

GRADUATE PROGRAM AND DEPARTMENTAL PROCEDURES



**Department of Sustainable Bioproducts
College of Forest Resources
Mississippi State University**

Updated: March 2016

Table of Contents

INTRODUCTION.....	3
DEPARTMENTAL ADMISSION, RETENTION AND PROBATION.....	4
Application for Admission	4
Admission Requirements	4
Admission Categories.....	5
Regular Admission – Master of Science Program	5
Provisional Admission – Master of Science Program.....	5
Regular Admission – Doctor of Philosophy Program.....	6
Provisional Admission – Doctor of Philosophy Program	7
International Students.....	7
Language Proficiency.....	7
Additional Acceptance Requirements	7
Summary of Departmental Admission Requirements.....	8
Acceptance and Orientation	10
Graduate Assistantships	10
Registration	11
Graduate Student Health Benefits	12
ORIENTATION.....	12
Major Professor and Advisory Committee.....	12
Degree Program Correspondence.....	12
REGISTRATION.....	13
GRADUATE STUDY COMMITTEE AND PROGRAM.....	14
RESEARCH PROPOSAL.....	15
Research Progress Report.....	16
REQUIREMENTS FOR M.S. STUDENTS	17
Program of Graduate Study, Thesis Option	17
Oral Exam	17
Thesis	18
Program of Graduate Study, non-Thesis Option	18
REQUIREMENTS FOR Ph.D. CANDIDATES.....	20
Program of Graduate Study.....	20
Ph.D. Preliminary Examination.....	21

Admission to Candidacy	21
Oral Dissertation Defense ("Doctoral Final")	22
THESIS/DISSERTATION PREPARATION AND DEFENSE	24
Defense of Thesis/Dissertation.....	24
Submission of Final Manuscript.....	25
Time Limit.....	25
Publication and Presentation of Research	25
Seminars	26
INTERRUPTION OF STUDIES DUE TO EMPLOYMENT	27
GENERAL POLICY INFORMATION.....	28
General Duties.....	28
GENERAL ASSISTANTSHIP INFORMATION	30
Federal Tax on Graduate Student's Stipends.....	30
Research Assistantship.....	30
Work Obligation for Graduate Research Assistants.....	30
EQUIPMENT USE	32
Use of Laboratory Equipment	32
APPENDIX 1	34
APPENDIX 2	35
APPENDIX 3	36

List of Tables

Table 1. Summary of Requirements.....	9
Table 2. Summary of the required and suggested guidelines for M.S. candidates.....	19
Table 3. Summary of the required and suggested guidelines for Ph.D. Candidates.....	23

OTHER FORMS: Obtain from MSU Graduate School Website, www.grad.msstate.edu

INTRODUCTION

This handbook has been prepared to familiarize graduate students who have majors or emphasis areas in the Department of Sustainable Bioproducts (DSB) with operating procedures of the Department. The **College of Forest Resources (CFR)** consists of three academic departments, with the research conducted through the **Forest and Wildlife Research Center (FWRC)** and extension through the **MSU Extension Service**. The current MSU Graduate Catalog should be consulted for general University policies, and is available at the graduate school's website www.grad.msstate.edu. If any discrepancies are found between the MSU Graduate Catalog and this document (DSB Graduate Handbook), the MSU Graduate Catalog will always be considered the final word.

Majors and emphasis areas for the Master of Science (M.S.) degree levels are offered in the CFR with a major in Sustainable Bioproducts and at the Doctor of Philosophy (Ph.D. or doctoral) level in the CFR with a major in Forest Resources and a concentration in Sustainable Bioproducts. The M.S./thesis option and Ph.D. are considered research degree programs, with a non-thesis M.S. option also available which has more classroom course requirements than the thesis option. The SB administration is located in 205 Franklin Center at the Forest Products complex at 201 Locksley Way, Starkville, MS, 39759 [phone 662-325-2116], adjacent to the MSU campus. An electronic campus map listing the buildings and adjacent town areas may be found at <http://www.msstate.edu/web/maps/>

For a Ph.D., the dissertation is intended to advance science and provide students with the challenge and opportunity to demonstrate their ability to conduct independent research in a selected or assigned area. Subject to review and approval of their respective graduate committees, Ph.D. students are expected to conduct research projects with little guidance from their major professor. In contrast, the thesis option M.S. is normally considered to be an introductory research degree, with close supervision and guidance from the student's graduate committee and a written thesis requirement. The non-thesis M.S. requires a research paper plus three additional credits of graduate coursework, or six additional credits of graduate coursework with no research paper.

Information and requirements for the M.S. and Ph.D. degrees are outlined in the current bulletin of the MSU Bulletin of the Graduate School available at www.grad.msstate.edu. Requirements listed in the Bulletin of the Graduate School may supersede the Department of Sustainable Bioproducts' Graduate Program and Departmental Regulations.

This document has been prepared to assist graduate students in becoming familiar with operating procedures specific to the SB Department and the Forest Products Laboratory.

All graduate students are expected to be familiar with and comply with University, Departmental, College, and subject area requirements. Failure to comply satisfactorily with all requirements may seriously inconvenience the student and, in the case of students on assistantships, may lead to termination of appointments (**See MSU Graduate School Bulletin**).

DEPARTMENTAL ADMISSION, RETENTION AND PROBATION

Application for Admission

Students interested in applying for admission to the Department's graduate program need to apply online through the Office of the Graduate School (<http://www.grad.msstate.edu/>). Prior to consideration for admission, the applicant must: (a) meet requirements for admission, and (b) complete the online application. Once admission requirements are met, the Office of the Graduate School will electronically forward the application materials to the Department, and departmental faculty will be notified that materials are available to be viewed online. A faculty member may make a request that an offer of a research assistantship be made to an applicant. Otherwise, if all requirements are met, a student may be admitted without any commitment of financial assistance.

Admission Requirements

Departmental applicants for a M.S. or a Ph.D. should hold a bachelor's degree from a fully-recognized four-year institution of higher learning having unconditional accreditation by the appropriate bodies.

