



INFORMATION
FOR GRADUATE
STUDENTS

INTRODUCTION

Since Rice opened in 1912, the university has recognized the importance of graduate study and research as a principal means of advancing knowledge. The first Doctor of Philosophy degree was awarded in 1918 in mathematics. Since that time, the graduate area has expanded to encompass the schools of architecture, engineering, humanities, management, music, natural sciences, and social sciences, as well as interdepartmental areas. The graduate program has steadily increased over time; Rice now enrolls approximately 1,900 graduate students and offers advanced degrees in 29 fields of study.

Graduate programs lead to either research or professional degrees. Research programs generally require the completion of a publishable thesis that represents an original and significant contribution to the particular field of study. Research degrees include the Doctor of Philosophy (PhD), Doctor of Architecture (DArch), Master of Arts (MA), and Master of Science (MS).

Professional programs provide advanced course work in several disciplines but do not generally include independent research. These programs lead to degrees in most of the major schools including many engineering disciplines. (See the Graduate Degree Chart and the Interdepartmental and Cooperative Programs Chart on pages 59–63 for a complete listing of degrees offered.)

All degrees conferred by the university are awarded solely in recognition of educational attainments and not as warranty of future employment or admission to other programs of higher education.

For additional information on graduate programs and requirements, please go to <http://rgs.rice.edu>.

ADMISSION TO GRADUATE STUDY

Graduate study is open to a limited number of extremely well-qualified students with a substantial background in their proposed field of study (this usually, though not always, means an undergraduate major in the field). Each department determines whether applicants have enough preparation to enter a given program, emphasizing the quality of their preparation rather than the particular academic program they completed or the credits they earned.

Admittance to a Rice University graduate-degree program, with the exception of those in the School of Music, requires a baccalaureate degree or its equivalent as determined by the Office of Graduate Studies. For the Shepard School of Music, the equivalent to the baccalaureate degree will be determined by their graduate committee.

Applicants for admission to graduate study should either contact the appropriate department for application forms and relevant information about the program or visit the department's website for on-line application information. The Graduate Studies website, <http://rgs.rice.edu>, also has links to the graduate departments' websites. The Graduate Degree and Department Information Chart (pages 59–62) lists department chairs with department phone/fax numbers and e-mail addresses. Applicants should send all application materials, including transcripts and test scores, to the admitting department.

Application Process—An application for graduate study should include the completed application form, the application fee, transcript(s), recommendations, and writing samples, if required. Some departments require scores on the aptitude

portion of the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT) and an appropriate advanced test; these should be sent directly to the admitting department. See individual departmental listings for specific requirement information.

To make sure scores are available when admission decisions are normally made, applicants should take the GRE by the December before the fall for which they are applying. The application deadline for the fall semester is February 1. Some departments, however, may specify an earlier deadline, and departments may occasionally consider late applications.

Admission depends on students' previous academic records, available test scores, and letters of reference from scholars under whom they have studied. Writing samples, portfolios, or statements of purpose may also be required. In general, applicants should have at least a 3.00 (B) grade point average in undergraduate work. Applicants whose native language is not English must take the TOEFL test and should score at least 600 on the paper-based TOEFL or at least 250 on the computer-based TOEFL. For those students who choose to take the IELTS in lieu of TOEFL, the minimum score is 7. The TOEFL and IELTS may be waived for an international student who has received a degree from a university in which English is the official language of communication.

GRADUATE DEGREES

RESEARCH DEGREES

Research degrees are offered in six of the seven schools at Rice (the School of Management offers professional degrees only), with some degrees combining studies in more than one school. For general information on advanced degree work at Rice, see Requirements for Graduate Study (pages 64–68). Specific requirements for advanced research degrees in each field of study appear in the appropriate departmental pages (pages 78–266). Students seeking additional material should contact the appropriate department (see Graduate Degree and Department Information Chart on pages 59–63).

PhD Programs—The PhD degree is awarded for original studies in the departments listed in the Graduate Degree and Interdepartmental and Cooperative Programs Charts (page 63); in architecture, the equivalent degree is the DArch. Candidates receive a PhD degree after successfully completing at least 90 semester hours of advanced study and concluding an original investigation that is formalized in an approved thesis. As final evidence of preparation for this degree, the candidate must pass a public oral examination. (See also Candidacy, Oral Examinations, and the Thesis Regulations on page 65.) The residency requirement for the doctorate is four semesters of full-time study at the university.

Master's Programs—The MA degree is available in the departments listed in the Graduate Degree and Interdepartmental and Cooperative Programs Charts (page 63), including certain scientific fields of study. The MS degree is offered in the engineering and science fields also listed in the chart. Candidates may undertake the MArch, MArch in Urban Design, and MMus degrees as research degrees by adopting the thesis option. Candidates receive a master's degree after completing at least 30 semester hours of study (including thesis hours), 24 hours of which must be

taken at Rice. Master's programs require original work reported in a thesis and a public oral examination. Most students take three or four semesters to complete a master's degree (some programs may require more time). Students receiving a master's degree must be enrolled in a graduate program at Rice University for at least one semester of full-time study.

Students may also pursue a nonthesis degree in certain departments. This degree would be based on alternative departmental requirements and would include, but not be limited to, the following:

- 30 semester hours of study
- 24 semester hours must be at Rice University
- Minimum residency is one semester of full-time graduate study
- At least 15 hours of course work must be at or above the 500 level
- All courses must be in the relevant field

In certain departments, students may receive a master's degree (called an *Automatic Master's*) when they achieve candidacy for the doctoral degree. Students seeking a master's degree in this manner must submit a petition for the degree, signed by their department chair, to the Office of Graduate Studies by February 1 of the year in which the degree is to be awarded. (See also Candidacy, Oral Examinations, and the Thesis on page 65.)

PROFESSIONAL DEGREES

Rice University offers advanced degree programs to prepare students for positions in a number of professional fields. The professional degrees offered appear in the Graduate Degree and Interdepartmental and Cooperative Programs Charts (pages 59–63). In some departments, the professional degree also prepares the student for a doctoral-level program. All professional degrees are master's degrees with one exception: candidates earn the DMA after concluding a program of advanced music study.

