
It’s the student’s responsibility to be conversant and familiar with the rules, requirements and procedures. Also, make sure that timelines and policies are followed to allow for a timely graduation. See [graduate.rice.edu](http://graduate.rice.edu) for applicable policies.

This document summarizes Departmental requirements and includes information on some University requirements for graduate degrees.

Students have access to administrative staff for assistance. The primary contact person for graduate students is Kim Hardy. She and the other staff are listed below:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
<th>Location</th>
<th>Phone ext</th>
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</thead>
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<tr>
<td>Cindy Wilkes</td>
<td>Sr. Department Admin.</td>
<td>cindy.wilkes@</td>
<td>E200G</td>
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<tr>
<td>Gary Cisneros</td>
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<td>109 MEB</td>
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<tr>
<td>Kim Hardy</td>
<td>Graduate &amp; Undergraduate Admin.</td>
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<td>Linda Lerma</td>
<td>Department Coordinator</td>
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<td>E200I</td>
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<tr>
<td>Sandra Williams</td>
<td>Financial &amp; Research Admin.</td>
<td>sandra.l.williams@</td>
<td>E200F</td>
<td>3694</td>
</tr>
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**Cindy Wilkes – Sr. Dept. Administrator:**
Manages the departmental funds and budgets and supervises the staff members.
Go to Cindy for:
- Funding questions.
- Research guidelines.
- Department’s physical facilities.
- University policies.
- Special circumstances.

**Gary Cisneros:**
Go to Gary for:
- Lab and equipment issues.
- Order for lab supplies.
- Lab safety training.
- Lab safety issues.

**Kim Hardy:**
Assists graduate students with academic and administrative issues during their study in MSNE. Coordinates the recruitment of graduate students.
Go to Kim for:
- Questions about academic policies and procedures.
- Assistance with processing forms related to your academic progress.
- Questions about payroll/paycheck/stipend.
- Requesting for verification letters (student status, etc.).
- Questions about course schedules, classroom locations.

**Linda Lerma:**
Provides academic support for classes. Assists faculty members. Maintains the MSNE department reception area, workroom, and mail distribution.
Go to Linda for:
- Travel requests and reimbursements.
- Problems with building access with your Rice ID card.
- Room/Building maintenance issues.
- Reserve room for events, meeting.
- Assistance with incoming/outgoing mail, the workroom, and its equipment (fax, copier, printer, and other office supplies).
• Questions about MSNE Seminars and other department events.
• Issuance of office/lab keys ($10 deposit required for 1st two keys).
• Maintenance of MSNE Website including updating curriculum, events, awards, news and announcements.
• FedEx.
• Tax exemption forms for general purchases and Texas lodging travel (Rice University does not pay for sales tax within the state of Texas).
• Reimbursements via a check or cash for out of pocket expenses.
• Payroll for Undergraduates.
• PCard reallocation.

Sandra Williams:
Go to Sandy for:
  • Grant proposals.
  • Grant budget tracking.
  • Grant closeouts.
Faculty members have a myriad of responsibilities including the advising and mentoring of undergraduate, graduate students and post doctoral fellows, supervising research in their areas of interest and expertise, managing the financial aspects of their labs, and instruction at the undergraduate and graduate level.

**Doctor of Philosophy (PhD) and Master of Science (MS) Students:** The primary faculty contact for PhD and MS students is the student's individual advisor.

**2015-2016 Graduate Committee:** Professor Barrera, Professor Lou and Professor Tang.

**2015-2016 Professional Master Students (MMSNE):** The primary faculty contact for MMSNE students is Professor Lou, jlou@rice.edu

