The information contained here has been prepared to assist graduate students in becoming familiar with the operating procedures and requirements of the College of Natural Resources and Environment (CNRE). Our website is http://cnre.vt.edu. Following is the website link to the Graduate School and is a great resource for newly admitted graduate students. It would be to your advantage to visit the Graduate Life Center (GLC) and review the New Student Guide information for the Graduate School at http://graduateschool.vt.edu/admitted/index.html.

General university procedures can be found in the Graduate Catalog, available at http://graduateschool.vt.edu/graduate_catalog/, which includes information on admission, degree requirements, preparation of documents, and other important topics. Departments, major professors, and advisory committees may prescribe additional requirements.

All graduate students are expected to be familiar and comply with university, college, department, and subject area requirements. In addition, graduate students must follow the Graduate Honor Code (http://graduateschool.vt.edu/admitted/policies.html). Failure to comply satisfactorily with all requirements may seriously inconvenience the student and could lead to assistantship termination and/or dismissal from the program.

Dr. Paul Winistorfer is Dean of the College of Natural Resources and Environment. He and other administrative staff are located in 324 Cheatham Hall.

Dr. Dean Stauffer is the Associate Dean for Academic Programs for the College of Natural Resources and Environment. He is available to assist you with any academic issues you may encounter and will be the final approval for a graduate independent study form submitted for approval. Dr. Stauffer is located in 138 Cheatham Hall, and can be reached at dstauffe@vt.edu or 231-5297. Teresa Quesinberry at tquesinb@vt.edu or 231-5482 is also located in 138 Cheatham Hall and can also assist you.

Following are CNRE department heads names and contact information.

Dr. Janaki Alavalapati
Department of Forest Resources
and Environmental Conservation
Room 313, Cheatham Hall
jrra@vt.edu; 540-231-5676

Dr. Bill Carstensen
Department of Geography
Room 115A, Major Williams Hall
carstens@vt.edu; 540-231-2600

Dr. Steve McMullin (Interim)
Department of Fish and Wildlife Conservation
Room 100, Cheatham Hall
smcmulli@vt.edu; 540-231-8847

Dr. Bob Smith
Department of Sustainable Biomaterials
Room 230, Cheatham Hall
rsmith4@vt.edu; 540-231-7679

Graduate students should report to their department as soon as possible after arrival on campus in order to sign the necessary payroll forms. When reporting, be prepared to show proof of citizenship or
immigration status. For U.S. citizens, a current photo identification card and either an \textit{original} Social Security card or an \textit{original} birth certificate are required. \textit{Copies are not acceptable.}

\textbf{Fish and Wildlife Conservation (fishwild.vt.edu)} - Dana Keith (100 Cheatham Hall / 231-5573)
\textbf{Forest Resources and Environmental Conservation (frec.vt.edu)} - Sue Snow (313 Cheatham Hall / 231-5483)
\textbf{Geography (geography.vt.edu)} – Graduate Program Director, Lisa Kennedy (115 Major Williams Hall/ 231-1422, kennedy1@vt.edu) or Karen Bland (231-7557, kbland@vt.edu)
\textbf{Sustainable Biomaterials (sbio.vt.edu)} - Debbie Garnand (230 Cheatham Hall / 231-8853)

The Graduate School, the College of Natural Resources and Environment, and the departments all offer orientation events for new students. Check with the appropriate resources for details.

\textbf{DEAN’S GRADUATE STUDENT COUNCIL}
\textbf{DEPARTMENT REPRESENTATIVES FOR 2013-2014}

<table>
<thead>
<tr>
<th>Department</th>
<th>Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish and Wildlife Conservation</td>
<td>Clara DeYoung</td>
</tr>
<tr>
<td>Forest Resources and Environmental Conservation</td>
<td>Daniel Sumner</td>
</tr>
<tr>
<td>Geography</td>
<td>Khris Beagley</td>
</tr>
<tr>
<td>Sustainable Biomaterials</td>
<td></td>
</tr>
</tbody>
</table>

