

Graduate Student General Information

South Dakota School of Mines and Technology offers graduate degree programs at the master's and doctoral levels. The graduate program provides opportunities for advanced study and research in the fields of engineering and science. Each individual degree program of study is designed to broaden and extend the student's knowledge within the chosen field, to develop the power of independent, critical thinking and to promote the skill of individual and cooperative research skills.

A Master's Degree program was authorized at the South Dakota School of Mines and Technology in October 1935, and the first degree was granted in 1937. Permission to start a Ph.D. program during the 1967-68 academic year was granted in January 1967 to the Department of Geology and Geological Engineering. In June, 1983, the Board of Regents authorized the Doctorate in Materials Engineering and Science. The Board authorized the Atmospheric, Environmental, and Water Resources Ph.D. program (cooperative with South Dakota State University) in October of 1993. In March 2005 this program was changed to Atmospheric and Environmental Sciences. Also in March 2005, The Board of Regents authorized a Ph.D. program in Nanoscience and Nanoengineering and in March 2006 authorized an M.S./Ph.D. program in Biomedical Engineering, which is a joint program with the University of South Dakota. In April 2007, a Ph.D. program in Chemical and Biological Engineering was authorized by the Board.

The Graduate Office was organized formally in 1950-51. The policies of the Graduate Office are formulated with the assistance of the Council on Graduate Education, which is advisory to the Dean of Graduate Education. The policies are approved by the Faculty Senate and the Board of Regents and are administered by the Graduate Dean.

The Council on Graduate Education

The Council on Graduate Education consists of six (6) elected graduate faculty representatives, two graduate student representatives and the Dean

of Graduate Education or his/her designee. (The Vice President for Academic Affairs serves in an ex-officio capacity.)

Graduate Programs

Master of Science degrees are offered in:

- Atmospheric Sciences
- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Construction Management
- Electrical Engineering
- Engineering Management
- Geology/Geological Engineering
- Materials Engineering and Science
- Mechanical Engineering
- Paleontology
- Physics
- Robotics and Intelligent Autonomous Systems

Doctor of Philosophy degrees are offered in:

- Atmospheric and Environmental Sciences
- Biomedical Engineering
- Chemical and Biological Engineering
- Materials Engineering and Science
- Geology/Geological Engineering
- Nanoscience and Nanoengineering

Admission to the Graduate School

The Graduate Office encourages applications from qualified students holding bachelor's degrees in engineering or science from accredited four-year colleges and universities. Bachelor's degrees or "diplomas" in technical engineering fields generally do not qualify as accredited four-year degrees for purposes of admission. A student desiring admission should obtain an application form from the Graduate Office or via the website at: <http://graded.sdsmt.edu>. The completed form, accompanied by a transcript of all undergraduate work and a non-refundable application fee of \$35 for all applicants should be submitted to the Graduate Office. Application materials from domestic applicants should be received at least three months before the beginning of the semester

for which the student desires admission (June 1 for fall semester and October 1 for spring semester). International applicants must submit all of their materials at least five (5) months before the beginning of the semester (April 1 for fall semester and August 1 for spring semester). Applicant files will not be reviewed until the \$35 application fee has been paid.

Three letters of recommendation are required from students who have not previously attended from the South Dakota School of Mines and Technology. These should be requested by the applicant from three persons familiar with the scholastic ability and interests of the applicant. Applications from students who currently attend or who have graduated from the South Dakota School of Mines and Technology need only include the signatures of two faculty members familiar with the applicant's academic performance unless otherwise specified on the application form.

If the applicant has not completed an undergraduate program, a list of the remaining requirements should accompany the application. Evidence of graduation must be submitted prior to enrollment.

The Graduate Record Examination (GRE) may be required by a graduate program (see program specific requirements). If the GRE is required, it should be taken in advance of application so that the scores are available at the time the student's application is reviewed. Please use school code 6652 for the results to be sent to the School of Mines. This examination is prepared by the Educational Testing Service, Princeton, New Jersey

The descriptions that follow provide information on requirements for specific graduate programs. When an application for admission to a graduate program is received, the faculty of the department or multi-disciplinary program in which the applicant expects to major will evaluate the applicant's academic qualifications. The head/coordinator, on behalf of the faculty, will recommend whether or not the applicant should be accepted into the Graduate program and whether the admission should be as an unconditional, provisional, probationary, or special student. The Dean of Graduate Education

will review this recommendation and provide a letter of decision to the applicant. For further information, refer to the section on "Probation Policy."

Admission to the Graduate school for study toward a master's degree does not imply that the student will be allowed to work toward a doctorate. A separate application and evaluation of the student's qualifications are necessary before acceptance into a doctoral program. It should be noted further that admission to the Graduate school for study toward a Ph.D. degree does not constitute admission to candidacy for the Ph.D. degree. Refer to a later section for information on admission to candidacy.

International Student Admissions

An international applicant for Graduate school must provide evidence of English proficiency. English proficiency for graduate applicants from countries in which English is not the native language must be verified by the TOEFL (Test of English as a Foreign Language). In addition, TWE (Test of Written English) scores are recommended, but are not required. TOEFL results must be sent to the Graduate Office, South Dakota School of Mines and Technology, PL 113, 501 East Saint Joseph Street, Rapid City, SD 57701-3995. Please use school code 6652 for the results to be sent to the School of Mines. A minimum score of 560/220/83 is required for unconditional satisfaction of the requirement. Students having scores greater than 520/190/68 but below 560/220/83 will be required to undergo an evaluation and will be required to complete a program of study in English as a second language. Admittance will not be granted to students with TOEFL scores below 520/190/68. Information on worldwide test centers and on registration for the TOEFL can be obtained by contacting any U.S. Embassy or Consulate or by writing to Test of English as a Foreign Language, Educational Testing Service, Princeton, New Jersey 08540, U.S.A. International students from countries in which English is either the native or common language may be exempted by the Dean of Graduate Education from the TOEFL requirement. Likewise, applicants who have a

prior degree from a college or university in the United States are generally exempted. Alternate English proficiency tests, such as the IELTS, will be considered in lieu of the TOEFL on an individual basis.

Conditional acceptance may be granted to international applicants if they attend and complete an English as a Second Language program prior to attending the School of Mines. An international applicant will not be issued the U.S. Department of Justice Form I-20, Certificate of Eligibility for Non-immigrant (F-1) student status, until admission to Graduate school for study toward a specific advanced degree has been granted. Form I-20 is usually necessary for admission to the United States for college attendance. Conditions of issuance of this form include documented evidence of financial ability to cover the projected annual costs of education at this university including living allowance. This institution will issue a DS-2019 Form only when appropriate. All international applicants are required to submit the \$35 application fee. (At the time of first registration on campus, a \$120.95 international student enrollment fee must be paid.) Both charges are non-refundable.