Prior academic performance, as measured by Grade Point Average (GPA), is a primary factor used in determining admission categories. Certified transcripts of prior studies must be supplied as part of the application to the MSU Graduate School so the student's GPA can be verified.

Scores on the General Test of the Graduate Record Examination (GRE) or GMAT are not generally required with initial applications for graduate programs in the Sustainable Bioproducts Department unless the student's grade point average is below 3.0. However, the Department Head or a faculty member interested in chairing the applicant's committee may request GRE scores before making a final decision on acceptance. Therefore, the Department recommends that applicants inquire about the GRE requirements prior to submission of their application packet. The applicant's scores on the GRE or GMAT will be used

by faculty in making acceptance decisions for provisional admission for applicants with a grade point average under 3.0.

International students who have earned prior degrees in the United States or come from countries where English is the official language are not required to submit English language test scores. International students who do not meet the prior requirements, will be required to take either the "Test of English as a Foreign Language" (TOEFL) and score 550 PBT; 213 CBT or 79 iBT or the "International English Language Testing System" (IELTS) exams and score at least 6.5 in order to be considered for full assistantship. TOEFL or IELTS scores will be used as an indicator of English proficiency and applicants who do not meet minimum scores will be required to schedule English as a Second Language (ESL) courses at MSU. International students are not eligible if their English test is scored below 479 PBT or 153 CBT or 53 iBT (TOEFL) or 4.5 (IELTS).

Admission Categories

Regular Admission – Master of Science Program

In addition to holding an undergraduate degree, regular (unconditional) admission to a graduate program leading to a M.S. degree in Sustainable Bioproducts requires that an applicant satisfies at least one of the following minimum graduate admissions requirements based on the level of work completed at the time of the application:

- a) 3.0 GPA in the last two years (approximately 60-70 semester hours or 90-100 quarter hours) of undergraduate academic coursework
- b) 3.0 GPA in 30 or more semester hours of undergraduate credit **after** earning the first bachelor's degree
- c) 3.0 GPA in the last two years (approximately 60-70 semester hours or 90-100 quarter hours) of undergraduate academic coursework **and** a 3.00 GPA on **fewer than** 24 hours of graduate coursework
- d) 3.00 GPA in **24 or more** graduate hours
- e) An earned master's degree or higher-level degree in a related field of study as deemed by the Department of Sustainable Bioproducts.

Provisional Admission – Master of Science Program

Students who have a GPA greater than or equal to 2.50 and less than 3.00 for the last two years (60-70 semester hours or 90-100 quarter hours) of undergraduate academic coursework may be admitted with

provisional status. Scores from the General Test of the GRE may be requested to evaluate the student's potential to successfully complete the graduate program. Although no minimum scores are specified by the Department, desirable expectations are at least 300 for the combined verbal and quantitative scores and a minimum score of 3.0 on the analytical writing section.

Students admitted on provisional status must achieve a GPA of 3.0 or better on three graduate courses (minimum of 9 hours) during the first semester of enrollment to be removed from provisional status. If a GPA of 3.0 is not achieved, the provisional student will be dropped from the program following the first semester. Students admitted on a provisional basis are not eligible for research assistantships while on provisional status.

International students will not be admitted under provisional status, but they can be admitted on a “conditional” basis if they meet the GPA conditions for regular admission and their TOEFL or IELTS score falls between the MSU established minimum and the Departmental minimum.

Regular Admission – Doctor of Philosophy Program

Regular admission to the SB Department’s graduate program leading to a Ph.D. in Forest Resources requires that an applicant satisfies at least one of the minimum graduate admissions requirements listed below based on the level of work completed at the time of the application:

- a) 3.0 GPA in the last two years (approximately 60-70 semester hours or 90-100 quarter hours) of undergraduate academic coursework
- b) 3.0 GPA in 30 or more semester hours of undergraduate credit **after** earning the first bachelor’s degree
- c) 3.0 GPA in the last two years (approximately 60-70 semester hours or 90-100 quarter hours) of undergraduate academic coursework **and** a 3.00 GPA on **fewer than** 24 hours of graduate coursework
- d) 3.00 GPA in **24 or more** graduate hours
- e) An earned master’s degree or higher-level degree in a related field of study as deemed by the Department of Sustainable Bioproducts.

Some international students must demonstrate an acceptable proficiency in English by scoring above the established minimum score on either the TOEFL or IELTS exam before being admitted into the doctoral program.

Provisional Admission – Doctor of Philosophy Program

Doctoral applicants are not accepted on a provisional basis. International students may be admitted on a “conditional” basis if they meet the GPA conditions for regular admission and their TOEFL or IELTS score falls between the MSU established minimum and the Departmental minimum.

International Students***Language Proficiency***

International applicants from countries where English is not the first language must demonstrate proficiency in English to be accepted for regular admission in the Department’s graduate programs. This proficiency is determined by the student’s score on either the TOEFL or IELTS exams.

If an international student has a university degree from the U.S. or a country where English is the official first language, they do not need to submit a TOEFL or IELTS score. In all other cases, the applicant must submit their results from either the TOEFL or IELTS examination as a part of the application. For the TOEFL Paper-Based Test (PBT), applicants must score 550 or higher to be accepted for regular admission. For the TOEFL Computer-Based Test (CBT), applicants must score 213 or higher to be accepted for regular admission. For the TOEFL Internet-Based Test (iBT), applicants must score 79 or higher to be accepted for regular admission. For the IELTS, applicants must score 6.5 or higher to be accepted for regular admission. Applicants scoring between 477 and 549 on the PBT, 153 and 213 on the CBT, 53 and 79 on the iBT, or 4.5 and 6.5 on the IELTS may be admitted conditionally, pending successful completion of the remedial English courses outlined in the MSU "*Bulletin of the Graduate School.*" International applicants who complete the Professional Mastery Program at the MSU ESL Center may submit a certificate of completion with their application in place of English language test scores.

Additional Acceptance Requirements

International students who do not have a degree from a U.S. university will have their official transcripts evaluated by the Office of the Graduate School to determine whether the work is equivalent to a U.S. degree and meets minimum standards for regular admission to a graduate program.