\textbf{FREQUENTLY ASKED QUESTIONS}

\textbf{How do I register for classes?}
Log into Hokie Spa and go to your Registration and Schedule. It is there where you will drop/add your classes for each semester. You will follow the university’s timetable calendar for dropping and adding classes to your schedule (the same as for undergraduate students) set up by the University Registrar. We are currently in the Fall Semester 2013 calendar. The timetable calendar is located: \textit{http://www.registrar.vt.edu/dates_deadlines/timetable_calendar/index.html}

\textbf{How do I request approval for an independent study?}
You will need to complete the 5974 Graduate Independent Study Request form located in a link through our home page at \textit{http://cnre.vt.edu/students/forms/index.html}. Follow the instructions on the form for completing it, obtaining signatures, and then return it to the Academic Programs Office for the final approval and signature from the associate dean, Dr. Stauffer.

\textbf{How do I request to add a class which I am not able to add myself?}
There are deadlines in the academic timetable that need to be followed for force adding courses. Force add/drop forms are located at the receptionist desk in Room 138 Cheatham Hall. This form requires approval signatures from the course instructor and the student’s advisor before being returned to Room 138 for processing.
Where do I find the necessary forms I will need as a graduate student at Virginia Tech?
Forms that you will need are located at [http://graduateschool.vt.edu/forms/index.html](http://graduateschool.vt.edu/forms/index.html). You will also find the Graduate Independent Study Request form at [http://cnre.vt.edu/students/forms/index.html](http://cnre.vt.edu/students/forms/index.html).

What do I do if I have an emergency and need to leave Virginia Tech?
Do not leave without taking care of the courses in your schedule. This will require your signature on necessary forms.
1. Notify your advisor immediately
2. You may need to talk to the Graduate School
3. Resign from the semester if it is necessary
And, if you still need help, talk to someone in the Academic Programs Office in 138 Cheatham Hall.

How do I request to withdraw from a class or resign from the semester?
You will need forms from the graduate school website:
[http://graduateschool.vt.edu/forms/index.html](http://graduateschool.vt.edu/forms/index.html). The “Graduate Course Withdrawal” and “Student Resignation/Withdrawal” forms are located at the above website under the Enrollment section. Students will complete the forms and get appropriate signatures from the instructor/s and their department and the form then goes directly to the graduate school for processing.

Is there funding available for my research through the College of Natural Resources and Environment?
Your department may or may not have funding for research. Please check with your major advisor on what might be available and how to apply for funding.

Is there other graduate student funding available?

Are there rooms that can be reserved for committee and other meetings?
It is your responsibility to schedule the date, time and a location for your meetings, so please do not finalize a date and time to meet with your committee without first reserving a location. **And plan well in advance as Cheatham Hall conference rooms and classrooms fill up quickly.**

There are three conference rooms in Cheatham Hall which can be reserved. They are 136B and 147 on the first floor and 315 on the third floor.
- Teresa Quesinberry (231-5482) ([tquesinb@vt.edu](mailto:tquesinb@vt.edu)) in Room 138 can reserve 136B, 315 and classrooms in Cheatham Hall.
- Room 147 Cheatham is designated as a Fish and Wildlife Conservation departmental conference room and Dana Keith (231-5573) ([dkeith@vt.edu](mailto:dkeith@vt.edu)) in Room 100 can reserve that conference room.
- Karen Bland (231-7557) ([k bland@vt.edu](mailto:k bland@vt.edu)) can make a reservation for Major Williams Hall Room 117 in the department of geography.
- A conference room in Fralin Hall (next door to Cheatham) may also be available.
• As graduate students, you also have access to rooms in the Graduate Life Center (GLC) on College Avenue. Those reservations are made through the GLC.

Is mental health counseling available on campus to graduate students?
Cook Counseling Center, located in McComas Hall, (http://www.ucc.vt.edu/) provides individual, group, and couples counseling, assessment, consultation, and campus outreach services to currently enrolled students. These services are included in the cost of your comprehensive fees.

Counseling support is available in the GLC. Cook Counseling Center provides counseling support specifically to graduate students in the Green Room (across from Room G) on Thursdays from 1-5pm. No appointment necessary. Feel free to take advantage of this if you are stressed, anxious, need to develop better study habits, or just need someone to talk to.