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Department or Position</th>
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<tbody>
<tr>
<td>Ajayan, Pulickel</td>
<td>Benjamin M. and Mary Greenwood Anderson Professor of Engineering, and Department Chair.</td>
</tr>
<tr>
<td>Lou, Jun</td>
<td>Professor and Associate Chair of Materials Science and NanoEngineering.</td>
</tr>
<tr>
<td>Barrera, Enrique</td>
<td>Professor of Materials Science and NanoEngineering.</td>
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<tr>
<td>Ringe, Emilie</td>
<td>Assistant Professor of Materials Science and NanoEngineering.</td>
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<tr>
<td>Tang, Ming</td>
<td>Assistant Professor of Materials Science and NanoEngineering.</td>
</tr>
<tr>
<td>Thomas, Edwin L.</td>
<td>William and Stephanie Sick Dean of Engineering, Professor of Materials Science and NanoEngineering.</td>
</tr>
<tr>
<td>Yakobson, Boris I.</td>
<td>Karl F. Hasselmann Professor of Materials Science and NanoEngineering.</td>
</tr>
<tr>
<td>Adams, Wade</td>
<td>Senior Faculty Fellow.</td>
</tr>
<tr>
<td>Hauge, Robert</td>
<td>Distinguished Faculty Fellow in Chemistry and Materials Science and NanoEngineering.</td>
</tr>
<tr>
<td>Loos, Peter</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Pimpinelli, Alberto</td>
<td>Executive Director of Rice Quantum Institute, Faculty Fellow in Materials Science and NanoEngineering.</td>
</tr>
<tr>
<td>Vajtai, Robert</td>
<td>Senior Faculty Fellow.</td>
</tr>
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Student Resources

ESTHER: [http://registrar.rice.edu/students/esther_FAQs/#whatis](http://registrar.rice.edu/students/esther_FAQs/#whatis)
Esther (Employee and Student Tools, Help, and Electronic Resources) is the web application for students, faculty, and staff. Students will use ESTHER to register for classes and retrieve certain data such as grades and account information.

Graduate Students Association (GSA): [http://gsa.rice.edu](http://gsa.rice.edu)
GSA comprises degree seeking graduate students at Rice University. The GSA mission is to enrich the graduate student experience and to represent, support, and promote graduate student interests and values. An integral and essential part of the Rice community, the GSA provides programs and services aiding in recruitment and retention of graduate students, represents graduate student interests to the University administration, and builds a strong sense of community both on and off campus.

Mentor Program:
Where current MSNE students are able to help the incoming students get established and find their way in the new environment they're in. Valuable experiences gained and lessons learned are passed along, to help make the transition to Rice enjoyable and rewarding, paving the way to a successful future.

Shared Equipment Authority: [http://sea.rice.edu](http://sea.rice.edu)
The Shared Equipment Authority (SEA) is a core facility that provides access to scientific equipment to all Rice staff and students. They have dedicated personnel that train, monitor and maintain all their equipment.

Health Insurance Requirement: [http://oiss.rice.edu/studenthealth/](http://oiss.rice.edu/studenthealth/)
All students at Rice University are required to have health insurance coverage and show proof of coverage before registering for classes. All non-immigrant visa holders and their dependents are required to carry insurance for the duration of their program. Health insurance is necessary for everyone in the United States, as medical costs are very high.

**Note:** All Rice-sponsored F-1 and J-1 international students must enroll in either 1) Aetna (Rice's Student Health Insurance Plan) or 2) SAS (Rice's Approved Alternate Health Insurance Plan for Internationals).

Employment Resources and Related Issues: [http://oiss.rice.edu/studentwork/](http://oiss.rice.edu/studentwork/)
For International F-1 or J-1 students, you have the opportunity to engage in on-campus work or practical training opportunities off-campus. However, you must obtain the appropriate work authorization before starting to work. If you work even one day before or one day after your authorization period, you must leave the U.S. or face deportation.

Title IX information: [http://safe.rice.edu/](http://safe.rice.edu/)
Rice encourages any student who has experienced an incident of sexual, relationship, or other interpersonal violence, harassment or gender discrimination to seek support. There are many options available both on and off campus for all graduate students, regardless of whether the perpetrator was a fellow student, a staff or faculty member, or someone not affiliated with the university.

Students should be aware when seeking support on campus that most employees are required by Title IX to disclose all incidents of non-consensual interpersonal behaviors to Title IX professionals on campus who can act to support that student and meet their needs. The therapists at the Rice Counseling Center and the doctors at Student Health Services are confidential, meaning that Rice will not be informed about the incident if a student discloses to one of these Rice staff members. Rice prioritizes student privacy and safety, and only shares disclosed information on a need-to-know basis.

If you are in need of assistance or simply would like to talk to someone, please call Rice Wellbeing and Counseling Center, which includes Title IX Support: 3311/(713) 348-3311. Policies, including Sexual Misconduct Policy and Student Code of Conduct, and more information regarding Title IX can be found at [safe.rice.edu](http://safe.rice.edu)
Degrees offered:
The department offers three graduate degrees: Doctor of Philosophy (PhD), Master of Science (MS) and Professional Master (MMSNE).