International students are advised that full-time status at this university is necessary in order to satisfy F-1 status requirements (see "Tuition and Fees" section of the catalog).

Each international student (and any dependents accompanying him/her to the United States) is REQUIRED to enroll in the Major Medical Hospitalization/Surgical Insurance Plan provided through South Dakota School of Mines and Technology. No outside policies will be accepted as substitutes. The only exception to this rule is if the student is covered by his/her home country (documentation of this policy is required). Life insurance is also strongly recommended.

As a result of the regulations that became effective on January 1, 2003, the Family Educational Rights and Privacy Act (FERPA) is waived for F and J students with respect to these specific reporting requirements. The regulations will be strictly enforced by the appropriate bureau(s) within the US Department of Homeland Security (DHS) and information will be reported electronically to DHS via Student and Exchange

Visitor Information System (SEVIS). The consequences to students for non-compliance with the new regulations are severe. For more information, e-mail the Ivanhoe International Center at Ivanhoe@sdsmt.edu or go to <http://international.sdsmt.edu>.

Graduate Assistantships

South Dakota School of Mines and Technology has funds available from various sources for graduate assistantships and fellowships. Such awards are usually made on the basis of scholastic merit and the availability of funds. Assistantships are not available to students on probation unless an exception is granted by the Dean of Graduate Education.

Financial assistance is available for graduate teaching assistants (GTA) and for graduate research assistants (GRA). A GTA assists with instruction within laboratory sections, grades papers, or performs other assigned instructional duties. A GRA is compensated to conduct supervised research, generally relating to the student's thesis or dissertation research.

The Dean of Graduate Education grants the award, acting upon the recommendation of the department head, program coordinator, or major professor after evaluation of the student's academic record, overall qualifications, and programmatic progress. Graduate assistants are required to attend GTA/GRA training each semester prior to any release of funds.

The following rules apply to all graduate assistants:

1. An assistant receiving a full time stipend (50 percent academic study, 50 percent research or teaching) must be registered for a minimum of 9 credit hours during the fall or spring academic semester in which the assistantship is in effect. An assistant receiving a minimum stipend during the summer academic semester, set by the Board of Regents (currently \$2,779), must be registered for a minimum of two 2 credit hours during that semester. Reduced tuition is available for students meeting this criteria.

2. An assistant receiving a three-quarter time stipend (62.5 percent academic study, 37.5 percent research or teaching) must be registered for a minimum of 7 credit hours during the academic semester which the assistantship is in effect, or 1 credit during the summer. (does not qualify for reduced tuition unless registered for 9 credits in the fall and spring semesters and 2 credit hours in the summer semester).
3. An assistant receiving a half-time stipend (75 percent academic study, 25 percent research or teaching) must be registered for a minimum of 5 credit hours during the academic semester which the assistantship is in effect, or 1 credit during the summer. (does not qualify for reduced tuition unless registered for 9 credits in the fall and spring semesters and 2 credit hours in the summer semester).
4. At least the minimum compensation established annually by the Board of Regents (currently \$2,779) must be awarded in each qualifying semester to receive reduced tuition.

Graduate assistants who are eligible for reduced tuition at one institution are eligible at other South Dakota Regent affiliated institutions.

Graduate students who are U.S. citizens or eligible non-citizens may be eligible for other forms of financial aid such as Federal Stafford Student Loans, Federal Perkins Student Loans, or Federal Work-Study. Application and requests for additional information on these programs should be made to the Office of the Registrar and Academic Services — Financial Aid.

Graduate assistants under state contract are subject to institutional policies set forth in the Faculty/Staff Handbook.

A conventional, full-time GRA/GTA for an M.S. degree pays \$11,116 per academic year and \$2,779 per month in the summer for a total of approximately \$22,232 per calendar year. A conventional full-time GRA/GTA for a Ph.D. degree pays \$12,450 per academic year and \$3,112 per month in the summer for a total of approximately \$24,900 per calendar year. If funds are available, extra support can also be provided for work effort during the winter holiday

break. Part-time service is compensated in accordance with expected hourly effort and the above hourly rates.

A student with a research assistantship (GRA) should recognize that the prescribed hours of research work are minimum expectations mandated by employment practices and may not represent the effort that will be actually necessary to produce a satisfactory thesis or dissertation within a reasonable period of time.

A graduate student must be considered a full-time student during the academic period in order to receive an assistantship. Up to eight semester hours of research credit may be awarded for one summer of work. Students must register before assistantships and fellowships are processed for the semester for which they are authorized in order to prevent payment delays.

Graduate Fellowships

A number of fellowships from industrial and governmental agency sources are currently available. Eligibility requirements and restrictions are parallel to those for research assistantships. A fellowship award may not always include reduced tuition as a benefit. Pre-registration by continuing students is required to prevent payment delays.

Graduate Student Registration

A graduate student will report to the advisor specified in the admission letter and thereafter will follow the registration procedure for all South Dakota School of Mines and Technology students. The advisor is responsible for counseling the graduate student in the formulation of a program of study until the student has selected a major professor.

Full-Time/Half-Time Defined

A full-time graduate student is defined as a student registered for nine or more credit hours per semester at any of the six universities in the South Dakota Regental system during the academic year, or 2 or more credit hours during the summer session.

A half-time graduate student is defined as a

student registered for 4.75 to 8 credit hours per semester during the academic year, or 1 credit hour during the summer session.

Audited or remedial English credits do not apply to the above definitions.

During the regular academic year, registration in evening courses counts toward the determination of full-time status if the student is registered also in regular daytime courses. During the summer session, full-time student status may be earned completely with evening courses.

Graduate students are assessed the same campus fees as undergraduates (see “Tuition and Fees”). State law does not permit reduction or remission of fees under any circumstances.

Continuing Registration

Note: Graduate-level special students (as defined in another section) are exempt from the following continuing registration rule. The only other exception to the continuing registration policy is when a student has been granted a formal leave of absence (see “Leave of Absence” section below).

Degree-seeking graduate students must be registered on a continuing basis during each fall and spring semester of the regular academic year (see section on “Minimum Registration”). This applies regardless of whether the graduate student is in residence, is off-campus, or is pursuing a degree on a part-time basis. Failure to maintain continuing registration will result in deactivation of the graduate student’s program. Therefore, graduate students who fail to comply and subsequently wish to return to their same program of study will be required to obtain written permission from the Dean of Graduate Education and may be charged a minimum reinstatement fee of \$50.