Requirements for professional degrees include the successful completion of 30 semester hours or more of upper-level courses (at the 300 level or higher) with at least 24 hours taken at Rice. Minimum residency for all master's degrees is one semester of full-time study. Specific information and requirements for individual degrees appear in the Graduate Degree Chart (pages 59–63). Program information and application materials are also available from the departments (see Graduate Degree and Department Information Chart on pages 59–63). For general information on advanced degree work at Rice, see Requirements for Graduate Study (pages 64–67).

Admission into a professional program is granted separately from admission into a research or thesis program. Students who wish to change from a thesis program to a professional degree program must petition their department in writing. Upon recommendation of the department and approval by the dean's office, the request is sent to the Office of Graduate Studies for consideration and final approval. If approved, students who received tuition waivers while enrolled in the thesis program will be expected to repay the tuition before their professional degrees are awarded. Professional degree programs terminate when the degree is awarded. Students who wish to continue graduate study after completing a professional program must reapply for admission into a research program.

GRADUATE DEGREE AND DEPARTMENT INFORMATION CHART

School Department and Department Chair	Graduate Degree Offered and Contact Information	Additional Options or Areas of Concentration (within majors)
SCHOOL OF ARCHITECTURE		
Lars Lerup (Dean) John J. Casbarian (Associate Dean)	MArch, MArch in Urban Design, DArch 713-348-4044 fax: 713-348-5277 arch@rice.edu 713-348-5152 www.arch.rice.edu/flash/	Architecture design, urbanism, theory, and practice
GEORGE R. BROWN SCHOOL OF ENGINEERING		
Bioengineering David Hellums	MBE, MS, PhD 713-348-5869 fax: 713-348-5877 bioeng@rice.edu dacnet.rice.edu/~bioe/	Biochemical engineering, biological systems modeling, biomaterials, biomedical lasers, cellular and molecular engineering, controlled release technologies, metabolic engineering, phytoremediation, spectroscopy, systems engineering and instrumentation, thrombosis, tissue engineering, and transport processes.
Chemical and Biomolecular Engineering Kyriacos Zygourakis	MChE, MS, PhD 713-348-4902 fax: 713-348-5478 ceng@rice.edu www.ruf.rice.edu/~che/	Thermodynamics and phase equilibria, chemical kinetics and catalysis, optimization and process control, rheology and fluid mechanics, polymer science, biomedical engineering, enhanced oil recovery and cleanup of groundwater aquifers, and biochemical reactor engineering.
Civil and Environmental Engineering Herb Ward	MCE, MEE, MES MS, PhD 713-348-4949 fax: 713-348-5268 civi@rice.edu www.ruf.rice.edu/~ceedept/	Civil engineering: structural dynamics and control, structures and mechanics, reinforced and prestressed concrete, geotechnical engineering, computer-aided engineering, probability and random vibrations, reliability of systems, and solid mechanics. Environmental science: environmental biology, chemistry, toxicology, geology, and planning; surface and groundwater hydrology; water and wastewater treatment; and urban and regional air quality. Environmental engineering: hydrology and water resources engineering; water and wastewater treatment, design, and operation; and numerical modeling
Computational and Applied Mathematics Bill Symes	MCAM, MCSE, MA, PhD 713-348-4805 fax: 713-348-5318 caam@rice.edu www.caam.rice.edu/	Numerical analysis, operations research, and differential equations; additional program in computational science and engineering (see Interdepartmental and Cooperative Programs)
Computer Science Keith Cooper	MCS, MS, PhD 713-348-4834 fax: 713-348-5930 comp@rice.edu www.cs.rice.edu/	Algorithms and complexity, artificial intelligence and robotics, bioinformatics, compilers, distributed and parallel computation, graphics and visualization, operating systems, and programming languages
Electrical and Computer Engineering Behnaam Aazhang	MEE, MS, PhD 713-348-4020 fax: 713-348-5686 elec@rice.edu www.ece.rice.edu	Bioengineering, communication and signal processing, computer architecture and networking, electro-optics, and device physics

Mechanical Engineering and Materials Science Enrique V. Barrera	MME, MMS, MS, PhD 713-348-4906 mems@rice.edu www.mems.rice.edu/	Mechanical engineering: mechanics, computational mechanics, stochastic mechanics, fluid dynamics, heat transfer, dynamics and control, robotics, biomedical systems, and aerospace sciences. Materials science: nanotechnology, metals physics, statistical mechanics, metallic solid thermodynamics, materials chemistry, aspects of composites, coatings and thin films, and interface science
Statistics Katherine B. Ensor	MStat, MA, PhD 713-348-6032 fax: 713-348-5476 stat@rice.edu www.stat.rice.edu/	Applied probability, Bayesian methods, bioinformatics, biomathematics, biostatistics, data analysis, data mining, density estimation, epidemiology, environmental statistics, financial statistics, image processing, model building, nonparametric function estimation, quality control, risk management, spatial temporal statistics, statistical computing, statistical genetics, statistical visualization, stochastic processes, and time series analysis

SCHOOL OF HUMANITIES

Education:	713-348-4826 www.dacnet.rice.edu/Depts/Education/	Secondary education (See Education Certification below)
English Susan Wood	MA, PhD 713-348-4840 fax: 713-348-5991 engl@rice.edu english.rice.edu	British and American literature and literary theory
French Studies Michel Achard	MA, PhD 713-348-4851 fax: 713-348-5951 fren@rice.edu www.ruf.rice.edu/~fren/	French literature, language, and culture
Hispanic Studies Maarten Van Delden	MA 713-348-5451 fax: 713-348-4863 span@rice.edu hispanicstudies.rice.edu	Spanish and Latin American Literature and Spanish Linguistics
History Peter Carl Caldwell	MA, PhD 713-348-4948 fax: 713-348-5207 hist@rice.edu history.rice.edu/	U.S., European, and other history
Linguistics Masayoshi Shibatani	MA, PhD 713-348-6010 fax: 713-348-4718 ling@ruf.rice.edu linguistics.rice.edu/	Anthropological, applied, cognitive, field, functional or discourse, and English, German, or Romance linguistics; second language acquisition; language typology and universals, sociolinguistic, phonetics, phonology, and speech technology
Philosophy Steven Crowell	MA, PhD 713-348-4994 philos@rice.edu philosophy.rice.edu	Specialization in medical ethics