- The PhD degree requires completion of at least 90 semester (or credit) hours of advanced relevant study, of which at least 18 semester hours must be for coursework, and an approved thesis. As final evidence of preparation for this degree, the candidate must pass a public oral examination and submit the approved thesis to the Office of Graduate and Postdoctoral Studies. The residency requirement for the doctorate is four semesters of full-time study at the university. Successful candidates must pass a qualifying exam and write and orally defend a thesis on his or her original research. For more detailed information, please go to PhD degree requirement.

- The MS degree requires at least 30 semester (or credit) hours of study, of which at least 18 semester hours must be for coursework. The Thesis Master programs require original work reported in a thesis and a public oral examination. Most students take three or four semesters to complete the requirements for 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 a minimum of 2 semesters of full-time study. For more detailed information, please go to MS degree requirement.

- The MMSNE degree requires at least 30 semester (or credit) hours of study. Minimum residency is one fall or spring semester of full-time or part time graduate study. Students must submit a petition for the degree, signed by the MMSNE advisor, to the graduate administrator by the deadline specified in the official academic calendar. For more detailed information, please go to MMSNE degree requirement.

Academic Advisors:
PhD and MS degree candidates are expected to identify their academic advisors who will guide and support their thesis research during the 1st semester at Rice. It is important to find an advisor who shares your research interests and have expertise in the areas of research that attract you. To this end, students are encouraged to meet with the faculty members in the department and their group affiliates during the first semester to better understand their research interests and projects. To facilitate the process, the department provides graduate students with the opportunity to pick three research groups and participate in each group's research activities for one month during the first semester. Students are required to submit their first, second and third choices of advisor to the graduate administrator beginning of the second semester, which will be used as input to pair students with faculty members.

Credit transfer:
If a student wishes to have graduate courses taken at another university counted for credits toward an advanced degree offered by the Department, he/she should petition the Department in writing, listing not only the grades earned but also including detailed description of the courses and syllabus involved. Transfer of credits are subject to the following restrictions:

- Courses must be from a regionally accredited U.S. institution or an international institution officially recognized by that country's Ministry of Education or equivalent.
- The course must be recorded on an official transcript sent directly from the original institution to Rice or hand-delivered by the student in an official sealed envelope.
- Students seeking to transfer credits must submit an approved Graduate Request for Transfer Credit form to the Office of the Registrar.
- For PhD Degree, the number of transferred credit hours will be decided by one member of the Graduate Committee in consultation with the Department Chair on a case-by-case basis. PhD candidates must still
complete a total of 90 semester hours of advanced study and four semesters of full-time residency at the Rice University.

- For the MS degree, only 6 transferred credit hours will be accepted towards the degree requirement. The candidate needs to obtain approval from the Rice instructors of the courses he/she wishes to waive. The syllabus and course description of the substitute courses from the candidate’s prior institution(s) must be provided to the instructors to determine the appropriateness of the waiver. Final decision will be made by one member of the Graduate Committee.

- For the MMSNE degree, only 6 transferred credit hours will be accepted towards the degree requirement. The candidate needs to obtain approval from the Rice instructors of the courses he/she wishes to waive. The syllabus and course description of the substitute courses from the candidate’s prior institution(s) must be provided to the instructors to determine the appropriateness of the waiver. Final decision will be made by the advisor.

**Grades:**

In general, a graduate student is expected to earn letter grades of at least B in all courses taken, and maintain a minimum cumulative GPA of 3.0. If a student’s cumulative GPA is below 3.0, the student will be placed on probation. The student may be dismissed from the program if his/her cumulative GPA falls below 3.0 for two semesters. Final decision will be made by the Graduate Committee in consultation with the Department Chair.

*No credit go toward three MSNE degrees (PhD, MS, and MMSNE) will be given for a course in which lower a letter grade of C is received.*

The record of a graduate student who receives a failing grade in a course will be reviewed, and the Department will make specific recommendations regarding further study at the university.