All graduate students must register within the designated period each semester. Beyond that point, the reinstatement fee may be imposed along with any other late registration fees.

Minimum Registration

The minimum registration for graduate students, including graduate-level special students, is 2 credits. Minimum registration is required during any semester or summer when using departmental or institutional resources, including scheduling and taking exams. The number of credit hours taken in excess of the minimum should accurately reflect the extent of the graduate student’s course work and research activities.

Graduate students must also meet this minimum registration requirement during the specific semester or summer in which they complete all requirements for their degree and become eligible for graduation. There will be no grace period; hence, students who fail to complete all degree requirements prior to the official closure date for a given semester or summer will be required to register for a minimum of 2 credits during a subsequent semester or summer in order to graduate.

Academic Loads

Thirteen credit hours per semester are considered to be the normal maximum graduate load. Higher loads must be approved by the Dean of Graduate Education and may be permitted if the student is taking a combination of courses at the graduate and undergraduate level. A reduced load may be recommended at the discretion of the student’s advisor and major professor for students working as GTAs or GRAs.

Please refer to a previous section for additional information on assistantships and financial aid.

Leave of Absence

A student who is unable to continue his/her program of graduate study due to unanticipated major circumstances may request a leave of absence from his/her program of study by completing and submitting a “Request for Leave of Absence” form, available in the Graduate Office. The form must be completed and signed by the student, the student’s advisor, department

head or program coordinator and then submitted to the Graduate Office for each semester of absence. The Dean of Graduate Education will evaluate the request and either approve or deny it. If the request is approved, the student will not be subject to continuing registration, and the leave of absence will not count toward the time limits to complete his/her program of study. A leave of absence is determined on a semester-by-semester basis and is usually limited to a maximum of one calendar year.

Change of Major

A student admitted to the graduate school in a specified department/program must complete at least one semester in the original department/program before being allowed to change to another department/program. A student who wishes to change majors should obtain an "Intent to Transfer" form and return it to the Graduate Education Office with the appropriate signatures from his/her current department/program. Upon favorable recommendation from the department/program, the Dean of Graduate Education will issue a letter of transfer and notify the appropriate offices and the student of the change.

Dual Enrollment in Ph.D./M.S. Programs

Concurrent enrollment in a Ph.D. program and an M.S. program in a different department is normally not allowed. Students who are pursuing a Ph.D. may not take more than 15 graduate credits in a second department. If the student leaves the Ph.D. program and is admitted to the second department, no more than fifteen (15) credits may be counted toward an M.S. degree.

Exception Policy

A student who seeks an exception to the above policy must follow the procedure set forth below. Students must be aware that exceptions to this policy will only be granted under extraordinary circumstances.

1. The Ph.D. student must obtain prior written approval for this dual-degree plan from his/her major professor and the head/coordinator of the

relevant Ph.D. program.

2. If approval is granted in Step 1, then the Ph.D. student must obtain written approval for the M.S. degree plan from the head of the corresponding M.S. program.

3. If approval is granted for Step 2, then the student will need to establish a second graduate committee and file a separate program of study for the M.S. degree with the Graduate Office.

4. The Dean of Graduate Education will have authority to either approve or disapprove this second program of study. If the M.S. program of study is approved by the Dean of Graduate Education, then the major professor of the student's Ph.D program will be appointed as the representative of the graduate school of the student's M.S. graduate committee.

5. The first two semesters of the dual program will be considered probationary. The second program of study can be terminated based on recommendations of the Ph.D. major professor and/or M.S. major professor to the Dean of Graduate Education.

Dual Majors

South Dakota School of Mines and Technology does not permit, in general, credit hours that have been used to satisfy requirements for one master of science degree to be applied toward another master's degree from this institution. Under exceptional circumstances however, a student may petition the Council on Graduate Education through his/her advisory committee for a variance from this policy.

Special Students

An individual who holds a Baccalaureate degree and wishes to pursue further study without a commitment to advanced degree candidacy may apply to the Graduate Office for admission as a special student at the graduate level. The applicant must provide evidence of the baccalaureate degree. Upon admission as a special student, he/she will be subject to Graduate Office policies including the probation policy. A maximum of 12 credit hours may be accumulated, after which the student must either apply for

admission as a degree-seeking student or must petition for a variance from this policy. Graduate students classified as special students are not eligible for assistantships.

Graduate Grading System:

The graduate grades will be assigned to the graduate academic level and to all courses and sections with course numbers of 500 or greater. Plus and minus grades are not used.

The following grades are recommended to be associated with the Graduate Grade System:

1. Standard Grades:

A Exceptional

4.00 grade points per semester hour.

B Good

3.00 grade points per semester hour.

C Average

2.00 grade points per semester hour.

D Unsatisfactory

1.00 grade points per semester hour.

F Failure

0.00 grade points per semester hour.

S Satisfactory

Does not calculate into any GPA.

U Unsatisfactory

Does not calculate into any GPA.

W Withdrawal

Does not calculate into any GPA, no credit granted.

AU Audit

Does not calculate into any GPA. An audit (AU) grade may be granted only when the student has elected the AU option on or prior to the census date of the term.

I Incomplete

Does not calculate into any GPA. An incomplete

(I) grade may be granted only when all of the following conditions apply:

- a. A student has encountered extenuating circumstances that do not permit him/her to complete the course.
- b. The student must be earning a passing grade at the time the Incomplete is necessitated. Anticipated course failure is not a justification for an incomplete.
- c. The student does not have to repeat the course to meet the requirements.
- d. The instructor must agree to grant an incomplete grade.
- e. The instructor and student must agree on a plan to complete the course work.
- f. The course work must be completed within one calendar year; extensions may be granted by the Dean of Graduate Education.
- g. If the student completes the course within the specified time, the grades that may be assigned are A, B, C, D, F, S, or U.
- h. If the student does not complete the course within the specified time the incomplete grade remains on the transcript.

IP In Progress

Does not calculate into any GPA. An in progress (IP) grade may be granted only when all of the following conditions apply:

- a. The requirements for the course (for every student enrolled in the course) extend beyond the current term.
- b. The extension beyond the current term must be defined before the class begins.
- c. The instructor must request permission to award IP grades for a course from their department head/coordinator and from the Dean of Graduate Education. Then approval must be obtained from the Vice President for Academic Affairs.
- d. A definite date for completion of the course must be established in the course syllabus.

NP Normal Progress

Does not calculate into any GPA. A normal progress (NP) grade calculates into attempted credits but does not calculate into completed credits or grade point averages.

