Name of institution: Iowa State University
Date submitted: June 23, 2020
Name of program: Biorenewable Resources & Technology Interdisciplinary Graduate Program
CIP Code: 26.1201
College: Graduate College
Level: B ______ M X ______ D X ______ FP ______
Degree abbreviation (e.g., B.S., B.A., M.A., etc.): MS and Ph.D.
Action requested: Reduced admissions ______ Program suspension ______ Program termination X

The request for admission reduction, program suspension, or program termination shall be reviewed in-depth by the Board Office and the Council of Provosts. With the recommendation for approval by the Board Office and the Council of Provosts, the request for admission reduction, program suspension, or program termination shall be submitted to the Board of Regents for discussion and action.

The institution shall not communicate to the public its intended action to limit enrollment, suspend the program, or terminate the program until it is been approved by the Board of Regents.

Provide a brief description of the program.

The graduate program in Biorenewable Resources and Technology (BRT) offered 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 offered 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. Students admitted to the Biorenewable Resources and Technology interdepartmental graduate program could pursue MS, Ph.D., or a Ph.D. minor degree. The home department of a BRT student was the department of the student’s major professor, who serves as the Chair of the student’s Program of Study (POS) Committee and provides financial support to the student.

The curriculum was designed to encourage students to obtain co-major degrees in Biorenewable Resources and Technology and a more traditional science or engineering discipline. A thesis was required for the Master of Science degree.

Provide a brief rationale for the requested action.

Declining enrollments of over 90% since the program was first offered in 2002. The program also does not have the financial resources to support new students or course instructors or administer the program.

Describe how students currently admitted to or eligible for admission to the program will be accommodated; what kind of transition period is planned; length of transition period.

Because of lack of demand, no new students have been admitted in the last three years. The two or three students remaining are sufficiently far along in their programs that no special accommodation will be required to complete their graduation requirements.

Describe the effect on costs of reducing enrollments or terminating the program, e.g., cost savings, resource reallocations, etc.
The program never received direct funding to support students or instructors or administer the program. Students were supported through the individual research programs of affiliated faculty and courses were offered through academic departments, and funds to administer the program were provided from discretionary accounts of the Bioeconomy Institute. However, reduced research at ISU in biorenewables at ISU has reduced student opportunities in the field. There will be no impact on university resources by discontinuing the program because of the way it was configured.

☐ Is program available elsewhere in the state? Identify the schools where the program is available and the current enrollment at those sites.

No comparable program at schools in Iowa. However, relevant course work will be available to students through academic departments with relevant disciplinary missions.

☐ Provide an annual analysis for a 5-year period of applications in the academic program; provide an annual analysis for a 5-year period of enrollments in the academic program.

Five years ago, the number of applications were less than five with only three admitted in the past five years. This contrast to the early years of the program (2002-2012) when the program had as many as forty students enrolled.

☐ Provide an annual analysis for a 5-year period of graduations from the academic program.

All three students enrolled in the past five years will have graduated by 2020.

☐ Is this intended to be a temporary or permanent change (applies only to reduced admissions)? If temporary, for how long?

Permanent change – resources are not available to administer the program and teach courses required for the degree even if student interest existed.

☐ How will the reduction or termination affect workforce needs in the state? Be as specific as possible.

No workforce reduction associated with closure of this program. All courses were offered by academic departments affiliated with the program. The program was administered as part-time assignments by staff of the BEI.

☐ What is the anticipated impact on other programs? Will students likely go elsewhere?

No significant impact on other programs anticipated considering the lack of demand for this program in recent years.

☐ What is the anticipated impact on minorities and women?

No significant impact on women and minorities anticipated considering the lack of demand for this program in recent years.

☐ Is a reduction in faculty, staff, facilities, etc. anticipated?

No workforce reduction will occur as a result of discontinuing this program. As previously explained, no faculty or staff were directly employed by the BRT program.

☐ Provide any other information that might be helpful to the Board of Regents in considering this request.

The program offered a unique interdisciplinary educational opportunity for graduate students for 18 years. However, changes in research opportunities and interests for graduate students today makes this a timely termination of the BRT program.
Academic Program Approval Voting Record

This document is to be appended as the last page of the proposal for any new or revised academic program to record the successive votes of approval as the proposal moves through its required review and approval steps. Consult Faculty Handbook Section 10.8 or the Faculty Senate Curriculum Committee website for information regarding Committee review and voting requirements for each action.

Curricular Action: (check appropriate boxes below)

1. □ New Program □ Name Change ✓ Discontinuation □ Concurrent Degree for:
2. □ Undergraduate Major ✓ Graduate Major □ Undergraduate Minor □ Graduate Minor
   □ Undergraduate Certificate □ Graduate Certificate □ Other: ___________________
3. Name of Proposed Change: Biorenewable Resources & Technology

4. Name of Contact Person: Dr. Robert Brown e-mail address: rcbrown3@iastate.edu
5. Primary College: Interdepartmental Secondary College: __________________
6. Involved Department(s): ___________________ ___________________

Voting record for this curricular action:

<table>
<thead>
<tr>
<th>Voting Body</th>
<th>Votes</th>
<th>Date of Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. or Program Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Curriculum Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Approval Vote</td>
<td>5 0 0</td>
<td>8/19/2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Council</td>
<td>15 0 0</td>
<td>8/26/2020</td>
</tr>
<tr>
<td>Faculty Senate Curriculum Committee</td>
<td>7 0 0</td>
<td>9/8/2020</td>
</tr>
<tr>
<td>Faculty Senate Academic Affairs Council</td>
<td>13 0 0</td>
<td>9/25/2020</td>
</tr>
<tr>
<td>Faculty Senate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[FSFCC – November 2013]