- **Satisfactory/Unsatisfactory Courses:**
  Satisfactory/unsatisfactory courses are those that assign a grade of S or U rather than a letter grade. With S/U courses, instructors issue the S grade if the student has successfully completed the course, or the U if he/she has not. An S grade will not count towards grade point average (GPA) but will count towards total credits earned. A U grade will not count towards the degree total credit requirements of MSNE graduate programs. Student who receives two consecutive “U”s in S/U courses will be put on academic probation. A third “U” will result in suspension from the program.

- **Auditing Courses:** Currently enrolled students may audit courses at Rice without charge by securing permission of the instructor and registering as an auditor with the Office of the Registrar. Upon completion, the audited course will appear on the student's transcript with a grade of either "AUD" or "NC" (No Credit). There are no credit hours associated with audited courses, and auditing a course does not affect a student's GPA. Requests to audit a class or to change from audit to credit or vice versa must be approved by the end of the second week of the semester.

- **Pass/Fail Option:** All degree-seeking graduate students may take course(s) pass/fail outside their department. They must designate 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 submitting the proper online form with the Office of the Registrar by the end of the second week of the following semester. Students should be aware that while a grade of P does not affect their Grade Point Average, a grade of F is counted as a failure and is included in their GPA.
Financial Aid:
Departmental funding is available to most incoming PhD and MS students during their first year of studies. The department will provide these students with a 9-month stipend at the current stipend rate. Stipend is paid semi-monthly, the fall from August 16th to December 31st, and the spring from January 1st to May 15th.
Advisors become responsible for financially supporting students on the first day of their tenth month of study. Advisors are expected to pay 100% of the student’s stipend unless that stipend is funded by an external fellowship, scholarship, training grant, or other source of external funding which covers all or a portion of the student's stipend. Continued financial support depends on acceptable academic progress.

Summer Support (from May 16th to August 15th) – Students should discuss their summer plans well in advance with their advisors. In order to be paid by Rice for the summer, students must register for at least 6 hours of MSNE 800. Students planning a summer internship off-campus, with advisor’s approval, must inform the Graduate Administrator by May 1 in order to complete the financial arrangements required.

Termination of Financial Support- Active participation in required academic activities is a basic condition for continued financial support. Students who are absent from such required activities without permission and without mitigating circumstances may be subject to termination of financial support. See the General Announcements’ section on Academic and Judicial Discipline for details: http://ga.rice.edu/GR_dismissal/

External Fellowships/Scholarships: Students are encouraged to seek external fellowships and awards. The Office of Proposal Development (http://opd.rice.edu) offers an extensive array of proposal development services when developing and writing proposals for federal agencies and other entities to seek funding for the research projects. Assistance can also be obtained from the Office of Dean of Graduate and Post Doctoral Studies. Go to http://gps.rice.edu/universityfellowships for more information. Students are encouraged to take advantage of the services and resources available to them. Students are required to notify the Materials Science and NanoEngineering Department of any external fellowships or scholarships they receive immediately upon receiving an award including award received prior to matriculation.

The National Science Foundation and many Government Agencies and Foundations offer Scholarships, Fellowships, and other funding opportunities for Graduate students. Some of these opportunities are listed on the website of the George R. Brown School of Engineering, http://engineering.rice.edu/gradopps/. Additionally, Rice maintains a LibGuide with a large listing of available funding opportunities, http://libguides.rice.edu/c.php?g=45066&p=286600. Graduate students are strongly encouraged to seek out these opportunities, and contact the MSNE graduate administrator.

Student Vacation:
PhD and MS students receive two weeks paid vacation annually. The students must make arrangements, and get approval from their Advisor’s for paid vacation time.

Withdrawals:
Medical leaves and other types of interruptions of study should be handled according to the guidelines in the General Announcements (http://ga.rice.edu/GR_withdrawals/)
MSNE Areas of Specialization

1. Biomaterials.
2. Carbon Nanomaterials Composites.
3. Composites.
7. Energy Conversion and Storage.
8. Low Dimensional Materials.
10. Nanotechnology.
12. Surfaces, Interfaces, Coatings and Thin Films.
Requirements for the PhD degree

If you are accepted as an MSNE PhD student but your Advisor is from another department, you still need to meet all the MSNE requirements to obtain the MSNE PhD degree.

Full-time students seeking the PhD degree are expected to complete all the requirements for the degree within five calendar years, following entrance into the program. Continuation in the program beyond this time limit will require special approval by the Department.