Religious Studies	MA, PhD	Religion and contemporary cultures; scriptural interpretation; ethics and philosophy of religion; mysticism, psychology, and religious practices
Jeffrey Kripal	713-348-5201 fax: 713-348-5486 reli@rice.edu reli.rice.edu/	

JESSE H. JONES GRADUATE SCHOOL OF MANAGEMENT

William H. Glick (Dean)	MBA, MBA MBA/Master of Engineering MBA/MD (with Baylor College of Medicine)	MBA is a general management degree; however, students may have informal concentrations in the following areas: accounting, entrepreneurship, finance, general management, international business, information technology, marketing, operations management, organizational behavior and human resource management, healthcare management, and strategic management and planning; joint nonthesis degree option with all engineering disciplines
George Kanatas (Associate Dean)	MBA for Executives 713-348-4838 fax: 713-348-5251 ricemba@rice.edu	
Wilfred C. Uecker (Associate Dean)	jonesgsm.rice.edu/ 713-348-5396 fax: 713-348-5102 713-348-6060 fax: 713-348-5131 oed@rice.edu	

SHEPHERD SCHOOL OF MUSIC

Robert Yekovich (Dean)	BMus/MMus, MMus, DMA 713-348-4854 fax: 713-348-5317 musi@rice.edu www.ruf.rice.edu/~musi	Composition, choral and instrumental conducting, historical musicology, performance, and music theory Composition and selected areas of performance
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WIESS SCHOOL OF NATURAL SCIENCES

Biochemistry and Cell Biology	MA, PhD	Biochemistry, biophysics, developmental biology, cell biology, genetics, molecular biology, neurobiology, structure and function of nucleic acids and proteins, regulatory processes, biochemistry of lipids, enzymology, NMR and crystallography, cellular regulation, oxygen and electron transport, molecular genetics of plants, animals, fungi, bacteria, and bacteriophage
George Bennett	713-348-4015 fax: 713-348-5154 bioc@rice.edu www.biochem.rice.edu	
Chemistry	MA, PhD	Organic chemistry, inorganic chemistry, physical chemistry, nanotechnology, biological chemistry, theoretical and computational chemistry, materials chemistry, bio-organic chemistry, and bio-inorganic chemistry
Kenton H. Whitmire	713-348-5650 fax: 713-348-5155 chem@rice.edu www.chem.rice.edu	
Earth Science	MA, PhD	Marine geology and geophysics; sedimentology, stratigraphy, paleoceanography, paleoclimatology, evolution of continental margins and carbonate platforms; tectonics, neotectonics, tectonophysics, geodynamics, mantle processes, planetology, and space geodesy; remote sensing, potential fields, reflection and lithospheric seismology, global seismology, wave propagation and inverse theory; kinetics of fluid-solid interactions, low T aqueous geochemistry, petrology, and high T geochemistry, hydrogeology, sediment deformation, carbon cycling, and terrestrial-biosphere interactions
Alan Levander	713-348-4880 fax: 713-348-5214 geol@rice.edu earthscience.rice.edu/	

Ecology and Evolutionary Biology Joan Strassmann	MA, PhD 713-348-4919 fax: 713-348-5232 eeb@rice.edu eeb.rice.edu	Ecology, plant and insect communities, populations, diversity, mutualisms, invasive species, evolution, quantitative genetics, mate choice, speciation, molecular evolution, adaptive evolution, behavioral ecology, sociobiology, genomics, microbial evolution
Mathematics Michael Wolf	MA, PhD 713-348-4829 fax: 713-348-5231 math@rice.edu math.rice.edu	Differential and algebraic geometry, ergodic theory, partial differential equations, probability and combinatorics, real analysis, complex variables, and geometric and algebraic topology
Physics and Astronomy F. Barry Dunning	MST, MS, PhD 713-348-4938 fax: 713-348-4150 physics@rice.edu www.physics.rice.edu/	Atomic and molecular physics, biophysics, particle physics, condensed matter physics, surface physics, space physics, astronomy, astrophysics, and theoretical physics

SCHOOL OF SOCIAL SCIENCES

Anthropology James D. Faubion	MA, PhD 713-348-4847 fax: 713-348-5455 anth@rice.edu www.ruf.rice.edu/~anth/	Archaeology, anthropological linguistics, social/cultural anthropology, theory, history, and global change
Economics Peter Hartley	MA, PhD 713-348-4875 econ@rice.edu www.ruf.rice.edu/~econ/	Econometrics, economic theory, industrial organization and regulation, international trade and finance, labor, macroeconomics/monetary theory, and public finance and development
Political Science Rick K. Wilson	MA, PhD 713-348-4842 poli@rice.edu www.ruf.rice.edu/~poli/	American government, comparative government, and international relations
Psychology Randi Martin	MA, PhD 713-348-4856 fax: 713-348-5221 psyc@rice.edu www.ruf.rice.edu/~psyc/	Cognitive-experimental psychology and industrial-organizational/social psychology, with tracks in engineering psychology, human-computer interaction, and neuropsychology

EDUCATION CERTIFICATION

Meredith Skura	713-348-4826 Fax: 713-348-5459 educ@rice.edu education.rice.edu/	Secondary education
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INTERDEPARTMENTAL AND COOPERATIVE PROGRAMS

Opportunities for graduate study are available in a number of interdisciplinary areas. The advanced degree programs listed in the Interdepartmental and Cooperative Programs Chart (below) are administered by the participating Rice departments. They represent fields of study in rapidly developing areas of science and engineering or those areas subject to multiple investigations and interests. Rice has also established ties with other Houston universities and the Texas Medical Center to enable graduate students to receive training in computational biology research, to earn separate degrees simultaneously, or to focus their doctoral study on the specialized field of medical ethics.

