of five members of the faculty in the program plus the Director(s) of Graduate Studies, and a representative for the graduate students in the program. The five members span the disciplines in the program, with a minimum of 2 members each from the atmospheric and the soils faculty. The members serve terms of 3 years.

B) Selection of Candidates for Graduate Studies

Student Recruitment Procedures

Students will be recruited by the graduate committee and members of the graduate program. Faculty members with grant funding for the student will assume the main responsibility of recruitment. The program will use web based material along with materials being developed with the College of Food, Agricultural, and Natural Resources Sciences for recruitment. The website and promotional materials will be overseen by the DGS.

1) Applications for Admission to the Graduate School and for Financial Assistance:

Applications are done online through ApplyYourself. Applications materials including official transcripts and test scores are submitted to the Graduate School, 309 Johnston Hall, University of Minnesota, Minneapolis, Minnesota 55455; while departmental forms along with three letters of recommendation, and other program specific materials are returned to the Director of Graduate Studies, Department of Soil, Water, and Climate, 439 Borlaug Hall.

2) Evaluation and Selection of Applicants:

Applicants judged as qualified by the Graduate School and by Graduate Advisory Committee are recommended for admission to the Director of Graduate Studies, who subsequently makes a recommendation to the Graduate School, which will only question recommendations for acceptance of a student when that student’s grades or GRE scores fall significantly below the preferred standards established by the program. The Graduate School will notify the applicant of the decision to accept or reject, but subsequent information on the conditions of appointment and the possibility of financial support will be supplied by the program. The formal review process will normally take 4-6 weeks, once all documents have been received.

This formal application selection procedure does not preclude faculty members from making preliminary contacts, interviews, and evaluation of potential applicants; these types of contacts are encouraged, particularly if the applicant seeks funding. However, it should be made clear to the applicant during this process that any tentative commitments are subject to approval of the Departmental Graduate Advisory Committee, the Director of Graduate Studies, and the Graduate School.

3) Basis of acceptance into the Graduate Program of Land and Atmospheric Sciences:

To be considered as acceptable for admission into the Graduate Program in Land and Atmospheric Sciences, we prefer applicants who are competent in English speaking and writing, have a minimum undergraduate GPA of 3.0 out of 4.0 and have achieved scores in the Verbal, Quantitative, and Analytical sections of the Graduate Record Exam (GRE) which would place them in the 50th percentile or higher for each section of this exam. However, each applicant will be judged on their overall record with trends in the student’s performance in upper division courses, in those courses most pertinent to their emphasis area, or to superior scores in the Quantitative and Analytical sections of the GRE, considered especially important in marginal cases.

International students for whom English is a second language must show academic qualifications equivalent to a GPA of 3.0 out of 4.0. They should also provide evidence that they ranked in the top 20% of the graduating class. Such students will also be expected to demonstrate English proficiency equivalent to achieving a Test of English as a Foreign Language (TOEFL) score meeting the Graduate School minimum (a score of at least 79 on the Internet-based TOEFL with section scores of 21 on writing and 19 on reading [550 on the paper-based test]). Scores of at least 4 on the Test of Written English (TWE) are also recommended. These scores are not, in themselves, sufficient to permit the student to undertake unrestricted coursework, but are considered adequate for limited coursework on topics familiar to the student.

Applicants who do not meet the preferred standards stated above, but who are judged to have sufficient academic strength to warrant their admission to the M.S. program, may be accepted on conditional status. If accepted on conditional status, the following conditions will prevail:
appointments between 0.25 and 0.5 time may be made on occasion. Advanced student
tantship stipends are based on 0.5 FTE (full-time equivalent) appointments, although
is difficult to predict; consequently, availability will vary from time to time. Most assis-
tance, Graduate School admission does not automatically assure the availability of such
assistance. Financial assistance is most frequently in the form of research or teaching

5) Financial Support:

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tance, Graduate School admission does not automatically assure the availability of such
assistance. Financial assistance is most frequently in the form of research or teaching
assistantships that are awarded to the best qualified applicants. Because research as-
stantships are generally funded by award of external research grants, their availability
is difficult to predict; consequently, availability will vary from time to time. Most assis-
tantship stipends are based on 0.5 FTE (full-time equivalent) appointments, although
appointments between 0.25 and 0.5 time may be made on occasion. Advanced student
may be eligible for appointment at a higher FTE rate under some circumstances. Half-
time research assistants are expected to carry out research activities during the period
of their stipend. The actual time spent on such activities varies, and in some cases, such
as summer, may be more than 20 hours per week. The schedule of research is worked
out with the advisor. While research assistantships appointments do not accumulate va-
cation time, sometime each year away from the daily routine is encouraged for all stu-
dents. Students should work with their advisor in making arrangements for such time.

Retention of regular appointment is contingent on continued registration and satisfac-
tory performance in the academic, research, and teaching aspects of the programme
and the availability of assistantship funds. You must register each semester that the
appointment is held during the academic year. Registration during the summer session
is not required.

Graduate students not on a regular assistantship may be supported by fellowships ad-
ministered by the Graduate School or by non-University agencies, and some may be
self-supporting. The same standards of performance and the same obligations to assist
in teaching activities pertain to all graduate students in Land and Atmospheric Sciences
irrespective of status of financial support.

6) Prerequisites:

Student course admission prerequisites are as shown below. Students admitted with
deficiencies would be provided with a list of courses they are required to take before the
completion of their degree. This list would be developed by the Directors of Graduate
Studies Program in consultation with the student’s faculty advisor.

Basic Sciences
Students are expected to have taken a minimum of four of the following courses (or their
equivalent): Calculus I (Math 1271 or Math 1142), Linear Algebra (Math 2243), Physics I
(Phys 1011) and II (Phys 1012 or ES 3131), Intro Biology (Biol 1009), Chemistry I (Chem 1021)
and II (Chem 1022), or Intro Statistics (STAT 3011).

Environmental Sciences
Students are expected to have taken a minimum of two of the following (or similar) cours-
es: Issues in Environment (ESPM 1011), The Atmosphere (ESPM 1425), Intro Soils (Soil
2125), Earth and Its Environments (Geol 1001), Intro Microbiology (ESPM 3612 or Microb
3301), or Intro Ecology (Biol 3407).

The conditional appointment may not extend beyond two semesters. Within this period,
the student must be cleared of conditional status by the Graduate Advisory Committee
and must have made final arrangements for a faculty advisor.

Applicants to the LAAS PhD program are expected to have an MS degree or equivalent
in a related field of science. Students with a BS degree and outstanding scholarship can
request direct admission to the LAAS PhD program. Each request will be considered
on a case-by-case basis by the Graduate Advisory Committee. Evidence of outstanding
scholarship may include: peer-reviewed publications, a pre-doctoral fellowship, a Na-
tional Science Foundation PhD Fellowship, high GPA/GRE scores, or strong previous
research experience. Current MS candidates who exhibit outstanding scholarship may
request transfer to a PhD degree program after completion of their first two semesters
of coursework.

4) Diversity:

The Graduate School embraces the University of Minnesota’s position that promoting
and supporting diversity among the student body is central to the academic mission of
the University. We define diversity to encompass many characteristics including eco-

nomic disadvantage, special talents, evidence of leadership qualities, race or ethnicity, a
strong work record, and disability. A diverse student body enriches graduate education
by providing a multiplicity of views and perspectives that enhance research, teaching,
and the development of new knowledge. A diverse mix of students promotes respect
for, and opportunities to learn from others with the broad range of backgrounds and
experiences that constitute modern society. Higher education trains the next generation
of leaders of academia and society in general, and such opportunities for leadership
should be accessible to all members of society. The Graduate School and its constituent
graduate programs are therefore committed to providing equal access to educational
opportunities through recruitment, admission, and support programs that promote di-
versity, foster successful academic experiences, and cultivate the leaders of the next

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