DESKTOP, LABORATORY SPACE, AND KEYS
Desk and laboratory space will be provided for graduate students by the appropriate department head if and when such space is available.

Department of Geography graduate students should see Karen Bland in 115 Major Williams Hall regarding desk, lab space, and keys.

Keys for Cheatham Hall are available from Arlice Banks (arbanks@vt.edu) in the Dean’s office in Room 324. A signed key slip, available from department head administrative assistants, and a deposit of $5.00 per key, are required for each separate key request. You are responsible for a key when it is issued to you. Here are rules to follow regarding keys:

• Keep Cheatham Hall and Major Williams Hall secure by relocking entry doors at night and on weekends.
• DO NOT PROP DOORS OPEN FOR ANY REASON.
• DO NOT SHARE KEYS.
• DO NOT SWAP KEYS WITH ANOTHER GRADUATE STUDENT. If a key exchange needs to be made, then new keys need to be reassigned by Arlice Banks in 324 Cheatham or Karen Bland in 115 Major Williams Hall.
• REPORT LOST KEYS IMMEDIATELY to Arlice Banks or someone else in Room 324 Cheatham or Karen Bland in 115 Major Williams Hall.
• Keys must be returned prior to your leaving Virginia Tech as a graduate student.

The Dean’s office in Room 324 will process a reimbursement request once you return the keys you were originally issued upon leaving Virginia Tech. A check will be direct deposited into your account, so please don’t close your account until your refund check has been deposited. Cash refunds are not allowed.
INFORMATION TECHNOLOGY ASSISTANCE
How to contact the CNRE HelpDesk:
  Phone: 1-9599
  Email: CNREHelpDesk@vt.edu
  Web: it.cnre.vt.edu
  Location: 216 C Cheatham Hall

Lon Weber - IT Director, Microcomputer Teaching Lab Manager
Les Fuller – Systems Administrator, (CEARS lab manager, Geography computer lab manager)
Tomislav Butkovic – HelpDesk Technician, (Cheatham Hall and Brooks computer lab manager)
Will Pfeil – Web and Media Specialist

A computer lab and printer, for student use, is located in 220 Cheatham Hall. You must have money on your hokie passport for printing. Classes are held in that room, so please be mindful of those classes.

STUDENT LISTSERV
The graduate student listserv is CNRE_Grad_Students@listserv.vt.edu. All new graduate students are added to this listserv and currently, they remain on the listserv until they request to be removed or remove themselves. The Academic Programs Office and others will forward information as necessary, so please don’t ignore these emails as they may contain important information.

Departments may have their own graduate student listservs as well. Check with the department administrative assistant to see if your department has their own.

HEALTH SERVICES AND HEALTH INSURANCE BENEFITS FOR GRADUATE ASSISTANTS
Certain immunizations are required for students attending Virginia Tech. Refer to the Schiffert Health Center’s website (http://www.healthcenter.vt.edu/) for a list of requirements. Mandatory student fees include a charge for health services. Services include unlimited visits, most medications, and most laboratory procedures. As not all medical situations can be treated at the Schiffert Health Center, additional medical insurance is recommended. If you are an international student, health insurance is mandatory for the duration of your stay. Information regarding health insurance is available at: http://www.co.vt.edu/Risk/studenthealthinsr/ or, for your convenience the Student Medical Insurance office is located at the Student Services Building; Room 110. The hours of operation are 8:00am – Noon and 1:00pm – 5:00pm Monday-Friday. Phone 540-231-6226 / Email smi@vt.edu. You may also visit the Frequently Asked Questions section from the Graduate School’s website on insurance benefits: http://graduateschool.vt.edu/admitted/health.html

PLAN TO ATTEND ONE OF THESE SESSIONS.
- Health Insurance Sign Up – There are 3 sessions offered in the Graduate Life Center lobby (Tuesday, 8/20, 12:00-3:00 p.m.; Thursday, 8/22, 2:00-4:30 p.m.; Friday, 8/23, 10 a.m.-1:00 p.m.)
LOCAL EVENT CALENDARS
Virginia Tech Women’s Center - http://www.womenscenter.vt.edu/
Virginia Tourism - http://www.virginia.org/
Graduate Life Center: http://www.graduatelifecenter.vt.edu/
Next Three Days: http://nextthreedays.com/