INTERDEPARTMENTAL AND COOPERATIVE PROGRAMS CHART

Program	Degrees Offered	Departments/Areas of Concentration
INTERDEPARTMENTAL PROGRAMS		
Applied Physics	Master's, PhD	Departments of physics and astronomy, chemistry, electrical and computer engineering, mechanical engineering and materials sciences, bioengineering, computational and applied mathematics, chemical and biomolecular engineering, and civil and environmental engineering; sciences that underlie important new and emerging technologies. Contact: Rice Quantum Institute, 713-348-6356 or quantum@rice.edu.
Computational Science and Engineering	Master's, PhD	Modern computational techniques and use of powerful, new computers in research, development, and design involving the following departments: computational and applied mathematics, biochemistry and cell biology, earth sciences, computer science, chemical and biomolecular engineering, electrical and computer engineering, civil and environmental engineering, and statistics. Contact: 713-348-4657 or caam@caam.rice.edu.
Education Certification	MAT	Secondary teaching certification in conjunction with BA in major field
Environmental Analysis and Decision Making	MS	Departments of computational and applied mathematics, statistics, civil and environmental engineering, chemistry, earth science, ecology and evolutionary biology, mechanical engineering and materials science, chemical and biomolecular engineering, sociology, electrical and computer engineering, management, and natural sciences. Contact Professional Master's Program: 713-348-3188 or profms@rice.edu.
Materials Science and Engineering	Master's, PhD	Departments of chemistry, electrical and computer engineering, mechanical engineering and materials sciences, chemical and biomolecular engineering, and physics. Contact: 713-348-4906 or mems@rice.edu.
Nanoscale Physics	MS	Departments of physics and astronomy, electrical and computer engineering, chemistry, management, and natural sciences. Contact Professional Master's Program: 713-348-3188 or profms@rice.edu.
Study of Women and Gender	Graduate Certificate	Departments in anthropology, English, French, history, linguistics, philosophy, and religious studies
Subsurface Geoscience	MS	Departments in earth science, chemistry, statistics, management, sociology, and natural sciences. Contact Professional Master's Program: 713-348-3188 or profms@rice.edu.
COOPERATIVE PROGRAMS		
Joint Programs in Biomedical Ethics	MA, PhD	Religious studies degree with the University of Texas Health Science Center at Houston. Contact: 713-348-5201 or reli@rice.edu Philosophy degree with the Baylor College of Medicine and the Institute of Religion. Contact: 713-348-4994 or phil@rice.edu.
Joint Program in Computational Biology	Training opportunities for PhD students	Research in a lab setting, seminars and work-shops, and access to advanced resources of W.M. Keck Center for Computational Biology (fellowships available); with Baylor College of Medicine and the University of Houston. Contact: 713-348-4752 or bioc@rice.edu.
Joint Programs with Medical Colleges	MD/PhD, MD/MA, MD/MS	Combined MD and advanced research degree for research careers in medicine; with Baylor College of Medicine. Contact: 713-348-5869 or bioeng@rice.edu.

ACADEMIC REGULATIONS

REQUIREMENTS FOR GRADUATE STUDY

Graduate students must meet the following minimums, deadlines, and course or grade requirements to graduate in good standing from the university. Some departments may have stricter policies and/or requirements.

Residency—Master's students must complete at least one semester enrolled in full-time study in a graduate program at Rice University. PhD students must be enrolled at least four semesters in full-time study at Rice University.

Full-time study—Semester course load for full-time students is 9 hours, or more as required by specific departments. Graduate programs at Rice generally require full-time study.

Part-time study—Admission of part-time students requires departmental permission, and students must register for at least 3 hours in a semester. All time-to-degree requirements apply to part-time students.

Time to degree—PhD students are required to complete their program, including thesis defense, within ten years of initial enrollment in the degree program. All masters students are required to complete their program, including thesis defense, within five years of initial enrollment. In both cases, students have a limit of six additional months from the date of defense to submit their theses to the Office of Graduate Studies. These time boundaries include any period in which the student was not enrolled or enrolled part-time, for whatever reason.

Time to candidacy—PhD students must be approved for candidacy before the beginning of the ninth semester of their residency at Rice. Masters students must be approved for candidacy before the beginning of the fifth semester of their residency at Rice.

Time to defense—PhD students must defend their theses before the end of the 16th semester of their residency at Rice. Masters students must defend their theses before the end of the eighth semester of their residency at Rice.

Time to thesis submission—After candidates successfully pass the oral examination in defense of the thesis, they must submit two signed copies of the thesis to the Office of Graduate Studies no later than six months from the date of the examination.

Credit for previous degrees—For students who enter a doctoral program with a master's degree, completed at Rice or elsewhere, departments should determine the amount of previous work, if any, that will be counted from the master's degree at issue toward the doctoral degree. Any such credit of one semester or more toward doctoral requirements will result in an equal reduction of the time allowed for (1) the achievement of candidacy, (2) the defense of the PhD thesis, and (3) the total time to the doctoral degree. The maximum credit allowed for students with master's degrees from Rice will be six semesters, and the maximum credit allowed for students with master's degrees from outside Rice will be two semesters.

Minimum hours—Students must register for at least 3 hours in a semester.

Course registration—Students may register for courses of study and drop or add courses only with the approval of their adviser or the department chair.

Deadlines—Students must observe all deadlines listed in the Academic Calendar (pages viii–xiv).

Grades—To graduate, students must achieve at least a B- (2.67) grade point average in courses counted toward the graduate degree. Some programs and

departments have more stringent standards. To compute grade point averages, the credits attempted in semester hours for each course and the points for the grade earned (from A+ = 4.33 to F = 0.00) are multiplied, then the products (one for each course) are added together and the sum is divided by the total credits attempted. See also Probationary Status (page 67).

Pass/Fail—All students, except Class III students, may take course(s) Pass/Fail outside their department. They must file a course as Pass/Fail no later than the end of the 10th week of classes; however, they may later convert a Pass/Fail to a graded course by filing the appropriate paperwork with the registrar. Students should be aware that while a grade of P does not affect their Grade Point Average, a grade of F does.

Satisfactory/Unsatisfactory—Some departments may assign a grade of S or U. Students should be aware that while a grade of S or U does not affect their Grade Point Average, no credit will be awarded if a grade of U is received. Courses with a grade of S will count towards total credits earned.

Departmental duties—In most research degree programs, students must undertake a limited amount of teaching or perform other services as part of their training. Assigned duties should not entail more than 10 hours per week, averaged over the semester, or extend over more than eight semesters.

Employment—Students receiving a stipend may accept employment only with the approval of their home academic department. Students working for more than 20 hours per week are not normally eligible for full-time status.

Continuous enrollment—Students must maintain continuous program involvement and enrollment unless granted an official leave of absence. See Leaves or Withdrawals (page 66) for more information.

