# Biorenewable Resources and Technology

(Interdisciplinary Graduate Program)

Dr. Jacqulyn A. Baughman, BRT Director of Graduate Education (DOGE)

Over 160 ISU faculty affiliated members, 29 departments in all seven colleges and 20 research centers and institutes are involved in this highly interdisciplinary graduate program. A complete and up-to-date listing is maintained at: http://www.biorenew.iastate.edu .

## Graduate Study

The graduate program in Biorenewable Resources and Technology (BRT) offers students advanced study in utilizing plant and crop-based resources in the production of biobased products (fuels, chemicals, materials, and energy). The BRT program was the first graduate program in biorenewable resources established in the United States. This multi-disciplinary program offers the degrees of master of science and doctor of philosophy in Biorenewable Resources and Technology, and a minor to students taking major work in other departments. The curriculum is designed to encourage students to obtain co-major degrees in Biorenewable Resources and Technology and a more traditional science or engineering discipline. A thesis is required for the master of science degree.

Prerequisite to major graduate work is a bachelor's degree or prior graduate training in engineering or a physical or biological discipline, including agricultural sciences.

### Core Required Courses: 501, 506B &C, 590, and 592L or BRT 507

The core required courses (6 credits min. required) for the Biorenewable Resources and Technology graduate program include:

| | | |
|---|---|---|
| BRT 501 | Fundamentals of Biorenewable Resources | 3 |
| BRT 506B | Biobased Products Seminar: Seminars and Research Symposium Attendance | R |
| BRT 506C | Biobased Products Seminar: Research Presentations | 1 |
| BRT 590 | Special Topics | 1-3 |
| BRT 592L | Biorenewable Resources Laboratory | 1 |
| BRT 507 | Technology-Led Entrepreneurship in Biorenewables | 1 |
| **Total Credits** | | **7-9** |

Students must complete "approved" core elective courses from at least three of the four bioeconomic development barrier areas: plant science, production, processing, and utilization. These are selected in consultation with the student's Program of Study (POS) committee. Additionally, students are to complete the determined amount of elective credits required for their degree, and in consultation with their POS committee, as well as research credits.

Graduates of the program will be equipped with skills to design, develop and/or manage cost effective and environmentally attractive technologies and systems for producing fuels, chemicals, materials, foods and energy from biorenewable resources.

Information on application procedures, specific requirements of the major and the online BRT Graduate Certificate can be obtained from the following Internet address: http://www.biorenew.iastate.edu