RECREATION WEBSITES
VT Rec Sports – www.recspports.vt.edu
Venture Out gear rentals, trail maps, etc. – www.studentcenters.vt.edu/ventureout/
Virginia State Parks – www.virginia.org/StateParks/ (Claytor Lake is nearby)
Appalachian Trail – www.appalachiantrail.org
Tangent Outfitters – www.tangentoutfitters.com
New River Junction – www.newriverjunction.com
Biking in Blacksburg – www.tcs.vt.edu/alternative/bike.asp
Bicycle registration – www.parking.vt.edu/
Hokie Sports – www.vt.edu/sports/
GRADUATE HONOR SYSTEM
The Graduate Honor Code establishes a standard of academic integrity. The code demands a firm adherence to a set of values and is founded on the concept of honesty with respect to the intellectual efforts of oneself and others. (http://ghs.graduateschool.vt.edu/)

Compliance with the Graduate Honor Code requires that all graduate students exercise honesty and ethical behavior in all their academic pursuits here at Virginia Tech, whether these undertakings pertain to study, course work, research, extension, or teaching.

Introduction to the GHS (this is a very informative PowerPoint presentation)

Chief Justice: Jordan Booker
Advisor: Monika Gibson
Administrative Support: Pat Goodrich

GRADUATE ADVISOR AND ADVISORY COMMITTEE
The department head, in consultation with the faculty, makes major professor (also known as “advisor,” “graduate advisor,” or “graduate committee chair”) assignments. Students are encouraged to consult with the appropriate department head if changes in major professor assignments or field of study become desirable.

Prior to initial registration, each graduate student’s academic background is evaluated in accordance with department/section procedure. A temporary advisor is assigned who, along with the graduate student, will prepare a tentative plan of study. Prior to submitting the formal plan of study to the Dean of the Graduate School, an official graduate advisory committee will be formed for each student. This committee is selected by the major professor, in consultation with the individual student, and is subject to approval by the department head. Doctoral students must and master’s students are advised to enlist at least one suitably qualified committee member from outside the student’s department.

The College of Natural Resources and Environment requires that each student’s graduate advisory committee meet with the student before the student has been in residence for one year and at least annually thereafter. While these meetings should center on the research project and coursework, an additional function will be evaluating the student’s progress and making recommendations for improvement. It is the obligation of the student to arrange these meetings, in consultation with his/her major professor. Progress evaluations become part of the student’s file.

PLAN OF STUDY
Each graduate student must file a Plan of Study with the Graduate School. This program lists courses the student plans to complete as part of his/her degree requirements. Modifications to the Plan of Study are allowed if approved by the student’s committee and appropriate administrative officials. The Graduate School requires that MS students submit their plan of study by the end of the second semester enrolled. Ph.D. students must submit their plan of study by the end of their third semester in
residence. The department of Geography requires the signed plan of study by the end of the first semester for full-time students.

**RESEARCH WORK PLAN (PH.D. AND M.S. STUDENTS ONLY)**

Completion of graduate research is the requirement that most often extends the period of residency. Therefore, all graduate students should give prompt attention to choosing their research topic in consultation with their major professor and their advisory committee. Choice of topic should be guided by the student’s interest, the availability of faculty to direct the research, research funding, and the college’s ongoing research programs. An early choice of topic will allow for planning a more effective Plan of Study.

Following selection of a general research topic, the student should begin preparing a research work plan. The plan should include (at a minimum) sections related to justification, review of past research, research objectives, and the experimental design and methods to be used in the research. The plan should be prepared in accordance with the specific requirements of the department, section, and/or committee. An example format for the work plan is attached (Appendix A). Forms may vary between departments.

The work plan should be provided in writing to and approved by the student’s graduate advisory committee by the end of the first year in residence. A signed, approved copy of the student’s plan should be filed in the student’s departmental office.