CANDIDACY, ORAL EXAMINATIONS, AND THE THESIS

Approval of Candidacy—Candidacy marks a midpoint in the course of graduate education. Achieving candidacy for the PhD implies that a graduate student has: (a) completed required course work, (b) passed required exams to demonstrate his/her comprehensive grasp of the subject area, (c) demonstrated the ability for clear oral and written communication, and (d) shown the ability to carry on scholarly work in his/her subject area. Requirements for achieving candidacy for the thesis Masters degree are determined at the departmental level. Students enrolled in research degree programs submit their petitions for candidacy for a master's or doctoral degree through the department chair to the vice provost for research and graduate studies. In the petition sent to the vice provost, the department chair identifies the student's thesis director, recommends a thesis committee, certifies that the applicant has fulfilled the departmental requirements, and provides a course transcript as evidence that work completed within the department is of high quality.

Students must file their applications for approval of PhD and MA/MS candidacy in the Office of Graduate Studies on or before November 1 for mid-year conferral and on or before February 1 for May commencement. Students may take the final oral examination in defense of their thesis only after the vice provost for research and graduate studies approves their candidacy. PhD students must be approved for candidacy before the beginning of the ninth semester of their residency at Rice. Master's students must be approved for candidacy before the beginning of the fifth semester of their residency at Rice.

Thesis Committee—The thesis committee administers the oral examination for the student's thesis defense and has final approval/disapproval authority and responsibility for the written thesis.

A thesis committee is composed of at least three members. Two, including the committee chair, must be members of the student's department faculty; in doctoral thesis committees, one member must be from another department within the university. At least three members of the committee must meet one of the following requirements:

- Tenured or tenure-track members of the Rice faculty
- Research faculty holding the rank of faculty fellow, senior faculty fellow, or distinguished faculty fellow
- Faculty who have been certified as thesis committee members by the vice provost for research and graduate studies

The committee chair need not be the thesis director. The chair, however, must be either a tenured or tenure-track member of the major department or a research faculty member of the major department. Additional members of the committee, who may or may not meet the above criteria, may be selected with the approval of the department chair. These would be in addition to the three required members.

Candidates are responsible for keeping the members of their committee informed about the nature and progress of their research. They also must establish a schedule for thesis completion and review. The members of the committee, in turn, should review the thesis in a timely manner, approving a preliminary form of the thesis before scheduling the oral examination.

Oral Examination in Defense of Thesis—The public oral defense of a thesis is intended to be an examination of a completed body of work and should be scheduled only when the dissertation is essentially completed. The defense should be scheduled by the student after consultation with the thesis adviser, who agrees that the thesis is completed and ready to be defended. All members of the thesis committee must be present for the oral defense. A candidate must be enrolled in the semester in which his or her oral examination is held. For the purpose of the oral defense only, enrollment in a semester is considered valid through the Friday of the first week of class of the following semester.

At least one copy of the thesis must be available in the departmental office not less than two calendar weeks prior to the date of the oral defense. Oral examinations for the doctoral degree must be announced in *Rice News* at least one week in advance. Oral examination announcements can be submitted to *Rice News* by entering the information into the Graduate Students Thesis Defense Announcement form. (Specific instructions should be requested by sending e-mail to graduate@rice.edu when the student has set the date for the defense. The words "Rice News defense announcement" need to appear in the subject line of the e-mail.) An automatically generated e-mail will be sent to *Rice News* once the defense form has been submitted.

Students should note that material printed in *Rice News* must be submitted at least two weeks before publication; the *Rice News* calendar editor can provide specific submission dates. PhD candidates therefore should begin scheduling their oral defenses at least three weeks in advance.

Oral examinations for the master's degree require only that public notice of the oral defense be posted on the department bulletin board one week in advance and a copy sent to the Office of Graduate Studies.

The length of the oral examination and the subject matter on which the candidate is questioned are left to the judgment of the committee. After candidates successfully pass the oral examination in defense of the thesis, they must submit two signed copies of the thesis to the Office of Graduate Studies no later than six months from the date of the examination. If the thesis is not ready for final signature by the end

of the six-month period, the “pass” will be revoked and an additional oral defense will need to be scheduled. Extensions of this six-month period for completion without reexamination will be granted only in rare circumstances. Applications for an extension must be made by the candidate with the unanimous support of the thesis committee and approved by the Office of Graduate Studies. Students passing the oral examination on or before the end of the first week of classes of any semester do not have to register for that or any subsequent semester even though they may be continuing to make minor revisions to the final copy of their thesis.

Should a candidate fail, the committee chair may schedule a second examination. Students who fail a second time must withdraw from the university.

Students must send a copy of their approval of candidacy form, signed by the thesis committee signifying successful defense of the thesis, to the Office of Graduate Studies within one week after the oral examination. The original approval of candidacy form must be turned in when the thesis is submitted.

PhD students must defend their theses before the end of the 16th semester of their residency at Rice. Master’s students must defend their theses before the end of the eighth semester of their residency at Rice.

Thesis Regulations and Procedures—The thesis is the principal record of a student’s work for an advanced degree. It is permanently preserved in the library. Instructions for thesis submission and guidelines for thesis formatting are provided by the Office of Graduate Studies at the time of approval of candidacy. Additional copies of these instructions are available from the graduate studies office and can also be accessed on the Rice website at: <http://rgs.rice.edu/grad/policies/thesis>.

Students must have the original signatures of their thesis committee on two title pages of their dissertation. Students submitting a dissertation for the PhD, DArch, or DMA must fill out a Survey of Earned Doctorates form. All students submitting theses, whether for master’s or doctoral degrees, must complete a University Microfilm contract. Students must pay their fees for microfilming and binding their theses to the cashier before submitting the two copies to the Office of Graduate Studies for approval. The thesis may be submitted to the Office of Graduate Studies at any time; however students must meet the deadline for the thesis submission listed in the Academic Calendar (pages viii–xiv).

LEAVES OR WITHDRAWALS

Leave of Absence—A leave of absence is granted only by the Office of Graduate Studies upon the recommendation of the department chair and only to graduate students in good standing with the university. Students must obtain approval for a leave before the academic semester in question. These requests, approved by the department, must be received in the Office of Research and Graduate Studies prior to the first day of classes.

Leaves are not granted after students register for courses or after the registration period passes. Normally, students may take a leave of absence for no more than two consecutive semesters. Students must pay a reinstatement fee of \$100 on their return from an official leave.