All international applicants must complete a Document of Support in their Application for Graduate School, and must provide either a bank letter or other Document of Financial Support if they do not have full funding from either the Department or another source.

Summary of Departmental Admission Requirements

Before an applicant can be considered for graduate admission, they must have:

- a) completed, or will have completed upon admission to the Department of Sustainable Bioproducts, appropriate bachelor's or master's degrees,
- b) met minimum GPA standards,
- c) completed all application forms for the MSU Office of the Graduate School which will then forward their application to the SB Department,
- d) provided certified transcripts or official academic records of the bachelor's degree of work towards the bachelor's degree and all work after the bachelor's degree. If transcripts with work prior to the degree are needed for evaluation purposes, the MSU Graduate School will request them from the applicant,
- e) had three letters of recommendation provided to the Office of the Graduate School,
- f) provided a statement of purpose for wanting to enter the graduate program,
- g) met language proficiency requirements (for international students),
- h) provided documented evidence of financial support (for international students), and
- i) submitted scores for the General Test of the GRE or GMAT (if requested by the Department).

Table 1. Summary of Requirements

Master's Degree Program
Bachelor's degree from an accredited university
Regular admission: <ul style="list-style-type: none"> • GPA ≥ 3.00 for last two years (60-70 semester hours or 90-100 quarter hours) of undergraduate study
Provisional admission: <ul style="list-style-type: none"> • GPA ≥ 2.50 and < 3.00 for last two years (60-70 semester hours or 90-100 quarter hours) of undergraduate study • Provide evidence of acceptable verbal, quantitative, and analytical skills on the GRE [if requested by the tentative major professor]
International students (additional English proficiency requirements): <ul style="list-style-type: none"> • Regular admission – TOEFL or IELTS score above Department minimum • Conditional admission – TOEFL or IELTS score between MSU and Department minimum
Doctoral Degree Program
Bachelor's degree from accredited university, or Master of Science degree in related field
Regular admission: <ul style="list-style-type: none"> • GPA ≥ 3.00 on all prior graduate courses (if ≥ 20 graduate hours) OR a GPA ≥ 3.00 for last two years (60-70 hours or 90-100 quarter hours) of undergraduate/graduate coursework (if < 20 graduate hours)
International students (additional English proficiency requirements): <ul style="list-style-type: none"> • Regular admission – TOEFL or IELTS score above Department minimum • Conditional admission – TOEFL or IELTS score between MSU and Department minimum

Acceptance and Orientation

Admission into the SB Department's graduate program is not automatically guaranteed with completion of the application procedures. Students who meet admission requirements may be accepted with funding (i.e., an assistantship offer) or without funding (i.e., provisional admission, or student not offered departmental assistance). A student choosing to enter the program without funding can do so with the agreement of a faculty member(s) in the Department to serve as their major (or co-major) professor(s). Applicants who require financial assistance must find a faculty member in the Department who agrees to serve as the major (or co-major) advisor of the applicant's program and a source of funding for the applicant's program must be identified.

The Department Head has the authority to grant or deny admission into the Department's graduate program. Notification of a decision on the application will usually be made to the applicant within 30 days after a complete application packet is received by the SB Department from the MSU Office of the Graduate School. The applicant will receive an e-mail message and/or a letter from the Office of the Graduate School regarding acceptance or rejection of the application.

If financial support is provided by an assistantship, a letter from the Department Head will be sent to the student offering the assistantship. The applicant is requested to indicate acceptance or rejection of the offer, sign the letter, and return a copy to the Department Head *as soon as possible*.

Upon arrival on campus, new students should first report to their major professor, and then make an appointment with the Departmental Academic Assistant in charge of graduate students (Room 205, Franklin Center., telephone: 662-325-0483) for a briefing on departmental procedures and to complete required paperwork. Primary advising responsibilities for all graduate students resides with the student's major professor, although the Department Head, graduate coordinator and faculty, and departmental staff will be available to help students throughout their tenure at MSU.

Graduate Assistantships

Graduate research assistantships (GRA) are often available in the Department, and are associated with specific research grants. Individual faculty members with research funding will recruit graduate students for those positions. Faculty members generally offer assistantships based on an evaluation of the student's GPA, letters of reference, field of study, and prior training/experience. GRE scores may also be used to aid in selection of students for assistantships.

To be eligible to receive an assistantship, a student must have "regular" or "conditional" admission status in the Department's graduate program – a score higher than 550 PBT or 213 CBT or 79 iBT (TOEFL) or 5.5 (IELTS). Students on "provisional" or "probationary" status are not eligible to receive assistantships. Students on assistantship must be full-time students (registered in at least 9 graduate credit hours) and may not enroll in more than 13 graduate credit hours per term. The required full-time status must be maintained throughout the entire semester. **Therefore, no course may be dropped if the resulting course load would be fewer than the required 9 graduate credit hours, nor may any course in the 9-hour load consist of or be converted to audit status.** The 9-credit hour course load may not be composed of undergraduate courses unless the course is a program prerequisite. In such cases, the minimum graduate load required will be 6 credit hours and only one undergraduate course will be permitted as part of the 9-credit hour load. During the summer, students on assistantship must be enrolled in at least 6 graduate credit hours with a maximum of 13 credit hours allowed.

An assistantship will continue throughout the student's tenure, normally two years for a M.S. and three years for a Ph.D., and so long as the source of funding continues and the student maintains satisfactory academic performance (i.e., greater than a 3.0 GPA) and satisfactory progress on their professional paper/project, thesis, or dissertation. Starting in 2015, students awarded a graduate assistantship will receive a 100% tuition waiver from MSU; however, they will be financially responsible for activity and/or special fees.

Assistantships typically represent half-time positions based upon a 40-hour week. Information on procedures, policies, and responsibilities can be found online from the MSU Office of the Graduate School. The student's major professor has the discretion of deciding how the work hours will be assigned. The assigned work (i.e., research, teaching, service) may or may not be directly related to the student's specific research or professional project. Students receiving assistantships do not earn leave time; however, they do participate in the university holiday schedule.