**PH.D. COURSE WORK AND EXAMINATIONS**

The following requirements are specific to the college:

I. **Minimum Competency in Statistics**

The minimum competency for Ph.D. students regarding statistics is to pass STAT 5606 or STAT 5616 or another course of equivalent statistics content with a grade of “B” or better. The statistics requirements must be satisfied before a student is allowed to take preliminary examinations. The college Student Policy and Affairs Committee recommends that this requirement be satisfied during the first year of residency.

II. **Qualifying Examination**

Departments or sections may require a qualifying examination for Ph.D. students. See the *Graduate Catalog* (http://www.graduateschool.vt.edu/graduate_catalog/). Click on the Policies tab for additional information.
III. Preliminary Examination

A preliminary examination is required for all Ph.D. students. The student’s advisory committee administers this exam and determines the format. Departmental requirements and those of individual sections or committees may prescribe additional procedures regarding administration, format, timing, and evaluation. An expected preliminary examination date must be submitted with the Plan of Study for approval by the Graduate School. In addition, (1) the examination must be scheduled during academic sessions, (2) requests to schedule the examination must be received by the Graduate School at least two weeks prior to the examination date, (3) students must be registered during the term the examination is taken, and (4) the results must be reported to the Graduate School within two weeks of the examination (all in accordance with university procedures).

IV. Additional Coursework

Requiring additional courses (beyond those included on the Plan of Study) remains within the purview of the student’s graduate advisory committee. Most often, such requirements are the result of weaknesses uncovered by progress evaluations, qualifying examinations, and preliminary examinations.

THESIS / DISSERTATION

Format and procedures for submitting your thesis or dissertation are given in the Graduate Catalog (http://www.graduateschool.vt.edu/graduate_catalog/). Individual departments or sections may prescribe additional procedures. Students are advised to consult their major professor and graduate advisory committee concerning requirements and expectations.

The preparation of the thesis/dissertation is time consuming and can be expedited by giving careful attention to the following details:

1. Remember that the thesis/dissertation is a permanent record that will require several revisions before submission to your advisory committee and may require additional revision afterwards.

2. During the initial stages of writing the thesis/dissertation, the major professor will be responsible to see that the material is properly organized, correctly stated and interpreted, and written in an acceptable style.

3. When the major professor is satisfied that the manuscript is ready for review, copies will be furnished to each committee member. Copies are best made on paper with numbered lines. Committee members are to be allowed a minimum of two weeks for review and comment.

4. At least one week before the oral examination, each member of the examining committee must be provided with a copy of the reviewed manuscript.
5. Each graduate student is responsible for the preparation of his/her thesis/dissertation in the required electronic form. Refer to **Electronic Thesis and Dissertation (ETD)** (http://etd.vt.edu/) for information. A primary goal of ETD initiatives is to make the research and scholarship conducted by graduate students freely and openly accessible. Another goal is to give future academics opportunities to prepare electronic works such as book chapters, journal articles, and conference presentations, assuming that they will be publishing electronically in the future also. Yet another goal is to expand the medium of expression for graduate research and scholarship to more than words and figures that can be reproduced on paper, to other media, including audio and video. There are **awards** available for outstanding ETDs. Additional departmental requirements may apply.

**PUBLICATION OF RESEARCH**
No research project is complete until the results are available for general use. Students are expected to publish their research promptly upon completion. In some instances it is advisable to publish research prior to the preparation of a thesis/dissertation. Publication should proceed with the cooperation of the major professor, who should be incorporated as a co-author in recognition of the faculty contribution to the overall direction of the research. Some major professors require that theses/dissertations be in a form that is easily prepared for publication. In addition, major professors may require that manuscripts for publication be submitted at the time the thesis/dissertation is defended.

**USE OF COLLEGE FACILITIES**
The college’s laboratories and equipment are available for research and teaching. In addition, other facilities—computers, electron microscopes, and many other items—are available within the university. Arrange for the use of equipment and/or space by consulting the faculty member or technician in charge of the facilities. Your major professor will know who to contact. This person will ensure you know, or are shown, how to use the facilities. Be especially careful to clean up after you have finished. Do not leave notebooks, samples, or other items where they may prevent others from using the equipment or space. Laboratories should be maintained in a neat and orderly fashion at all times. Adherence to safety protocol in laboratories is mandatory. Consult with your major professor regarding the handling, storage, and disposal of chemicals.