Short Term Medical and Parental Leave—If a graduate student cannot fulfill the duties of his or her appointment due to a medical emergency or the adoption or birth of a child, enrollment and stipend support may be continued for up to six weeks or until the appointment expires (which ever occurs first). Complete guidelines for obtaining a short term or parental leave are available at: <http://rgs.rice.edu/Grad/Policies/med-mat-leave.cfm>

Withdrawal and Readmission—Students who wish to withdraw from Rice during the semester, for any reason, are to notify the chair of their academic department in writing (see Refund of Tuition and Fees, pages 44–45). Failure to register for any period without a leave of absence granted by the Office of Graduate Studies constitutes a de facto withdrawal.

The university may insist on a student's involuntary withdrawal if, in the judgement of the vice provost for research and graduate studies, the student;

- Poses a threat to the lives or safety of him/herself or other members of the Rice community
- Has a medical or psychological problem that cannot be properly treated in the university setting
- Has a medical condition or demonstrates behavior that seriously interferes with the education of other members of the Rice community

Students who later wish to resume study, whether after voluntary or involuntary withdrawal, must reapply to the university. Readmission requires the recommendation of the department chair and the approval of the vice provost for research and graduate studies. Accepted students must pay a readmission fee of \$300.

Students who withdraw for medical reasons must meet certain conditions when applying for readmission. They must submit a written petition for readmission to the Office of Graduate Studies at least one month before the start of the semester in which they wish to resume their work at Rice. They must also provide evidence from a health professional that they have resolved the problems leading to their withdrawal. Some cases may require an interview with the director of the Rice Counseling Center, with the director of Student Health Services or their designees.

Nonenrollment—Students may not do degree work at Rice or work involving Rice faculty or facilities during any period of nonenrollment, except during the period following successful oral defense prior to submission of the final thesis.

DROP/ADD

During the first two weeks of classes, all students may change their registration without a penalty fee by adding or dropping courses with the appropriate adviser's approval. Students must obtain the instructor's permission and the adviser's approval to add a course after the second week of classes. Students may not add courses after the fourth week of classes without the permission of the Office of Graduate Studies.

Students may not drop courses after the end of the 10th week of classes, except by approval of the Office of Graduate Studies (a \$50 fee is assessed for courses dropped after the 10th week by non-first-semester students). The student's request to drop a course must be approved by the student's advisor and then forwarded to the vice provost for consideration.

Students who add or drop courses after the second week but before the deadlines noted above are charged for each drop/add form submitted according to the fee schedule (see page 23).

ACADEMIC DISCIPLINE

Probationary Status—Students whose cumulative grade point average or the average for the most recently completed semester falls below 2.33 are placed on probationary status; some departments may have more stringent standards. Although

the department in most cases sends the student a letter of warning, probationary status applies whether or not a letter has been issued. A second semester of probationary status leads to automatic dismissal by the Office of Graduate Studies unless the student's department presents a plea for exception that is approved by the vice provost for research and graduate studies. Departments are free to dismiss a student in the first semester of probationary status if they issue a warning before taking action.

Dismissal—Reasons for student dismissal include unsatisfactory progress as determined by the student's department or behavior judged by Rice to be disruptive or otherwise contrary to the best interests of either the university or the student.

APPEAL

Students may petition the Office of Graduate Studies regarding the application of any academic regulation. Petitions should go through department chairs and divisional deans, who will be asked to comment on their merits. In some cases, the vice provost will seek the advice of the Graduate Council. For appeals regarding nonacademic matters, see the following section on problem resolution.

OTHER DISCIPLINARY SANCTIONS

Additionally, the assistant dean of Student Judicial Programs may place students on probation or suspension for violating the Honor Code or Code of Student Conduct or for other disciplinary reasons. Students on disciplinary suspension (including for an Honor System violation) may not receive their degree even if they have met all academic requirements for graduation. They must leave the university within 48 hours of being informed of the dean's decision, though in cases of unusual hardship, the assistant dean of Student Judicial Programs may extend the deadline to one week. Any tuition refund will be prorated from the official date of suspension, which is determined by the registrar. While on disciplinary suspension, students may not run for, or hold, any elective or appointed office in any official Rice organization. Participation in student activities on and off campus and use of Rice facilities are limited to enrolled students. Students seeking admission after leaving the university because of a sanction imposed by the assistant dean should submit a petition in writing for review by the assistant dean.

PROCEDURES FOR RESOLUTION OF PROBLEMS

Problems or conflicts may arise during a student's graduate education. Students should take responsibility for informing the appropriate faculty of any such problem. All parties involved should work together amicably with the goal of resolving the problem informally if at all possible. When attempts to resolve a problem informally do not meet with success, the following grievance procedure should be adopted.

1. The student should submit the grievance in writing to the departmental chair, who will then attempt to resolve the problem.
2. If the student remains unsatisfied, the problem should be presented to a departmental committee for resolution. This committee should be a standing committee and not the student's own review or dissertation committee. Both the student and the chair should submit a written record of their views to this committee.
3. If the student remains unsatisfied, the problem should be referred to a standing subcommittee designed at Graduate Council and composed of three faculty

members (representing diverse disciplines within the university), one graduate student and the associate dean for graduate studies. A written report of proceedings at stage two should be presented to the chair of graduate council, for forwarding to the subcommittee, together with all other written materials generated during the investigation. The decision of this subcommittee will be considered final.

TUITION, FEES, AND EXPENSES

The tuition and fees for graduate students in this section are for the 2005–2006 academic year only and are subject to change in subsequent years. Current tuition and fees for all graduate students, full time and part time:

	Annual	Semester	Hour
Tuition			
All schools except Jones School	\$22,700	\$ 11,350	\$1,262
Jones School MBA			
Start 2005	30,900	15,450	1,717
Start 2004	30,000	15,000	1,667
Jones School EMBA			
Start 2004 (2-year rate)	77,000		
Start 2005 (2-year rate)	78,300		
Fees			
Health service	350	175	
Graduate Student Association	20	10	
Honor Council	2	1	
Student Organizations Fund	8	4	
Information technology	120	60	
Jones School activities (Jones School only)	70	35	
Jones School materials (Jones School only)	1,350	675	

Away Status—Students pursuing their studies outside of the Houston area (students on “away” status) must be registered and pay tuition but are not required to pay the fees listed above, with the exception of the information technology fee.