A normal progress (NP) grade may be granted by

an instructor when the instructor determines that a graduate student is making normal progress in a graduate Thesis/Dissertation course. If a graduate student does not enroll for a period of one calendar year, the NP grade may change to I (Incomplete) upon approval by the Dean of Graduate Education.

A Satisfactory/Unsatisfactory (S/U) grade may be granted only when the entire course requires the S/U grade or the student has elected the S/U option on or prior to the census date of the term.

NRGrade not reported by the Instructor

Does not calculate into any GPA.

EXCredit by Exam

Does not calculate into any GPA. An examination for credit (EX) grade may be granted only for non course credit validation obtained through a validation process. This grade is not used for any Regental university course.

CRCredit

Does not calculate into any GPA. A credit (CR) grade may be granted only for non-course credit that is not related to an examination or to equating transfer grades to the BOR grading system. This grade is not used for any Regental university course.

TRTranscripted

Does not calculate into any GPA and no credit is granted.

LRLab grade linked to Recitation Grade

0 credit course.

Advanced-Degree Grade Requirements

To qualify for any advanced degree, the faculty has stipulated that the following requirements must be satisfied:

1. The student must earn a minimum 3.00 average of grades in all 300- through 800-numbered courses taken (a) in all departments AND (b) in his/her major department after admission to the graduate program, or taken for graduate credit at the School of Mines as an

undergraduate or special student. Note that thesis and dissertation research credit hours and grades will not be counted in the determination of these grade-point averages.

2. The student must earn a “C” grade or better in any graduate course (500 through 800 level), which is to be credited toward advanced degree requirements.

3. The student must earn a “B” grade or better in any 300 or 400 level course, which is to be credited toward advanced degree requirements.

4. The student’s thesis or dissertation research must be of a quality to earn a final grade of “S.”

5. Students who fail any course must repeat the course with a passing grade as defined above.

The student may petition, through their advisor or major professor, and the Dean of Graduate Education for a potential waiver of this rule.

6. The student cannot apply any credit hours or grades for 100- and 200-level courses (which are usually taken to overcome academic deficiencies) toward advanced degree requirements. If, in the opinion of the student’s advisor, major professor and advisory committee, progress in these courses is unsatisfactory, additional work may be required to demonstrate proficiency.

7. Of credits counted for an advanced degree, not more than 50 percent of the credit hours in any graduate program can be at the 500 level or below.

If a course is repeated for a passing or improved grade, only the grade for the last attempt will be included in the computation of the cumulative grade-point average shown on the graduate student’s transcript.

A limitation of a total of nine credit hours exists for advanced-degree credit for courses identified as “Special Topics in,” “Advanced Topics in,” or “Seminar in.” Refer to the specific course description for any other restrictions.

All graduate research credit hours are graded according to regular grading standards. However, for thesis research (courses numbered 700) and dissertation research (courses numbered 800) the final grades for a completed program will be issued as either “U” for Unsatisfactory or “S” for Satisfactory. These S and U grades will not be used in the computation of grade-grade point

averages.

Research credit may be applied toward the fulfillment of credit-hour requirements. The number of credit hours so applied is identified in the relevant sections under Master of Science and Doctor of Philosophy degree programs.

Undergraduates Taking Graduate Courses/Graduates Taking Undergraduate Courses

1. Graduate-level credits (500 level or above) taken as an undergraduate student are automatically placed on a graduate transcript and may not be used toward an undergraduate degree unless appropriate approvals and credit transfers are obtained through Academic and Enrollment Services. Graduate-level credits taken as an undergraduate and used to fulfill requirements for the undergraduate degree may not be used toward a graduate degree.

2. Up to 12 semester hours of graduate-level credits taken as an undergraduate and not used to fulfill requirements for the undergraduate degree may be used toward a graduate degree only after the courses in question are included on the student's program of study with all necessary approvals listed thereon. Upon written justification by the head/coordinator of the graduate student's major department / program, the Dean of Graduate Education may approve a minor variance from this rule.

3. Undergraduate-level credits (300 or 400 level) taken as a graduate student are automatically placed on an undergraduate transcript and may not be used toward a graduate degree except under the following circumstances:

- a. The courses in question are outside the student's major department but are included on the student's program of study with all necessary approvals listed thereon. (See also individual department restrictions on 300-400 level courses.)
- b. The courses in question are within the student's major department, appear on the waiver list pre-approved by the Council on Graduate Education, and are included on the student's program of study with all necessary approvals listed thereon. (See also individual department restrictions on 300-400 level courses.)

c. The courses in question are at the 400 level, are within the student's major department, do not appear on the waiver list pre-approved by the Council on Graduate Education, but are included on the student's program of study along with a petition of support from the student's major professor, with all necessary approvals listed thereon.

d. The student must have earned a "B" grade or better in any 300- or 400-level course which is to be credited toward advanced degree requirements.

e. The student cannot apply any credit hours or grades for 100- and 200-level courses (which are usually taken to overcome academic deficiencies) toward advanced degree requirements. If, in the opinion of the student's advisor, major professor and advisory committee, progress in these courses is unsatisfactory, additional work may be required to demonstrate proficiency.

The number of undergraduate credits not used to fulfill requirements for the undergraduate degree that may be applied toward a master's degree is limited to nine hours.

Forms mentioned above are available at the Graduate Office on the graduate education website.

Work Taken at Another Institution

The minimum percentage of credit hours in the graduate degree program that must be completed from the institution granting the degree is 60 percent. Credit for up to 12 semester hours of graduate-caliber course work taken at another institution may be transferred toward the requirements for the Master's degree at the South Dakota School of Mines and Technology.

Domestic graduate transfer courses and transfer grades are recorded and evaluated by the School of Mines, calculated into grade point averages according to the South Dakota Regental grade scheme, and recorded on the student's academic transcript ONLY if these transfer courses are equivalent to a specific graduate course at South Dakota School of Mines and Technology. International transfer courses will appear on the transcript along with the number of credits earned, but no grade will appear or be

calculated into grade point average.

Such credit from institutions external to the South Dakota Regental system must be reviewed and approved by the student's committee and by the Dean of Graduate Education. The Dean of Graduate Education shall notify the Registrar and Director of Academic Services in writing of the credits to be accepted and placed on the student's transcript. An official transcript received directly from the issuing institution to support the request is required. The transferred course number, title, and semester hours will be entered on the student's transcript. Credits transferred from an institution outside the South Dakota Regental system may be used to reduce graduation requirements, but will not affect the cumulative GPA earned at the South Dakota School of Mines and Technology.