Registration

Prior to the first semester of their graduate program, students should contact their major professor to determine which courses to enroll in. During subsequent semesters, students will obtain their "Enrollment Information" sheet containing their Registration Access Code (RAC) number from their major professor – October for the spring semester registration and in March for the summer and fall semester registration. If the major professor does not have the student's Enrollment Information sheet, the student should contact the Department's Graduate Academic Assistant in 205 Franklin.

Graduate Student Health Benefits

Graduate students in the Department are eligible to participate in the University's Student Injury and Sickness Insurance Plan. Details of this plan can be found on the Student Health Center's website. Full-time graduate students that are receiving a graduate assistantship are eligible to be reimbursed for their health benefit premiums. International graduate students are required to carry health insurance while at MSU. All international students will be automatically enrolled in the student health insurance program at the time of registration, unless proof of comparable coverage is furnished to the Administrator at the MSU Student Health Center.

ORIENTATION

Upon arrival, a student should first report to his/her Advisor or Graduate Coordinator in the Department of Sustainable Bioproducts for briefing on departmental procedures. The student will have an opportunity to tour the facilities. A desk and access to laboratories will normally be provided for graduate students. Necessary keys can be obtained from the Administrators.

Major Professor and Advisory Committee

A faculty member sponsors a student before they are accepted and confirmed by the Department Head. As the graduate student's research interests crystallize, a change of a major professor may be desirable. Students are encouraged to consult with the faculty and the Department Head in finalizing the selection of their major professor or when seeking changes in major professor assignments or area of study. Students should make a final decision on their choice of a major professor during their first semester. Any changes beyond the first semester must be approved by the Graduate Coordinator, Department Head, and Graduate School **and the student must develop a new plan of work.**

Degree Program Correspondence

Programs of study, program changes, and other official correspondence pertinent to each student's degree program should be forwarded to the Sustainable Bioproducts Administrative Office through the student's major professor. The student's file with a program of study, thesis/dissertation working plan, program changes, and official correspondence will be maintained in the Sustainable Bioproducts student files by the Graduate Student Administrative Associate.

REGISTRATION

A graduate student must be enrolled in the spring, summer, and fall semester to retain a graduate research assistantship. As mentioned earlier, students must be enrolled in at least nine (9) hours and no more than thirteen (13) hours for each spring and fall semester. For the summer semester the student must be enrolled for at least six hours (three hours/term or six hours for a ten-week term) and no more than nine hours total to retain an assistantship. **It is the student's responsibility to ensure that they are enrolled for the correct number of required hours.**

If there is no Registration Access Code (RAC) shown in Banner, the advisor should contact the Office of the Graduate School either by email or phone to request that a RAC be assigned. The Registration Worksheet is used for unclassified students and may be obtained from the Graduate School at 617 Allen Hall. Unclassified student must seek permission from the academic department in which she/he wishes to take course(s) and approval of the schedule. The student also obtains a “Student Major” override for each course from the department offering the course(s). The student returns to the Office of the Graduate School to obtain a Registration Access Code (RAC). The Dean of the Graduate School serves as the official advisor for unclassified graduate student; they register for classes via the web.

Once enrolled in graduate study, a student who subsequently fails to enroll for three consecutive semesters (excluding summer) must complete Application for Readmission to register again. The application must be submitted online.

GRADUATE STUDY COMMITTEE AND PROGRAM

Prior to submitting the formal program of study to the Graduate School, the student's major professor will be approved **by the Department Head. The student's Graduate Committee will meet to discuss and approve the student's program of study by the first or second semester.** **NOTE:** The program of study is due during the student's second semester. M.S. committees must be composed of at least three members. One committee member may be a non-MSU faculty member with a Committee Participant Appointment. The other two or more committee members must be members of the MSU Graduate Faculty. The committee is composed of the major professor who must be a graduate faculty member of the student's department and two or more committee members, one of whom may be a minor professor. **NOTE:** At least ½ of the committee must be from the Department of Sustainable Bioproducts. If the student has a minor field outside the SB Department, at least one member of the Graduate Committee must be from the minor field. Committees for Ph.D. students must have at least four members unless there is a minor professor in which case the committee must be composed of five members. The major professor must be a member of the student's academic department and have a Level 1 Graduate Faculty appointment. The Ph.D. committee members must be members of the MSU Graduate Faculty, with the exception that up to two non-MSU faculty can have Committee Participant Appointments, and at least one-half of the committee members excluding the chair, must be from the student's department for both M.S. and Ph.D. committees. See the MSU Bulletin of the Graduate School for further requirements. Exceptions to this policy must be approved by the Department Graduate Coordinator and the Graduate School. The student's Graduate Committee should meet to discuss and approve the program of study and coursework during the first semester.

RESEARCH PROPOSAL

The completion of the graduate student's research is the requirement **that most often delays a graduate student's degree and extends their time while in residence**. All graduate students involved in a thesis or dissertation should give prompt attention to choosing their research and have it approved by their major professor and Graduate Committee. Choice of a topic should be guided by the student's interest, the availability of faculty to direct the research, available funding and the research interests of the Department. An early choice will normally enable students to develop and prepare a more effective working plan. M.S. students in the non-thesis option are the only graduate students not required to submit a research proposal; however, these students must take additional coursework (at least 6 credit hours) in place of the thesis.

The purpose of the research working plan (Appendices 1 and 2), also called Research Proposal, is to assure that the work is within the student's capabilities, the experimental design is scientifically sound, and the work is appropriate to meet degree requirements. **The plan should be approved, signed, distributed to the committee members in accordance with the deadline mentioned earlier (2nd semester for the M.S. degree and the 3rd semester for the Ph.D. degree)**. A signed, approved copy of the student's working plan will be filed with the Student Academic Records Assistant.

A well-prepared working plan will facilitate the research and will provide the format for the final thesis or dissertation. **During the second semester, the student's Committee will meet to approve the research work plan**. The format of the **cover sheet and working plan are in Appendices 1 and 2**. Students are expected to seek help from within or outside the Department in developing research working plans. The Graduate Committee meets during the latter part of the student's second semester of residence to assess their program and to discuss any problems with the student's program.