Reduced Tuition—After six semesters of full-time study in one degree program (excluding the summer semesters), continuing students enter a reduced-tuition category of \$1,262 per year (\$631 per semester). Students who are admitted with a relevant master’s degree, i.e., a master’s degree that counts toward a doctoral program at Rice, may become eligible for reduced tuition earlier than those entering a doctoral program without a relevant master’s degree. Semesters credited toward reduced tuition will generally be limited to one degree program. In extraordinary circumstances, the Office of Graduate Studies may consider petitions for exceptions.

Health Insurance—All students, full time or part time—including those on away status—must carry health insurance (see page 11).

Other Fees—Unless students elect a special payment plan, they must pay all tuition and fees for the fall semester by the middle of August, and for the spring semester by the end of the first week of January. Past these deadlines, a late payment penalty of \$140 will be assessed.

Other fees applicable under special circumstances:

Preceptorship (per semester)	\$210
Internship (per semester)	210
Study abroad fee–Fall 2005	140

Study abroad fee—Spring 2006	250
Study abroad fee—Summer 2006	250
Graduate application fee	35
Jones School application fee: MBA	100
Jones School application fee: EMBA	100
Part-time registration fee	115
Late registration fee	110
Failure to preregister fee	60
Late course change fee	
Adds:	
Week 1-2	Free
Week 3-4	\$ 10
Week 5 and after	50
Drops:	
Weeks 1-4	Free
Weeks 5-10	10
Week 11 and after	50
Deferred Payment Plan late fee	35
Diploma fee: sheepskin	105
Diploma fee: parchment	35
Diploma fee: facsimile	15
Diploma mailing fee: domestic	25
Diploma mailing fee: air mail	30
Transcript fee	5
Class III registration fee	115
Class III late application fee	80
Class III late registration fee	110
Intramural fee	15
Readmission fee: graduate students only	300
Reinstatement fee: graduate students only	100
Replacement ID	10

For more information, see Refund of Tuition and Fees (pages 44-45).

FINANCIAL AID

FELLOWSHIPS, SCHOLARSHIPS, AND ASSISTANTSHIPS

A range of fellowships, scholarships, and assistantships are available at Rice. Most graduate students in degree programs requiring a thesis are supported by fellowships or research assistantships.

Rice Graduate Fellowships—Doctoral students with high academic records and strong qualifications receive support through Rice fellowships. In most cases, these fellowships provide a stipend plus tuition for the nine-month academic period. Departments may nominate particularly outstanding entering students for a Rice Presidential Fellowship.

Rice Graduate Tuition Scholarships—Students whose previous records show marked promise but for whom no graduate fellowships are available may receive full or partial graduate tuition scholarships, which do not include a stipend.

Research and Teaching Assistantships—Usually funded from grants and contracts, research assistantships are available in many departments. Qualified students (usually second-year or later) receive these awards to provide assistance on faculty research projects, work that usually contributes to the student's own thesis. In

some departments, a limited number of teaching assistantships may be available to advanced students.

Fellowship, scholarship, and assistantship recipients are selected by the individual departments, subject to the approval of the Office of Graduate Studies. Students should send their applications for such awards directly to the department involved.

To receive Rice fellowships, graduate tuition scholarships, or assistantship aid, students must be engaged in full-time graduate study; part-time students and students who are not enrolled are not eligible for such aid.

Students receiving stipends from fellowships or assistantships may not accept any regular paid employment on or off campus without the explicit permission of the department. Full-time students, whether receiving stipend support or not, may not accept paid employment in excess of 20 hours per week.

LOANS AND WORK-STUDY FINANCIAL AID

In addition to fellowships, scholarships, and assistantships, the Office of Student Financial Services offers assistance in the form of loans. Interested students must file a Free Application for Federal Student Aid (FAFSA) and a Rice Graduate Financial Aid Application or a Rice Jones School Application and submit copies of income tax returns and W-2's. The priority deadline to apply is April 15. (Loan assistance through Rice is not available to Master of Liberal Studies students.)

To be eligible to apply for loans and federal work-study employment, graduate students must maintain satisfactory academic progress as defined by their departments. Should a graduate student fail to make satisfactory academic progress, the student's aid eligibility will be terminated. Graduate students who enroll for less than 5 hours in a term will not be eligible for financial aid.

Stafford Student Loans—These are low-interest loans made to students attending the university at least half-time. Subsidized Stafford loans require need-based financial aid eligibility, but unsubsidized Stafford loans are available to all students. Stafford loan eligibility is subject to annual and lifetime borrowing limits.

Loan Counseling—Students who are recipients of federal student loans will be required to complete online loan entrance counseling before funds will be credited to student accounts. Students also will be required to complete online exit counseling at the completion of a program of study at Rice. Failure to complete online exit counseling will result in a transcript hold.

Private Loan Programs—Private loans are available to graduate and MBA students. These loans are not based on need but do require credit approval from the lender and cannot exceed the student's cost of education, as determined by Rice, minus other resources.

Special Loan Programs—A Gulf Oil Corporation Foundation Loan Fund and the Benjamin S. Lindsey and Veola Noble Lindsey Memorial Loan Fund are available to help students working toward a degree meet their educational expenses, but funds are limited. Interested students may contact the Office of Student Financial Services.

The Mary Lyn and Niles Moseley Loan Fund and the Professor John A. S. Adams, Sr., Memorial Graduate Student Loan Fund—These funds provide financial assistance, in the form of loans, to graduate students at Rice University. Students wishing to apply for such a loan should obtain an application from the Graduate Studies Office. Guidelines for the program are:

- Individual loans are made for an amount not to exceed \$1,500.

- Loans are made for a period of up to one year and, upon request, may be renewable annually.
- The interest rate applicable to these loans is determined by the university.
- Graduate students must be enrolled on a full-time basis to be eligible to apply for a loan and must maintain full enrollment during the full term of the loan.
- Upon completion, applications are submitted to the vice provost for research and graduate studies for approval.
- Loans are available during the full course of the academic year.
- Loans must be repaid before graduation.

