

Admission Requirements

Potential graduate students seeking admission to the OSU Graduate School for graduate study in the Department of Food, Agricultural and Biological Engineering (FABE) must fulfill admissions criteria established both by the OSU Graduate School <http://gradadmissions.osu.edu/criteria.html> and by the faculty of FABE.

The **GRE** General Test is required for all applicants to FABE. Test scores should be sent to the graduate school. Ohio State University's Institutional Code is "R1592".

Two original copies of transcripts or record of marks for each university-level school attended, including English translation of each of any foreign documents. One copy must be sent to the Graduate School and the other sent directly to the FABE Graduate Studies Chair, 247 Agricultural Engineering Building, 590 Woody Hayes Drive, Columbus, OH 43210-1057.

A Statement of Purpose must be sent to the FABE Graduate Studies Chair. In a brief and focused description, this statement should give background information concerning the factors which have stimulated your interest in science in general, and particularly in the sub-disciplines which comprise FABE. You should indicate which specific areas of specialization are most interesting to you as a possible focus for graduate research, and include information about previous undergraduate or graduate research experiences.

Three letters of recommendation, preferably on the standard form provided by OSU Graduate Admissions, from persons knowledgeable about the student's academic and/or research performance. The standard Ohio State Reference Forms found at http://admissions.osu.edu/apps/pdfs/int_refer.pdf Letters of recommendation should be submitted to the FABE Graduate Studies Chair.

A curriculum vitae/resume of no more than two pages must be submitted to the FABE Graduate Studies Chair for all applicants who wish to be considered for a fellowship.

In addition to the above requirements, the Test of English as a Foreign Language (TOEFL) is required for all students whose native language is not English. Depending on the specific type of TOEFL examination taken the minimum score for each is different (paper based tests minimum is 550; for computer based it is 213; and iTOEFL is 69-70.) The higher the scores are above the minimum the better it is for recommendation for admission. The requirement may be waived if the student has earned a degree in an English-speaking country.

Students whose native or first language is not English are required to take the English Placement Exam prior to their initial course registration at OSU. The exam tests oral/verbal, vocabulary, grammar and writing skills to determine which courses, if any, are needed in order to meet basic levels of communication.

- **Soil and Water, Ecological Engineering, Environment and Biological Engineering:** water-table management systems, engineering design and modeling; watershed hydrology and modeling; runoff management, control and recycling; soil-water-plant relationships; treatment and application of wastes; bioremediation of contaminated soil and water; biofuel production systems; ecological engineering of agricultural systems; probabilistic methods; and engineering, ecological and geomorphological principles applied to design and management of drainage networks
- **Agricultural Systems Operations and Management:** analysis of system costs and operation, management of production systems, machinery safety on farms and highways and occupational safety and health
- **Mechanical Systems Engineering:** machinery systems used in precision agriculture, automatic guidance of agricultural vehicles, real-time sensors to measure soil characteristics, image processing, tillage and soil management systems, soil compaction, pest control technology, chemical application, process automation for field and specialty crops, high value crop mechanization systems and human factors and safety engineering
- **Plant and Animal Environment Engineering:** controlled environment plant production; monitoring and assessment of impacts of animal production systems on air, water and soil; engineering environmentally friendly and sustainable animal production systems; composting and system parameter evaluation, modeling and optimization; treatment, management and application of animal wastes; air movement and quality at agricultural facilities; and fluid dynamics modeling of natural ventilation

Financial Aid

Fellowships, teaching and research assistantships, and minority scholarships are available on a competitive basis. These provide tuition, fees and a competitive monthly stipend.