The research working plan for both M.S. and Ph.D. candidates enrolled full-time is due to the major professor by the end of the student's second semester in residence and must be approved by the committee members and the Department Head. Students that do not meet this deadline will be asked to submit a written explanation, co-signed by the major professor and student, and an expected submission date on when their thesis/dissertation working plan will be submitted and approved by the student's Graduate Committee.

Research Progress Report

Beginning with the third semester, the major professor may request that a one-page progress report be submitted each semester to the student's committee updating them on the status of course work and progress on the research project.

Degree Level Change

A student admitted to a degree program may subsequently want to change degree levels (e.g., from PhD to master's) in the same program. This student should submit to the graduate School a Request for Change of Degree Level or Concentration form, including all required signatures. No other document is required. The student must remain in the original degree at least one semester before changing. Changes must be made before the semester begins.

REQUIREMENTS FOR M.S. STUDENTS

The Program of Study is due to the Graduate School the last semester in residence for M.S. students. However, this form must be completed and filed with the Student Academic Records Associate at the end of the student's second semester per department guidelines.

It is the student's responsibility to keep up with course changes and course requirements **and complete the appropriate forms.** The major professor will help answer questions concerning the requirements. A master's student must be enrolled in at least one graduate credit hour when taking an examination, defending their thesis or submitting thesis to the MSU Library per the Office of the Graduate School deadlines.

Program of Graduate Study, Thesis Option

All graduate students are encouraged to take two graduate seminar courses, SBD 8111 in the fall and SBD 8121 in the spring. M.S. students without a wood science background or wood science experience will also be encouraged to take a minimum of two Sustainable Bioproducts graduate courses, excluding graduate seminars SBD 8111 and 8121, or DIS (SBD 7000) or Special Topic (SBD 8990) courses. The courses selected should be approved by the student's committee. The major professor will review the student's transcript to decide if a student has the required wood science background.

The program shall consist of at least 6 hours of research and at least 24 hours of course work. **Twelve hours of course work on a master's degree program must be at the 8000 level**, exclusive of thesis hours. Directed Individual Study (DIS) courses, numbered at the 7000 level, can be approved for use in meeting the requirement of courses at the 8000 level, but not more than a total of six hours. **A student must maintain a grade point average in all graduate course work that is consistent with the requirements in the MSU Graduate Handbook.**

Oral Exam

The oral exam (**defense of thesis**) must be completed in a timely manner in order to meet deadline for graduation according to the Graduate School Academic Calendar, with an announcement sent to all departmental faculty prior to the exam. **A report of the exam results must be completed by the major**

professor and signed by the student's committee. A master's student must have a 3.0 or greater GPA to be allowed to take any examination(s).

Thesis

Two electronic copies of the thesis and the original signed paper copy of the title/signature page are required by the MSU Library. "Regulations Governing Thesis and Dissertations" are available on the MSU Graduate School website.

Thesis and Dissertation Format Review is available at the Library.

Program of Graduate Study, non-Thesis Option

The non-thesis option requires either: 1) a research paper of three credits thesis research and three additional credits of graduate coursework; or 2) six additional credits of graduate coursework.

Summary of the required and suggested guidelines for M.S. candidates are outlined below:

Table 2. Summary of the required and suggested guidelines for M.S. candidates

Timetable	Required	Suggested
By the end of 1 st semester:	<ul style="list-style-type: none"> • Select major professor • 3.0 or better GPA • Select graduate committee • Submit program of graduate study and meet with committee • Select research topic 	<ul style="list-style-type: none"> • Submit draft of research plan
By the end of 2 nd semester:	<ul style="list-style-type: none"> • Thesis research working plan approved by committee • Submit research work plan 	<ul style="list-style-type: none"> • Completed 18 hours of coursework
End of 3 rd semester and each semester thereafter:	<ul style="list-style-type: none"> • Submit one page progress report to Committee if required 	
End of 2 nd year		<ul style="list-style-type: none"> • Oral Defense • Thesis approved by committee • Graduation • Attended national meeting • Presented paper and one paper submitted to a referred journal

These guidelines are for full-time students (exceptions are permitted with the approval of the major professor).

Non-thesis M.S. students do not need to submit a thesis working plan.

REQUIREMENTS FOR PH.D. CANDIDATES

Program of Graduate Study

All graduate students are strongly encouraged to take two graduate seminar courses, SBD 8111 in the fall and SBD 8121 in the spring. Ph.D. students without a wood science background or wood science experience will also be encouraged to take a minimum of three Sustainable Bioproducts graduate courses, excluding the graduate seminars SBD 8111 and 8121, or DIS (SBD 7000) or Special Topic (SBD 8990) courses. The courses selected should be approved by the student's committee. The major professor will review the student's transcript to decide if a student has the required wood science background.

The program shall generally consist of three academic years beyond the bachelor's degree as a full-time student. The total number of course credit hours required must be consistent with the requirements as stated in the MSU Graduate Handbook. Currently, Mississippi State University requires that doctoral students earn at least 54 hours of graduate credit beyond the bachelor's level, which includes a required 20 hours of dissertation credits. Of the 54 hours, at least 24 must be from GPA-graded graduate coursework with a minimum of 12 credit hours at the 8000 level or higher (excluding dissertation research credit), and at least 20 must be dissertation research credits. The remaining 10 hours can be earned with coursework credits, dissertation/research credits, or a combination of both. Additionally, 9 credit hours can be shared between two MSU degrees. At the doctoral level, transfer credit cannot exceed one-half of the coursework requirements. All dissertation credit hours must be taken at MSU. Program of study courses must be approved by the student's committee. A student may be required to take an ESL, LSK, or undergraduate course, but these courses or audited courses cannot be included on a program. A reasonable balance between research and course work should be respected. A cumulative grade point average of a 3.0 or better is required in all course work. It is highly recommended that the preliminary exam be scheduled one year prior to the Dissertation defense. A doctoral student must have a 3.0 GPA or greater to be allowed to take any examination(s), including the preliminary examination. A doctoral student must be enrolled in at least one graduate credit hour when taking an examination, defending their dissertation or submitting dissertation to the MSU Library.