Emergency Loan Fund—Established through gifts from the Graduate Wives Club of 1972–73, the Graduate Student Association, and various faculty members, this fund makes available emergency loans to help graduate students at Rice with short-term needs. Loans are limited to \$250 and must be repaid within three months. In lieu of interest, a charge of \$5 per loan is assessed to maintain the fund.

Summer Aid—Graduate students are eligible to apply for private educational loans if they are registered during the summer term.

Other Fellowships, Honors, and Prizes—Provisions are made for a variety of fellowships, scholarships, and prizes available to graduates of this and other universities. Memorial fellowships that have been founded and endowed by gift or bequest on the part of friends of Rice University provide stipends enabling the holders to devote their time to study and research in their chosen fields. There are also several industrial fellowships maintained by companies interested in the development of technical fields and the training of competent scientists, engineers, and business executives.

Persons desiring consideration for appointment as fellows should consult with the department in which they wish to do research. However, not all fellowships are available every year.

Return of Title IV Funds—Students who receive federal funds as part of their aid packages and do not complete the academic term may be subject to returning a portion of those funds. Contact student Financial Services for information about policies and procedures regarding the return of Title IV funds.

GRADUATE STUDENT LIFE

GRADUATE STUDENT ASSOCIATION

All full-time students in the graduate program are members of the Graduate Student Association, which is the sole organization representing graduate students as a body. The governing body of this organization is the Graduate Student Association Council, consisting of a representative from each department offering graduate study and a president, vice president, secretary, and treasurer elected by the council. Graduate students also participate in university affairs through their representatives on many standing and ad hoc university committees, such as the Graduate Council, the Research Council, and various department committees.

One of the functions of the Graduate Student Association is to encourage social interaction among graduate students from different departments. To that end, the association organizes a variety of social activities open to all members of the graduate student body.

HOUSING FOR GRADUATE STUDENTS

The Rice Graduate Apartments are housed in a garden-style complex located on a 2.7-acre site just north of campus. The project features attractive landscaping and good lighting in all common areas, designed to enhance both the security and the aesthetics of pedestrian, bike, auto paths, parking, and recreational areas. Electronically controlled gates for both pedestrian and vehicular paths are provided. Handicap accessibility also is an important feature. A shuttle bus travels back and forth between the apartments and campus.

There are 112 units, including one-bedroom, two-bedroom, four-bedroom, and efficiency apartments. The complex is designed with a centrally located space for social activities, a laundry room on each floor, a study room equipped with computers, enclosed areas with locks for bike racks, and two courtyards. Every apartment has a living area, a fully equipped kitchen, cable TV connection, and a network drop for a personal computer. Housing is assigned on a space-available basis. Call 713-348-GRAD (4723) for further information.

The Morningside Square Apartments are two-story 1950s-vintage units located in a quiet neighborhood adjacent to Rice Village. They are within a short walking distance to campus, restaurants, and shopping areas. The complex is attractively landscaped and offers gated and covered parking.

There are 53 units, including one-bedroom, two-bedroom, and three-bedroom apartments. The common hallways, bedrooms, and living rooms feature oak hardwood flooring. Kitchens are equipped with a refrigerator and gas range. All units have ceiling fans, a gas furnace, and window air conditioners. Basic cable TV is provided, and a coin-operated laundry is available on site. Apartments are assigned on a space-available basis. Call 713-524-1275 for further information.

The Information Desk, the Office of Student Activities, and the Graduate Student Association keep records of available rooms and apartments listed with the university by area landlords. The daily newspaper and a weekly *Greensheet* are other sources of rental housing information. Incoming graduate students should arrive in Houston several days early to allow themselves time to find suitable housing.

HEALTH INSURANCE REQUIREMENTS FOR GRADUATE STUDENTS

Paying the student health service fee gives graduate students access to both the Student Health Service and Rice Counseling Center (see pages 11-12). New graduate students may not register for or attend classes until they have completed and returned the health data form to Rice and have met the immunization and TB screening requirements.

All graduate students must have health insurance purchased through Rice or provided by an outside source. Students may purchase insurance through the university. Rice's group coverage for the 2005-2006 academic year is effective from 12:01 A.M., August 15, 2005, until 12:01 A.M. August 15, 2006. Dependent coverage is also available. A description of the policy and the application form can be found on the Web at <http://studenthealthinsurance.rice.edu>. A waiver form, if outside insurance is provided, also can be found at this site. Students should submit either the application or waiver by August 15 each year.

CLASS III STUDENTS IN NONDEGREE PROGRAMS

Students with a 3.00 (B) or better grade average and an undergraduate or graduate degree from an accredited college or university may apply for admission as Class III students. These students may take courses for credit without being admitted to a specific degree program. Registration requires the permission of the instructor and

approval by the vice provost for research and graduate studies. Class III students must register for at least 3 hours and cannot take courses on a pass/fail or satisfactory/unsatisfactory basis. Class III students must receive at least a B for all classes taken or they will not be allowed to remain in the Class III program.

Students may not use courses taken under this arrangement to fulfill the requirements for a Rice degree unless and until they have been accepted into a degree program by an academic department (as well as, in the case of graduate students, by the vice provost for research and graduate studies) and received department approval; students are responsible for obtaining the proper approvals. Students may request that the department allow up to 3 courses taken as Class III to count toward their graduate degree.

APPLICATIONS FOR CLASS III

Applications and course request forms are available from the Office of Graduate Studies. Official transcripts from all colleges and universities the student has attended should be mailed directly by the institutions to the Office of Graduate Studies. Students who were previously Class III students must complete a new application (without transcripts) for each such semester. All application materials are due by the workday closest to August 1 for fall semester courses and December 1 for spring semester courses. Late applications are not considered after classes have begun. Individuals applying as Class III students for the summer term should apply to the Summer School for College Students (see page 36).

TUITION AND FEES FOR CLASS III

The tuition for 2005-2006 is \$1,262 per semester hour, plus a \$115 registration fee each semester. All fees are payable during registration. Students failing to submit their applications by the deadline must pay a late application fee of \$80, and students registering after the second week of class must pay a \$110 late registration fee and may also have to pay a late payment fee. For some courses, students may be charged for computer time. If a class fills with degree students, instructors may drop Class III students up to the end of the third week of class. In that case, the tuition (less \$30 of the registration fee) will be refunded. Please see page 36 for information pertaining to summer school.



DEPARTMENTS AND
INTERDISCIPLINARY
PROGRAMS