The PhD program is full-time and requires students to register a minimum of 9 credit hours per semester. Successful candidates must pass the oral qualifying exam and write and orally defend a thesis on his or her original research.

Residency: The minimum residence requirement for the Ph.D. degree is four semesters (fall/spring) of full-time study at the university.

Course Requirement: Candidates for the PhD degree are required to complete at least 90 semester (or credit) hours of advanced relevant study, of which at least 18 credit hours must be for coursework. Courses that are required for a BS degree in MSNE at Rice cannot be counted towards the credit hours to satisfy the degree requirements.

1. Coursework courses:
   (a) Core courses (required): MSNE 502, MSNE 503, MSNE 506 and MSNE 535.
   (b) Elective courses: MSNE 500+ or 600+, or course(s) from other departments upon approval from their advisors or one member of the Departmental Graduate Committee.

2. Non-coursework courses:
   Credits received for MSNE 500 and MSNE 800 will not be counted as coursework credits. They will count toward the degree total credit requirement (90 credit hours for PhD).

MSNE 500 “Graduate Seminar”: PhD students must attend at least 10 of the 13 MSNE seminars per semester for the duration of their study. The students are required to earn an “S” (satisfactory) grade in MSNE 500 for every semester. There will be a sign-in sheet available at seminars and the students need to sign in to prove attendance. Please go to the section “Grades” for more information.

MSNE 800 “Research and Thesis”: The students who register MSNE 800 are required to earn an “S” (satisfactory) grade. Please go to the section “Grades” for more information.

Instructional Assistance: (Teaching Assistant/Grader): PhD students are required, as part of their research degree program and educational experience, to provide instructional assistance to the department. This instructional assistance, which could be in the form of grading, lecturing, assisting in labs or developing course material, will not exceed ten hours per week. PhD Students are required to perform such duties for at least 4 semesters but no more than 6 semesters.
1. **Requirement:** All first year students must meet with one of the members of the Graduate Committee prior to course registration, to seek advice on what courses to take, and how to choose your research advisors (go to the section “Academics Policies and Procedures” for more information).

2. **Recommendation:** Register for core courses- MSNE 502, MSNE 503, MSNE 506, MSNE 535, plus elective courses. Active research should begin as soon as possible, but no later than the end of the first academic year.

3. **End of year 1: Preliminary Candidacy Evaluation (PCE)**
   Entering PhD students will be subject to a preliminary evaluation of their candidacy for the PhD degree program. The evaluation will be conducted by the end of the first year of enrollment, and will be based on a review of the academic performance up to the time of evaluation, including:
   - Performance in coursework
   - Research progress and other relevant information.
   A panel of three MSNE faculty members selected by the research advisor. The panel assessment will result in one of the following four possible outcomes:
   - Approve preliminary candidacy.
   - Approve preliminary candidacy conditionally, and specify conditions.
   - Extend the period of evaluation, and receive candidacy approval no later than the end of the third semester of enrollment in the MSNE graduate program.
   - Disapprove candidacy.

   Once a preliminary evaluation is completed, the reviewed material will be made available to the students. Students not progressing sufficiently within the first year will be dismissed from the program.

   **Note:** After the required coursework credit hours have been completed, students may register as full-time under MSNE 800 (Research and Thesis) or take additional courses beyond the requirements.

**Year 2**

Conduct research and take courses approved by advisor.

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**All the core courses (MSNE 502, MSNE 503, MSNE 506 and MSNE 535) must be completed before taking the Oral Qualifying Examination.**

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Make significant progress in research and pass Oral Qualifying Examination.

End of year 3: Oral Qualifying Examination
PhD students must pass the oral qualifying examination. The purpose of this examination is to determine whether the student is qualified to conduct independent research at the technical level required for a PhD thesis. The student's grasp of fundamental concepts in his/her field and related fields of interest will be examined. A committee consisting of three faculty members of the department will administer the examination. The result of this examination will be the principal factor in the department's decision on the student's admission to candidacy for the PhD program. Should the student fail this examination, he/she may be given a second chance to take the examination upon the recommendation of the examining committee.