Course Retake Policy

A student will be allowed a total of two registrations for any particular graduate course (course numbers of 500 and above) for which credit is to be counted toward graduation. The student must petition the Dean of Graduate Education and obtain the Dean's approval to be permitted to take a graduate course more than two (2) times. Only the LAST attempt of the course will count in the grade point average calculations.

A student will be allowed multiple registrations for certain graduate courses for which credit toward graduation may be received more than once (e.g., Independent Study, Thesis, Research, etc.). Grades for all such courses will be used for grade point average calculations. Please note that individual departments/programs may limit the number of credits allowed toward graduation in these types of courses.

Pass-Fail Option for Graduate Students

The following policy pertains to the pass/fail option at the graduate level:

1. 100- and 200-level courses, either within or without the department, which cannot be applied for credit toward a graduate degree may (with the consent of the student's major professor and advisory committee) be taken

on a pass-fail basis under the same rules that apply to undergraduate students.

2. 300- through 800-level courses outside of the student's department/program may (with the consent of the student's major professor and advisory committee) be taken on a pass-fail basis except that a "C" grade shall be considered the lowest passing grade. The maximum number of hours of pass-fail work for which a master's degree candidate may receive credit will be six for the thesis option and nine for the non-thesis option. No 300- through 800-level courses offered by the student's major department/program may be taken for credit under the pass-fail option. Beyond the master's level, the pass-fail option may be exercised at the discretion of the candidate's graduate advisory committee but must still be approved by the Dean of Graduate Education.

Probation and Reinstatement Policy

An applicant who has a large number of deficiencies, or whose undergraduate record is relatively weak, may be admitted to the graduate program on probationary status. For a student admitted on probation, a deficiency in grade requirements during the first semester of enrollment may be considered sufficient grounds for terminating the student's enrollment in the graduate program. Such a termination decision will be made by the Dean of Graduate Education after consulting with the student's major professor and the department head or relevant program coordinator.

A current graduate student who does not meet the following requirements (items 1-7 below) during any semester will be placed on probation and will be so informed by the Dean of Graduate Education. A failure to remove the deficiencies during the following semester may be considered sufficient grounds for terminating the student's enrollment in the graduate program. For further information regarding restrictions on financial assistance to graduate students on probation, refer to the section entitled "Assistantships and

Fellowships for Graduate Students.” Probation imposed because of grade deficiencies in specific courses (items 2-3 below) will continue each semester until the course(s) has been retaken and an acceptable grade(s) has been received. Probation imposed because of overall GPA deficiencies (item 1 below) will continue each semester until the GPA reaches the acceptable level.

A student will be placed on probation for a “U” grade received for research credit(s). Since a “U” is a final grade, probation will be maintained until at least one subsequent “S” credit is awarded. A student may graduate with “U” grades, but must also accumulate “S” grades for the required minimum number of research credits in a given advanced degree program. A student who has transferred from a thesis to a non-thesis program and who has received “U” grades as the last research grades in the thesis program will be admitted to the new program on a probationary status. Such probation may be removed by satisfactory progress (according to the usual performance criteria) during the first semester in the new program.

A student may be placed on probation for failing to meet either general or specific program requirements, e.g., failure to meet the required deadline for filing the required program of study with the graduate office and/or failure to meet the deadlines for taking and passing applicable qualifying, comprehensive, and final exams, etc. Probation for such deficiencies will be removed after the requirement(s) has been satisfied. A student’s probationary status will be reviewed at the close of each semester for appropriate action-removal from probation, continuation of probation, or termination. A student may petition the Dean of Graduate Education for reconsideration of a termination decision. (Refer to section on “Appeal Procedure.”)

1. A student must maintain a “B” (3.00) or better grade point average in all 300- through 800-level courses taken for graduate credit at the School of Mines. Thesis and dissertation

research credit hours and grades will not be counted in the determination of this GPA.

2. A student must earn no less than a “C” (2.00) grade in any graduate course (500 through 800 level) taken for graduate credit, and which is to be credited toward advanced degree requirements.
3. A student must earn no less than a “B” (3.00) in any 300- or 400-level course taken for graduate credit, and which is to be credited toward advanced degree requirements.
4. A student’s thesis or dissertation research must be of a quality to warrant the issuance of a semester grade of “S” or an interim grade of “NP.”
5. A student must earn no less than a “B” (3.00) in any 100- and 200-level courses taken for grade credit even though they cannot be applied toward a graduate degree.
6. A student must pass all courses taken on the pass-fail basis. (Refer to section on “Pass-Fail Option for Graduate Students.”)
7. A student must remove all other program deficiencies, such as meeting state deadlines for applicable qualifying, comprehensive, and final examinations; selection of a graduate advisory committee; and filing of a satisfactory program of study in the graduate office.

Appeal Procedure

Procedures for appealing or petitioning for a variance from certain policies are set forth in the relevant sections of this document when such variances are permitted in unusual or exceptional circumstances. Appeals or petitions involving such matters as grade changes from “F” or “I” to “W” and refund of late registration fees should be lodged with the Academic Appeals Committee through the Vice President for Academic Affairs, after review by the Dean of Graduate Education.

Appeals concerning probation, suspension, or potential variances in academic graduate policy should first be lodged with the student’s major department/program. Before rendering a decision on the appeal, the department head or program coordinator will

seek a recommendation from the student's graduate advisory committee. If the student is not satisfied with the decision on the appeal, the student may petition the Council on Graduate Education for reconsideration. Such petition must be filed with the Dean of Graduate Education.

In those cases where this document does not provide appropriate information concerning the resolution of a conflict or problem encountered by the graduate student, or if the student is dissatisfied with a prior appeal decision, he/she should seek the advice of the Dean of Graduate Education or the Dean of Students to determine what recourse is available to assist in seeking a solution to such problems.

Supervision of Advanced degree programs

The supervision of the general study program of each student, including compliance with all the various Board of Regents, institutional, and Graduate Division policies, is primarily the responsibility of the advisor. The graduate advisory committee assists in this role. The Advisory Committee consists of:

- a major professor,
- a graduate division representative, (must not be from the student's department/program),
- 1 additional member for master's students,
- 3 additional members for doctoral students.

The major professor is primarily responsible for supervision of the graduate student's research and thesis/dissertation preparation, as well as ensuring that academic standards and requirements are met and satisfied. The advisor and the major professor may or may not be the same person, depending on restrictions or requirements within the student's program and/or department.

The major professor serves as chairperson of the Graduate Advisory Committee, assists the student in selection of other members of the committee, and is responsible for obtaining approval from each prospective member for that person's service on the committee. The graduate division representative must be chosen from

outside the major department/program.