Ph.D. Preliminary Examination

When Ph.D. students complete their course work or other requirements as specified by the Graduate School, they may contact their major professor and, with their professors' approval, establish a specific time period that is suitable to the committee for taking the comprehensive examination. All Ph.D. students are required to write one research proposal on a **subject that the student has conceived** and is **subsequently approved by their Committee**. The required format for this proposal is outlined in Appendix 3. **This proposal will not be related to the dissertation topic**. The proposal must be completed within **four weeks after the title is approved by the Committee and submitted to committee members, the department head, and the graduate coordinator**, **Following this, the preliminary oral exam will be scheduled as soon as it is can be arranged**. This preliminary oral examination will involve the student and his or her committee members. In order to pass the preliminary exam, there can be no more than one dissenting vote by the graduate student's committee. **A Report Examination Result form must be completed by the major professor, and submitted to the MSU Office of the Graduate School. A copy of this form, signed by all committee members including the chair, and the graduate coordinator, should be used as the front sheet to the proposal and placed in the graduate student's file in the SB Departmental Administrative office (Franklin Bldg 205)**. The exam will cover questions within the student's field of study and defense of the research proposal not related to the dissertation. The results of the comprehensive examination and course work performance will be used to decide if the student is making satisfactory progress. **A student who fails this examination for the first time cannot apply to take the examination again until at least four months have elapsed from the date of the original examination**. Deficiencies must be resolved within one year after the comprehensive examination or the student will be dropped from the program. According to MSU Graduate School policy, two failures will result in the student's dismissal from the degree program. The preliminary exam will constitute the Ph.D. student to qualify him/her for admission to the Ph.D. candidacy. The student must take the examination by:

- June 1 to graduate in December;
- November 1 to graduate in May; or
- February 1 to graduate in August.

Admission to Candidacy

Students who pass the preliminary examination, have completed all coursework on the coursework list required by the major professor and committee, and have an approved Dissertation Research Proposal

Study Plan may complete the "Admission to Candidacy" form as a degree candidate in the SB Department.

Oral Dissertation Defense ("Doctoral Final")

The dissertation defense must take place no later than the "last day for final examination for doctoral degree" as published in the Graduate Academic Calendar of the Graduate School, with a prior notice sent to the SB faculty by the major professor.

Dissertation

Two electronic copies of the dissertation and plus the original signature page are required by the MSU Library. "Regulations Governing Thesis and Dissertations" are available from the Graduate Office at 116 Allen Hall. More information may be found at the MSU Library.

Table 3. Summary of the required and suggested guidelines for Ph.D. Candidates

Timetable	Required	Suggested
By the end of 1 st semester:	<ul style="list-style-type: none"> • Select major professor • 3.0 or better GPA • Select research topic • Select graduate committee • Submit program of graduate study and meet with committee for approval 	<ul style="list-style-type: none"> • Initiate literature review for research work plan
By the end of 2 nd semester:	<ul style="list-style-type: none"> • Submitted draft of research work plan to committee 	<ul style="list-style-type: none"> • Completed 18 hours of coursework
End of 1 st year	<ul style="list-style-type: none"> • Dissertation research work plan and literature review approved by committee 	
End of 3 rd semester and each semester thereafter:	<ul style="list-style-type: none"> • Submit one page progress report to Committee, if required 	
End of 2 nd year	<ul style="list-style-type: none"> • Submit one page progress report to Committee, if required 	<ul style="list-style-type: none"> • Completed courses • Passed written and oral preliminary/comprehensive examinations
End of 3 rd year	<ul style="list-style-type: none"> • Submit draft copy of dissertation 	<ul style="list-style-type: none"> • Written first publication • Admission to Candidacy form submitted • Attended national meeting and presented paper
Graduated		<ul style="list-style-type: none"> • Two papers submitted to a referred journal

These guidelines are for full-time students (exceptions are permitted with the approval of the major professor).

THESIS/DISSERTATION PREPARATION AND DEFENSE

The preparation of the thesis/dissertation is a time-consuming endeavor which can be expedited by careful attention to the following details: (1) the thesis/dissertation will usually require several rewrites both before and after submission to your graduate committee and the graduate coordinator; (2) during the initial stages of writing the thesis/dissertation, the student should consult with his or her major professor to see that the material is properly organized, correctly stated, interpreted and written in an acceptable style with proper grammar. **It is the responsibility of the student, with the assistance of the major professor, to ensure that the thesis/dissertation is properly written and formatted. Format templates are available at the MSU Library's Graduate Student Theses and Dissertations website.**

Defense of Thesis/Dissertation

After completion of the first draft, it is the major professor's and graduate student's responsibility to review the thesis/dissertation to ensure that it is satisfactory for submission to the student's committee for their review; **it must be at the stage where only minor corrections and/or grammar edits are needed.**

However, the student's committee may be very helpful with comments and suggests on a rough draft.

When the major professor is satisfied that the thesis/dissertation is ready for review, separate copies of the typewritten manuscript will be furnished to each committee member and the graduate coordinator.

Committee members and the departmental graduate coordinator must be provided with a copy of the thesis or dissertation **two** weeks prior to the oral examination or dissertation defense. Committee members are allowed a minimum of **two** weeks for review and comment. Should a committee member not be able to review the thesis during the two-week period, she/he may be replaced at the discretion of the committee chairman.

An oral exam must take place no later than the "last day for final examination for the master or doctoral degree" as published in the Graduate Academic Calendar of the MSU Graduate School, with a notice sent to all SB faculty of the time and place. The oral exam will concentrate on defense of the student's thesis/dissertation but may also cover questions concerning the student's knowledge of his/her field of study.