**SEMINARS**
A variety of seminars are sponsored within the college and across campus. Students are encouraged to attend seminars of interest arranged by other departments. All graduate students are **required** to attend departmental or section-sponsored seminars. Departments may require that students register (pass/fail option) for the departmental graduate seminar (course no. 5004) every semester they are in residence. Students are **expected to attend** those seminars organized by the College of Natural Resources and Environment, regardless of topic.
GENERAL DUTIES
Detailed graduate student responsibilities are the mutual concern of the student and major professor. All graduate students are expected to broaden their experience by assisting in research programs other than those specifically designated as their research topic. This is particularly true when other graduate students need assistance in fieldwork for safety or other reasons.

Graduate students are expected to obtain teaching experience by giving seminars, assisting with undergraduate laboratories, presenting formal lectures, and grading. Since teaching, in one form or another, frequently forms a part of each student’s later life, thought should be given to including appropriate education coursework within the graduate Plan of Study. Also, students are expected to assist in the maintenance and operation of equipment in their area of specialization.

Graduate students on assistantships are expected to maintain regular hours. Each graduate research assistant is expected to work 20 hours per week (or a proportionately smaller number when employed less than half-time) for their assistantship and is considered to be 50 percent employed. It should be noted that this requirement does not provide for vacation time. Therefore, all graduate assistants who wish to be away from campus must make prior arrangements with their major professor concerning the fulfillment of their obligation to the university.

A summary of important degree requirements for master’s and doctoral students, taken from the Graduate Catalog (http://www.graduateschool.vt.edu/graduate_catalog/) are attached for your convenience (Appendix B).

Information regarding enrollment limits and credit hour loads for employed graduate students can be found in Appendix C.
RESEARCH WORK PLAN
for
John C. Doe
Candidate for the Degree of
MASTER OF SCIENCE
in
FORESTRY

TITLE: The Growth of Open-grown Virginia Pine (Pinus Virginiana)

OBJECTIVE: (1) To examine the vertical distribution of foliage and other components in the canopy of open-grown Virginia Pine.

(2) To investigate the relationships between several parameters of tree measurements (Dbh, height, and others) and the dry weight of the above-ground portion (bole, branches, cones, and foliage) of open-grown Virginia Pine.

(3) To use the above relationship and stem analysis to formulate growth curves for open-grown Virginia Pine.

APPROVAL:

__________________________________   ___________________________________
Chair        Date

__________________________________   ___________________________________
Committee Member      Date

__________________________________   ___________________________________
Committee Member      Date

__________________________________   ___________________________________
Department Head      Date

At a minimum, the Research Work Plan should contain the following sections:

1. Justification: The reasons for undertaking the research
2. Literature Review: A thorough review of past work
3. Objectives
4. Materials and Methods
   Data Collection: A complete description of techniques to be used
   Methods of Analysis: An outline of the statistical methods to be used
5. References
APPENDIX B¹
Credit Hour Requirements for Degrees and Certificates

I. Master's Degree

Virginia Tech allows for both thesis and non-thesis master's degrees. For each degree type, the student's Plan of Study must meet the semester credit hour requirements shown below. Departments/programs may have additional requirements, and an advisory committee may add specific requirements needed for an individual student’s academic development. Graded credits must be taken for an A/F grade unless the course is only offered P/F (see Grading System Requirements). See Transfer Credit for policies about the transfer of graduate credits for use on the Plan of Study. See Undergraduates Taking Graduate Courses for policies allowing students at Virginia Tech to transfer some courses from the bachelor’s degree to the master’s degree (also referred to as double counting courses toward both degrees).

A. Thesis Master’s

**Minimum total credits:** 30 credit hours

**Minimum graded credits:** 20 credit hours

1. May include a maximum of 6 credits of Virginia Tech 4000-level undergraduate course work. These 6 credits may include Special Study (4984) courses but may not include Undergraduate Independent Study (4974) or Undergraduate Research (4994) courses.