A change in advisor may be accomplished at the student's request by submitting a "Request to Change Advisor" form, with all appropriate approval signatures, to the Dean of Graduate Education.

If staff changes or other valid reasons dictate a change in major professor, such a transition can be made at the request of the student and with the consent of the student's committee as evidenced by filing a revised "Program of Study" with the graduate office. A written appeal by a student for a change in major professor may be filed with the Council on Graduate Education through the Dean of Graduate Education in contested cases. The decision by the Council on Graduate Education is final. When such changes occur, a new "Program of Study" must be submitted to the graduate office.

If a master's candidate has expressed a desire to continue for a doctorate then, at some time during the semester in which he/she expects to attain 36 credit hours beyond the Baccalaureate degree, the student's department/program shall determine by qualifying examination or by review of his/her record to date whether the student shall be permitted to continue toward the doctoral degree.

Concurrently, the department head or program coordinator, after consultation with the student and the existing advisory committee, shall expand the student's committee to a total of five members by the addition of one or two members of the faculty who may eventually be called upon to assist with the student's doctoral program. If there is an anticipated change in major professor for the doctoral program, one of the new members shall be the prospective major professor. If only one additional member from outside the major department/program is selected for the doctoral advisory committee, that person shall represent the field identified as the candidate's minor.

Program of Study

The student's advisory committee will assist the student in formulating a "Program of Study" leading to the advanced degree. A copy of the "Program of Study" and advisory committee assignments must be filed with the student, the student's department/program, and the graduate office no later than the mid-term of the second semester of the student's registration as a degree-seeking student. The student must seek the advisory committee's approval for any subsequent modification of the original "Program of Study". A copy of any amended program must be filed in a timely manner by the student and with the same offices as the original schedule. Each "Program of Study", or amendment thereof, must have the signature approval of the student and all members of the student's committee before it will be reviewed for final approval by the Dean of Graduate Education.

Language Requirements

There is no standard language requirement within the Graduate Division; however, departments/programs may establish their own language requirement.

Certification for the Degree

Before a diploma can be released, the Dean of Graduate Education must certify that the candidate has fulfilled all degree requirements. For certification of the degree for a given semester, ALL requirements must be complete on or before the day grades are due for that semester. Students completing during the summer semester must complete ALL requirements by the end of the summer session. Note that ALL KEYS MUST BE RETURNED to the Physical Plant before the degree is granted.

Candidates are cautioned not to make travel plans or other arrangements that will be difficult or costly to change until they are certain that all degree requirements can and will be satisfied. It is the responsibility of the candidate to know and comply with these degree requirements

MASTER OF SCIENCE PROGRAMS

The master of science programs offer three methods in which to complete the requirements resulting in the conferment of the degree. They are the thesis option, the non-thesis option, and course work-only degrees, including professional degrees.

Thesis Option Requirements

The M.S. degree minimum requirements for the thesis option are:

1. A program of at least thirty (30) credit hours of course work and research.
2. At least fifteen (15) credit hours of graduate course work (500-level courses and above).
3. At least six (6) credit hours of thesis research. (No more than nine (9) credit hours of thesis research will count toward degree requirements.) The maximum number of thesis credit hours is determined by the department and the thesis committee. At least six (6) credit hours and no more than nine (9) credit hours of thesis research will be permitted to count toward the degree credit requirements for the thesis option. However, the student may register for additional research credits for continuing registration purposes.
4. Undergraduate credits that may be used for the degree is limited to nine (9) hours.
5. A satisfactory thesis based upon individual research. (see below)
6. Meeting or exceeding academic standards prescribed elsewhere in this bulletin.
7. Passing an examination on general knowledge and successfully defending the thesis.

Thesis Requirements

The thesis should represent an effort of such quality and construction that it can be displayed in the school library with similar scholarly works, as well as providing material for publication(s) in an appropriate professional journal(s).

The thesis is written under the direction of the major professor, but the student should feel free to seek guidance from all members of his/her

advisory committee. Before starting to write the thesis, the student is urged to consult “Instructions for the Preparation of Theses and Dissertations” on the graduate education website (<http://resources.sdsmt.edu/forms/grad-ed/thesis-and-dissertation-instructions.pdf>) and to consult style manuals in the Devereaux Library. In general, the thesis may follow the style of captions, footnotes, and bibliographical references used by the leading technical journal in the student’s field. Students are urged to review carefully copyright ownership provisions in the “Instructions” document.

A final draft of the thesis should be submitted by the student to each member of his/her advisory committee a minimum of two (2) full weeks before the time and date of the student’s scheduled examination. Earlier submission deadlines may be required by the advisory committee.

The final draft of the thesis, after all revisions recommended by the committee have been made, must be signed by the author and approved and signed by the major professor, the head/coordinator of the student’s major department/program, and the Dean of Graduate Education before final reproduction. The dean requires that the final draft of the thesis be submitted to the graduate office 21 calendar days before graduation to allow adequate time for review, corrections and revisions, and potential approval.

The institution requires four (4) copies of the thesis in final form: the original (unbound) manuscript and one (1) bound copy for the Devereaux Library, and two (2) bound copies for the student’s department/program, one (1) of which will be forwarded to the major professor. Two (2) electronic versions of the thesis will also be required in digital format, one (1) for the department and one (1) for the graduate office. Contact the graduate office for instructions and requirements for this digital version. In case of a proprietary thesis, the original hard copy and digital version will be retained without reproduction in secured graduate office files throughout the specified proprietary period.

Non-thesis Option Requirements

1. A program of at least 32 credit hours of course work (refer to specific program requirements for exact number of minimum course work credit hours).
2. At least 20 credit hours of graduate course work (500 level and above).
3. Meeting or exceeding prescribed academic standards.
4. Passing an examination on general knowledge in the field.

A candidate for the master’s degree is expected to make up undergraduate deficiencies as determined by the department/program. Credit for such makeup work is generally not allowed toward the degree. However, the policy established by the faculty does allow for a certain number of upper-level undergraduate credits to be used for the fulfillment of master’s degree requirements according to the following limitations and conditions:

- ❖ The number of undergraduate credits that may be used for the degree is limited to nine (9) hours.
- ❖ For the non-thesis option, the number of non-thesis research credits that may be used for the degree is limited to six (6) hours.
- ❖ Out-of-program courses at the 300 level may be accepted toward the fulfillment of degree requirements in exceptional circumstances but only with the approval of the Dean of Graduate Education. This written justification should be submitted by the head/coordinator of the student’s major department/program to the Graduate Dean.
- ❖ Major department (or program) courses at the 300 level are not acceptable for graduate degree credit under any circumstances.
- ❖ Out-of-program courses at the 400 level may be used to fulfill degree requirements at the discretion of the head/coordinator of the student’s major department/program in accordance with the credit hour limitations prescribed above. Also, see individual departmental restrictions.