At least **two weeks** before the oral examination each member of the graduate committee and the graduate coordinator must be provided with a copy of the revised and corrected manuscript (thesis/dissertation)

with minimal editing and/or scientific corrections necessary. The student is responsible for providing each of the graduate committee members with a revised copy. The student's major professor is responsible for scheduling the oral examination and providing a written announcement to each graduate committee member and all SB faculty at least two weeks before the exam. The **thesis/dissertation defense** is considered as passed if not more than one dissenting vote is received. If the thesis/dissertation examination is failed, a reexamination may be given after a period of at least **four months**.

Submission of Final Manuscript

Each graduate student is responsible for the preparation and expense of all drafts of his or her thesis/dissertation. Attention to details of style, format, grammar and a thoroughly developed outline can help keep this cost to a minimum.

A bound copy of the thesis should be prepared for the major professor and for each member of the committee. In addition, one electronic copy shall be provided to the Graduate Records Administrative Assistant in the Department of Sustainable Bioproducts **along with the electronic copy of the thesis/dissertation to the MSU Library and, if requested, in some cases copies are given to sponsors of the research. Check the guidelines to see what is required.** ("Guidelines for Preparing Dissertations and Theses" can be obtained from the Graduate School, and a copy is on file at the SB Department with the Student Academic Records Associate).

Time Limit

After the student begins the M.S. program, they must complete all course work and a thesis within eight years. Students in the doctoral program must complete the degree program five years after passing the preliminary examination. A one-time, one-year extension can be requested from the MSU Graduate School for either a M.S. or Ph.D.; the request must be co-signed by the major professor and CFR Dean.

Publication and Presentation of Research

No research project is complete until the results are disseminated and available for public and other user groups. Students are expected to prepare technical and scientific manuscripts based on their research promptly on completion of field work or concurrently with writing of their thesis/dissertation. Publication should be in cooperation with the major professor(s). Authorship is normally at the discretion of the major

professor. A major professor(s) should always be coauthor(s) and, in some instances, senior author(s) in recognition of the faculty members direction of the research. Graduate committee members or other faculty/staff/students who make significant contributions may also be included provided they have contributed at least two of the following: a) project conception; b) data collection and analysis; and c) a significant writing contribution. Graduate students are expected to submit publications from their research; if no papers are submitted within a year following graduation, the major professor may write up their work and be listed as senior author.

If funds are available, each graduate student is encouraged to attend a national meeting of a professional or scientific organization. When possible, the student is also expected to present a paper/poster on their research. Authorship of presentations will follow the same guidelines as publications.

Seminars

A variety of seminars are sponsored on campus. M.S. students and especially Ph.D. students are encouraged to attend seminars of interest arranged by other departments and are strongly encouraged to attend those organized by the SB Department. Ph.D. students are required to attend a seminar of their choice. Students should seek to initiate seminars on items of interest to them. An outline of the student's seminar presentation should be sent to each faculty member at least one day before the seminar. **All Sustainable Bioproducts Graduate Students are encouraged to enroll in the SBD 8111 Research Seminar during one Fall semester and the SBD 8121 during one Spring semester.**

INTERRUPTION OF STUDIES DUE TO EMPLOYMENT

If employment causes the student to leave campus, the student is still obligated to meet all requirements for completing their degree. A graduate student who has completed all course work and/or has been admitted into candidacy and/or lacks only the completion of the thesis or dissertation must be continuously registered for at least one graduate credit hour during at least two academic terms (summer is considered one term) per year until completion. This includes:

1. Doctoral students who have completed their course work, passed their comprehensive/preliminary examinations, and are working on their dissertation.
2. Master degree students who have completed all their course work, passed their examination, and are working on their thesis.
3. Master degree students who have completed their course work but have not taken or passed their final examination.

NOTE: This also applies to the semester in which the student performs his/her dissertation defense. At least one graduate research hour must be registered.

Students are required to be enrolled two out of three semesters, with the fall term considered a mandatory enrollment period. Students may skip enrollment in either spring or summer semester if they are not taking an examination or submitting their thesis/dissertation to the MSU Library. Students who fail to be continuously registered will pay tuition and registration fees for missed terms at the current university rates, and will pay a penalty fee equivalent to the current rate of one graduate credit hour. The academic year is as follows: fall and spring; summer and fall; spring and summer, (for summer, one must enroll for either both terms or a 10-week course in order for it to count for one semester).

GENERAL POLICY INFORMATION

Communications Skills

Communication skills are important to SB students. Good communication is needed for homework problem assignments, laboratory reports, seminars, and extracurricular activities while in school and for letters, memoranda, technical reports, facsimile (fax), E-mail, and oral reporting to superiors, subordinates, and peer groups in professional/industrial situations. All graduate students are expected to develop satisfactory writing and oral communication skills prior to graduation. It is recommended that the student considers additional training in computer, writing, and public speaking skills.

General Duties

Graduate students are expected and encouraged to participate in scientific, educational, and professional organizations such as the MSU Chapter of the Forest Products Society (FPS) and the professional Society of Wood Science and Technology (SWST). Additionally, students should realize that professional development is not limited to course work and research activities and major professors may require readings from established lists or other activities to enhance the students' education. Students are expected to be aware of and participate in research endeavors of other graduate students and faculty within the Department. Some graduate students may also be asked to broaden their experience by assisting with undergraduate courses and research programs by their major professors.

Graduate students are expected to assist in the maintenance and operation of equipment in their area of specialization. Work areas and offices should be kept clean and neat and all equipment should be properly stored after use. **Students must obtain permission before using equipment or laboratory space of other professors or before using any general shop equipment.**

Graduate students will conduct themselves as professionals, including ethical behavior, at all times. Unethical research conduct, including plagiarism, may result in termination from the program, or if the student has already graduated, their graduate degree may be revoked by MSU. The honor code may be found at the University webpage.

Graduate students should keep in mind that research endeavors often involve developing new procedures or methods, and may require many experiments before satisfactory and/or reproducible results are obtained – and sometimes experiments cannot be completed for unanticipated reasons. Although frustrating, this is a normal part of research which all scientists endure. In addition, safety is to be the student’s first consideration.