2. All other graded course work must be 5000-level or higher (i.e., graduate course work). The graded course work may include:

   - A maximum of 9 credits total in 4984, 5974, 5984, and 6984 courses, and
   - 3 credits of seminar.

**Minimum research credits:** 6 credit hours of Master's Research (5994) taken at Virginia Tech

¹Taken from the [Graduate Catalog](http://www.graduateschool.vt.edu/graduate_catalog/)

B. Non-thesis Master's

**Minimum total credits:** 30 credit hours

**Minimum graded credits:** 24 credit hours

1. May include a maximum of 6 credits of Virginia Tech 4000-level undergraduate course
work. These 6 credits may include Special Study (4984) courses but may not include Undergraduate Independent Study (4974) or Undergraduate Research (4994) courses.

2. All other graded course work must be 5000-level or higher (i.e., graduate course work). The graded course work may include:

   A maximum of 9 credits total in 4984, 5974, 5984, and 6984 courses, and 3 credits of seminar.

   **Maximum project and report or research credits:** May include a maximum of 6 credits of Project and Report (5904) or Master’s Research (5994) credits taken at Virginia Tech.

II. Doctor of Philosophy (Ph.D.)

Doctoral degrees at Virginia Tech must meet the semester credit hour requirements listed below and include a dissertation that involves original research/scholarship. Departments/programs may have additional requirements, and an advisory committee may add specific requirements needed for an individual student’s academic development. Graded course work on the Plan of Study must be taken for an A/F grade unless the course is only offered P/F (see Grading System Requirements). See Transfer Credit for policies about the transfer of graduate credits for use on the Plan of Study. Courses transferred from the bachelor’s to the master’s degree for a student in the master’s program at Virginia Tech cannot be used for doctoral credit (i.e., they cannot be “triple counted”).

   **Minimum total credits:** 90 credit hours

   **Minimum graded credits:** 30 credit hours

   A. At least 27 graded credits must be at the 5000-level or higher (i.e., graduate course work). Some departments have approval from the Commission on Graduate Studies and Policies to reduce the minimum number of graded course work credits required for a specific degree program. See departmental degree requirements to determine if a department has approval for such changes in requirements.

      The 5000-level course work may include a maximum 18 credits total in 5974, 5984, and 6984 courses and 4 credits of seminar.

   B. The Plan of Study may include a maximum of 6 credits of Virginia Tech graded 4000-level undergraduate course work.

      The 6 credits of Virginia Tech 4000-level course work may include Special Study (4984) courses but may not include Undergraduate Independent Study (4974) or Undergraduate Research (4994) courses.

   **Minimum research credits:** 30 credit hours of Doctoral Research (7994) taken at Virginia Tech
I. **Full-Time Enrollment**

Full-time enrollment for graduate students, for purposes of tuition and fees, consists of a minimum of 9 credit hours during academic year semesters. However, the Commonwealth of Virginia does not count students as full time unless they are enrolled for at least 12 credits, and in most academic contexts, 12 credits is considered full time. The maximum number of credit hours is 18 during academic year semesters. Overloads (more than 18 credit hours per semester, or more than 6 per summer session) require permission from a graduate dean.

II. **Graduate Student Employment/Assistantships**

The Graduate School recognizes that many students depend on part-time employment (including assistantships) and are part-time graduate students.

**Maximum Credit Hour Load**

<table>
<thead>
<tr>
<th>Percent Employed</th>
<th>Academic Semester</th>
<th>Each Summer Term*</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>75</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>50 or less</td>
<td>12-18</td>
<td>6</td>
</tr>
</tbody>
</table>

* Maximum of 12 credit hours in both summer terms (maximum overload to 9 credit hours in a single summer term).

Graduate Assistants (GAs, GTAs, and GRAs) must enroll for at least 12 credit hours per semester to be eligible for their assistantship. Students on full assistantship are expected to work an average of 20 hours per week for the assistantship and are considered to be 50 percent employed. Graduate students on assistantship can enroll for up to 18 credit hours of course work in academic year semesters and up to 6 credit hours during each summer session.

²Taken from the [Graduate Catalog](http://graduateschool.vt.edu/graduate_catalog/)