- ❖ Major program courses at the 400 level may be accepted toward the fulfillment of degree requirements in exceptional circumstances. Such courses will only be considered after a written justification is submitted by the head/coordinator of the student's major department/program to the Dean of Graduate Education for his or her review and potential approval.

¹ In the above sections (1-6) the term program refers to a division in a department such as the environmental engineering program within the department of civil and environmental engineering, or a non-departmental unit such as engineering management, materials engineering and science, or atmospheric and environmental sciences.

Final Examination

All Master of Science degree candidates will be given a final examination covering course material. The examination may be written, oral, or both at the discretion of the major department or program.

Students pursuing the thesis option must also defend their thesis in an oral examination.

Final examinations covering both course work and thesis research may be combined. Oral examinations are open to all interested faculty members. Departmental or program policy shall determine whether non-faculty persons may attend the examination.

The student shall obtain and complete the relevant graduate office form to schedule the final examination. The major professor shall seek the approval of all committee members and shall file the form with the graduate office no less than five working days before the exam. The graduate office will announce this exam information as appropriate.

The thesis defense oral examination will normally be held during the last six weeks of the student's last term, but it may be given at any time after the thesis has received committee approval. No final examination may be scheduled during the period of course work final examinations.

The student's committee constitutes the examining board for a final oral examination. The

major professor will head the session. The major professor is responsible for ensuring that a majority of the committee, as well as the graduate office representative, is present. The examination will not be held if these conditions cannot be met. A negative vote by any two or more members of the student's committee or a negative vote by the graduate office representative will signify failure of the examination. All committee members must be given the opportunity for input to and evaluation of a written non-thesis final examination. Refer to the graduate office policies for information on committees and exam procedures for proprietary thesis programs.

Results of all written or oral examinations will be attested to by all committee members on a form furnished to the graduate office representative by the graduate office. The original form with signatures and dates will be filed with the graduate office and a copy with the department/program. A **copy** of the form will be filed with both offices if the student passes with reservation or pending correction. The originals will be filed with both offices, with the appropriate affirming signatures, when final corrections have been made and accepted.

If the candidate fails to satisfy the examiners on either course work or thesis, written or oral examinations, the committee may schedule a re-examination over general background, thesis, or both. The re-examination will be scheduled at the discretion of the candidate's advisory committee, normally eight to 12 weeks after the date of the first examination.

The student may petition his/her committee for re-examination prior to the eight week limit.

Time Limitation

A Master of Science degree program must be completed within five (5) calendar years dating from the student's formal entrance into a degree-seeking program. Courses taken by the student at any institution that are requested to be part of the degree program and that were taken more than five years prior to the date of anticipated graduation must be reviewed by the student's major department/program and the Dean of Graduate Education for possible acceptance.

Following this review, the student's major department/program and the Dean of Graduate Education will determine whether a reduction in credits applicable toward the degree, a re-examination, or both is required for the student to complete his or her degree program.

REQUEST FOR DEFERMENT

A "Request for Deferment" may be made to a student's advisor, Department Head, and to the Dean of Graduate Education to suspend a program on a semester by semester basis. Deferral time granted shall not count in the time limitation. Advisor and Department Head approved requests will be filed with the Graduate Office and forwarded to the Dean of Graduate Education for consideration.



DOCTOR OF PHILOSOPHY PROGRAMS

Nature and Purpose of the Doctoral Programs

The doctoral program is designed to prepare a student for a lifetime of intellectual inquiry that manifests itself in creative scholarship and research, often leading to professional careers in social, governmental, business, industrial organizations, and academia. The program emphasizes freedom of inquiry and expression and development of the student's capacity to make significant contributions to knowledge. An essential element is the development of the ability to understand and evaluate critically the literature of the field and to apply appropriate principles and procedures to the recognition, evaluation, interpretation, and understanding of issues and problems at the frontiers of knowledge. These goals are most effectively accomplished in close association with those experienced in research and teaching.

A central purpose of doctoral programs is the extension of knowledge, but this cannot be accomplished on all fronts simultaneously. Students must choose an area in which to specialize, a faculty member with whom to work, and a research topic of mutual interest to the student and the faculty advisor. Individualized programs of study are then developed, and committee members are selected cooperatively as course work and research are undertaken. When all course work has been completed, the research finished, the dissertation written, and all examinations passed, the student will have acquired the knowledge and skills expected of a scholar and will have extended knowledge and research capability in the field.

Ph.D. Degree Requirements

The requirements for the Doctor of Philosophy degree are:

1. Satisfactory completion of a Comprehensive Examination.
2. A minimum total of 80 semester credits beyond the bachelor's degree, 50 of which must be course work credit hours. (A maximum of 24

semester credits are allowed from appropriate M.S. course work to apply to the Ph.D. credit requirement. See individual program requirements for further details.)

3. A minimum of 20 semester credit hours of appropriate research credits. A maximum of 6 semester credits of acceptable M.S. research credits can be applied to the Ph.D. research credits upon approval of a corresponding petition by the student's department/program and the Dean of Graduate Education.
4. Satisfaction of academic standards as prescribed elsewhere in this catalog.
5. At least two consecutive semesters of residence as a full-time student.
6. Satisfaction of any departmental language or other specific requirements.
7. A dissertation written in grammatical English that represents results from at least the equivalent of one academic year of full-time research.

Between three and four academic years of full-time graduate study beyond the baccalaureate degree normally are required to earn a doctorate.

A candidate who has entered a Ph.D. program directly from a Baccalaureate program may be allowed to use up to 12 credits of upper-division undergraduate 400-level courses toward the 50 credit-hour course requirement for the degree with the same restrictions and procedures as those specified for master's degrees. Ph.D. candidates already holding an M.S. degree may use up to 6 credits of 400-level course work toward the 26 credit course work requirement. The head of the student's major department must petition the Council on Graduate Education through the Dean of Graduate Education for use of 300-level credits for Ph.D. programs.

The Graduate Advisory Committee approves the total number of research credits that the candidate may carry, consistent with departmental, continuing registration, and other requirements. The student's advisory committee can recommend to the Dean of Graduate Education a program requiring more credits than the minimum indicated above if it believes that this is in the best interests of the student.

Furthermore, the committee may approve a plan for the student to undertake work at some

other institution of recognized standing, but may not reduce the two-semester residence requirement.