Graduate students on assistantships are expected to maintain regular hours. Holidays for graduate students are the same as those for the faculty [typically, Martin Luther King Day, Spring Break, Memorial Day, July 4th, Labor Day, Fall Break, Thanksgiving, Christmas, and New Year's Day]. Any other leave or vacation must be approved by the major professor.

GENERAL ASSISTANTSHIP INFORMATION

Federal Tax on Graduate Student's Stipends

In 1986, Congress made all stipends taxable to the extent they exceed the cost of tuition. It is the graduate student's responsibility to determine if their stipend is taxable.

Research Assistantship

A M.S. student generally receives assistantship funding for two years, and a Ph.D. student for three years. Any extension requires a written justification from the student and must be co-signed by their major professor with the funding source identified, and approved by the Graduate Student Selection Committee and Department Head. An extension must be fully justified and is not routinely granted. A graduate student who receives a stipend must be enrolled in at least nine, but no more than thirteen hours, during the semester unless special permission is obtained from the CFR Dean; this letter must be written by the student's major professor. When a graduate student receives a stipend during the summer months, he/she must take a total of six hours. A student must be enrolled during the term they hold an assistantship.

If their assistantship covers both terms of summer school, they must be enrolled in three graduate credit hours each term. However, they may take a total of, but not more than, nine semester hours during the summer.

Work Obligation for Graduate Research Assistants

Graduate research assistants are expected to work the time stipulated in their assistantship agreement. Normally, **this is around 20 hours per week and may or may not be related to their thesis/dissertation as determined by their major professor.** Work requirements may be altered in special circumstances due to course work load and/or thesis/dissertation research if the major professor deems this necessary.

As a general rule, full-time graduate assistants (50% appointment) are not permitted to have additional employment beyond that of the assistantship. This prohibition is based upon the assumption that a full-time student with a work commitment of 20 hours per week in their assistantship would not be able to meet all their academic and work obligations in the most appropriate manner if there were to have

additional responsibilities. A graduate student who has an assistantship of 25% of their time is allowed to have another appointment which corresponds to a 25% load (for a 50% total). Before hiring any graduate student to be paid, the unit should check with the Office of the Graduate Studies to determine the assistantship status of the student.

Any exceptions must have approval of the student's academic dean, the employing department (when different from the assistantship unit) and Office of the Graduate School **PRIOR** to the Graduate Assistant performing additional work. A request for such an exception **MUST** be made in writing by the temporary hiring unit head to the Director of the Office of the Graduate School. The request should be transmitted through the assistantship unit and the Dean's Office for approval. The unit hiring the student for extra work is responsible for negotiating the details with the assistantship and academic units before requesting approval. A copy of the approved request should accompany the pay documents submitted following completion of work by the student/graduate assistant.

EQUIPMENT USE

Use of Laboratory Equipment

Use of any computers, copiers, or any lab equipment in research areas under the responsibility of any professor or staff member requires permission from the responsible professor/staff member. The student must follow safe and proper use of equipment. Ongoing Laboratory work normally takes precedence over students' use of any Laboratory equipment. **Use of any laboratory equipment is considered to be a privilege granted by a professor or laboratory staff and should be considered as such. Copying books is not permitted.** Copying of theses/dissertations are not permitted during regular work hours (Monday - Friday from 8:00 - 5:00 p.m.). Administrative personnel are allowed to interrupt students when they are copying. All graduate students must be certified before they can operate any wood working equipment at the Department. This certification must be done by the appropriate staff member(s) and approved by your major professor and Department Head. A copy of the certification should be filed with the Student Academic Records Associate.

State-owned vehicles are only to be driven by MSU personnel with a valid Mississippi Driver's License and with prior signed approval which must be granted yearly. Furthermore, state-owned vehicles are not to be used for local, personal errands, such as: driving to a local restaurant for lunch, driving home for the evening or weekend, or driving to a local store to purchase an item for personal use.

Appendices:

Sustainable Bioproducts Department Forms

NOTE: Current Graduate School Forms are available at www.grad.msstate.edu

APPENDIX 1

EXAMPLE OF COVER SHEET FOR DISSERTATION/THESIS

RESEARCH PROPOSAL STUDY PLAN

DISSERTATION/THESIS WORKING PLAN FOR

NAME OF STUDENT

CANDIDATE FOR THE DEGREE OF DOCTOR OF PHILOSOPHY or MASTER OF SCIENCE

TITLE:

Major Professor	Signature	Date
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Committee Member	Signature	Date
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Committee Member	Signature	Date
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Committee Member	Signature	Date
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Committee Member	Signature	Date
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Graduate Coordinator	Signature	Date
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Department Head	Signature	Date
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Student	Signature	Date
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APPENDIX 2

FORMAT FOR THESIS/DISSERTATION RESEARCH PROPOSAL STUDY PLAN

Project Summary - Brief outline of the research.

Project Description - Background and objectives.

Rationale and Significance

Literature Review

Materials and Methods:

1. Data collection - a complete description of materials and techniques to be used.
2. Methods of analysis - an outline of the statistical methods to be used.

Note: The total length of the above sections should not exceed 15 pages.

References

Budget

Signatures – Front page example given in Appendix 1

APPENDIX 3

RESEARCH PROPOSAL FORMAT FOR Ph.D. STUDENTS' PRELIMINARY EXAMINATION

TABLE OF CONTENTS

PROJECT SUMMARY (The project summary itself must be approximately 250 words).

PROJECT DESCRIPTION

- **Introduction** - A clear statement of the long-term goal(s) and supporting objectives or research questions of the proposed project should be included.
- **Background and Literature Review**
- **Rational and Significance**
- **Research Methods** - The hypotheses or questions being asked and the methodology being applied to the proposed project should be stated explicitly.

LITERATURE CITED

FACILITIES AND EQUIPMENT - Request a copy of list from Mrs. Karen Williams

VITAE AND PUBLICATION LIST - The vitae should be no more than two pages excluding publications listings and the publication list should be a chronological list of all publications during the past five years.

BUDGET

BUDGET JUSTIFICATION

Note: The proposal should not exceed fifteen (15) pages, excluding literature cited. The student will have four weeks to write this proposal.