Residence Requirements

At least two consecutive semesters of residence as a full-time student are required at South Dakota School of Mines and Technology. The comprehensive examination may not be taken before the last half of the second semester of residence. The final defense of the dissertation will not be permitted within the first five months following the successful completion of the comprehensive examination.

Supporting Fields

In order to foster the principles upon which a Doctor of Philosophy degree is based, as set forth in the introductory paragraphs to this section on doctoral programs, a Ph.D. student and his/her advisory committee are strongly encouraged to formulate a program of study that comprises, minimally, one-quarter of the required course work in minor or supporting fields. These courses may be completed in one or more departments in areas of study consistent with the student's major program. Typically, therefore, 12 of the **50** credit hours of required course work would be taken in non-major courses by a student entering a doctoral program with a baccalaureate degree. A Ph.D. candidate who has already earned a master's degree would be expected to satisfactorily complete 6 of the 26 credit hours of required course work in courses outside of the major field.

Because individual program requirements may exceed these minimum institutional guidelines, the student is urged to review carefully the curriculum for his or her field of study.

The Qualifying Examination

Doctoral students admitted into all Ph.D. disciplines must pass a qualifying examination, normally to be taken no later than the second semester of residence. A master's student who proposes to continue into a doctoral program should so advise his/her major professor.

Thereupon, the student will be given an examination by the advisory committee to determine whether to permit the student to proceed to the doctoral level of graduate study. This qualifying examination may be scheduled in the semester during which it is expected that 36 hours of credit beyond the B.S. degree, (which are deemed acceptable toward the student's doctoral program) will be accumulated. The examination for the master's degree may be used as the forum for the qualifying examination, at the discretion of the department/program.

The Comprehensive Examination

When the student's program of course work has been substantially completed, he/she will undertake the comprehensive examination for admission to candidacy. This examination will consist of written and oral examinations covering his/her field of study and related subjects. It will be prepared by the student's advisory committee, with potential suggestions from any faculty member from whom the student has taken a graduate course.

The student's advisory committee schedules and arranges the written and oral examinations. Review of the examinations will be accomplished as soon as possible by all members of the committee, and the results will be reported to the Dean of Graduate Education on the appropriate form supplied by the graduate office.

Satisfactory completion of the comprehensive examination requires that no more than one member of the advisory committee votes against passing. If the student passes with conditions, such as failure to pass a part of the examination, the committee shall inform him/her promptly as to how and when the conditions may be removed. If, in the opinion of two or more members of the advisory committee, the student has failed the comprehensive examination, another such examination may not be attempted during the same semester. After failure to pass a second time, work toward the doctorate can be continued only with the consent of the advisory committee, the committee for graduate education, and the Dean of Graduate Education.

The comprehensive examination should

normally be passed at least five months before the dissertation is defended.

Admission to Candidacy

Four months before the dissertation defense, the doctoral student should apply to his/her major professor for admission to candidacy on a form available from the graduate office. If the advisory committee and department head/program coordinator approve the application by certifying that the candidate has passed the comprehensive examination, the signed form must be returned to the Dean of Graduate Education who, in turn, will admit the student to candidacy.

The Dissertation

It is expected that the dissertation will represent the culmination of at least the equivalent of one academic year of full-time research.

The dissertation need be of no specific length, but it must be written in grammatically proper English. It must also advance or modify knowledge and demonstrate the candidate's technical mastery of the field. The dissertation can consist of a compilation of three published and/or submitted journal manuscripts that are derived from the candidate's doctoral research and are either authored or co-authored by the candidate. Dissertations submitted in this form must have an introduction and conclusion to tie the journal papers into a cohesive research paper. The more conventional dissertation format is also acceptable if recommended by the candidate's major department and the major professor. The final dissertation must be accompanied by an abstract of 250 to 600 words and vitae of the candidate.

The dissertation and abstract shall be approved by all members of the student's advisory committee, and a preliminary acceptance page of the dissertation shall bear the signed initials of each member of the committee.

The final draft of the dissertation, after all revisions recommended by the committee have been made, must be signed by the student and approved and signed by the major professor, the head/coordinator of the student's major

department/program, and the Dean of Graduate Education before final reproduction. The Dean of Graduate Education requires that the final draft of the dissertation must be delivered to the graduate office for a minimum of 21 days prior to graduation to allow adequate time for review and potential approval.

The institution requires four copies of the dissertation in final form: the original, unbound manuscript and one bound copy for the Devereaux Library; and two bound copies for the student's major department/program, one of which will be forwarded to the major professor. Two digital versions should also be submitted in electronic format, one for the graduate office and one for the department. Contact the graduate office for guidance in regard to the required digital format.

A final draft of the dissertation must be submitted by the candidate to each member of his/her advisory committee a minimum of two full weeks before the scheduled dissertation defense. Earlier submission deadlines may be required by the advisory committee.

Defense of the Dissertation

The defense of the dissertation is an oral examination open to the public except in proprietary programs. It will be scheduled at the convenience of the candidate's advisory committee at any time after the student has completed course work and after the major professor is satisfied that the dissertation is an acceptable manuscript, both in terms of technical quality and proper expression. The student shall obtain and complete the graduate office form to schedule the defense. The major professor shall seek the approval of all committee members, and shall return the form to the graduate office no less than five working days before the defense date. The graduate office will announce this exam information as appropriate.

While the student's committee determines the character and length of the examination, sufficient time should be devoted to a consideration of matters relating to the dissertation to test thoroughly the ability of the candidate to defend his/her work. Questions will, in general, be confined to the dissertation and to background

material related to it.

Satisfactory completion of the final examination requires a “pass” vote from the graduate office representative and no more than one “fail” vote from the other members of the advisory committee. If the student fails, another examination can be scheduled only with the approval of the student’s advisory committee and the Dean of Graduate Education.

Time Limitation

If the requirements for the Doctor of

Philosophy degree are not completed within a maximum period of eight (8) calendar years from the date of original enrollment in the doctoral program, the student’s program is subject to review by the staff of the student’s major department/program and the Dean of Graduate Education to determine whether a reduction in credits applicable toward the degree is justified before the student is permitted to proceed with the degree program. The procedures described under “Time Limitation” for M.S. degree candidates also apply here.



Mines Matters: The School of Mines Museum of Geology houses more than 300,000 specimens. Skeletons from the Oligocene of the Big Badlands and the Upper Cretaceous of Western South Dakota are displayed and give a vivid impression of Dakota life long ago. Other special exhibits feature fluorescent minerals, lapidary specimens of local agates, and native gold.