Students with GPA 3.0 and above
- The student and advisor will select a committee.
- The student will submit a written research proposal to his/her committee, and set up a date for the exam (The committee should receive the written proposal at least 1 week in advance of oral exam date). The research proposal needs to have a minimum of 25 pages and use font size 12 and double space. It should address elements in the student thesis research including motivation and background, literature review, key preliminary results, research plans and references.
- On the day of the oral exam, the student presents the preliminary work and the proposed research to the committee in an oral presentation. The committee will question the student on the proposal, knowledge of literature review/background, current progress, and other related questions in the field of the proposal. Following the oral presentation, questions will be asked by the committee on the contents of the 4 core courses (MSNE 502, MSNE 503, MSNE 506 and MSNE 535).

Students with GPA below 3.0:
- The student will be required to pass a written exam on all core courses (MSNE 502, MSNE 503, MSNE 506 and MSNE 535) before they can take the Oral Qualifying Exam.
- Student needs to answer two questions for each core course (502, 503, 506 and 535), i.e. a total of 8 questions within 2 hours. The questions will be given by the faculty teaching the core courses.

End of Year 4: Petition for PhD Candidacy (http://graduate.rice.edu/candidacy)
Achieving candidacy for the PhD degree implies that a graduate student has:
- Completed 45 hours of advanced relevant study.
- Maintain a 3.0 cumulative GPA (please go to the section “Grades” for more information)
- Demonstrated the ability of clear oral and written communication, and the ability to carry on scholarly work in his/her subject area. This is determined by successful presentation during the oral qualifying examination.
Petition for Approval of PhD Candidacy form is submitted to the graduate administrator with

a) The current unofficial transcript.
b) Checklist of courses.

Additionally, if a student plans to defend and submit a thesis for the next degree conferral, students must file their petitions for approval of Ph.D. candidacy at the Office of Graduate and Postdoctoral Studies before the deadline, see http://ga.rice.edu/Home.aspx?id=123 and http://registrar.rice.edu/calendars/

Each candidate for the PhD degree must complete a thesis demonstrating ability in research of a fundamental nature (analytical or experimental). It is expected that the research will be of sufficient importance and quality that positive results would lead to publication. Instructions for preparation of theses can be obtained at the appropriate time through the office of graduate and postdoctoral studies.

Ph.D. students must be approved for candidacy before the beginning of the ninth semester of their residency at Rice.

**Year 5**

Oral defense (http://graduate.rice.edu/oraldefense)

- A committee consisting of at least three members will conduct the defense. The committee includes your advisor (the committee chair), a faculty member from MSNE and one from another department within the university. The committee members should be announced early enough so that the candidate may discuss with them the nature of the thesis research and the contents of the thesis. The thesis must be made available to the members of the examining committee at least two weeks before the defense date. Although the defense will be concerned primarily with the candidate’s thesis, the questioning may also cover other related areas.

- Schedule the final oral defense of thesis to take place at a time agreeable to all members of the committee. Be sure to consult the deadlines listed in the Academic Calendar (http://registrar.rice.edu/calendars/) to ensure that you meet the defense deadline for commencement. In order to graduate, the final thesis must be submitted to the Office of Graduate and Postdoctoral Studies before noon on the deadline listed in the Academic Calendar http://registrar.rice.edu/calendars/ (or six months after the oral defense, which ever occurs first).

For the PhD degree, the examination must be publicly announced. Students should note that announcements should be made at least two weeks before the scheduled defense. Defense announcements can be submitted to the Office of Graduate and Postdoctoral Studies by filling out the following form at http://events.rice.edu/rgs/. The thesis defense cannot take place without announcements being sent out.

- Should a student fail the oral defense, the committee chair may schedule a second examination. Students who fail a second time will be dismissed from the university.

Within a week after passing the oral thesis defense, please upload a scanned version of your Approval of Candidacy for the Doctoral Degree form, signed (and dated) by the thesis committee, along with the defended draft of the thesis. This signifies a successful defense of the thesis. Directions to upload documents to the thesis.rice.edu website can be found here: http://gps.rice.edu/submitthesis.

Candidates for the PhD degree must register for Research and Thesis (MSNE 800) during the year preceding the anticipated date of graduation.

Thesis Deadline: http://graduate.rice.edu/thesis
Students must observe the deadlines set by the Office of Graduate and Postdoctoral Studies for submission of the final thesis to receive their degree for either December or May conferral. Otherwise students have six months from the date of defense to submit their final thesis to the Office of Graduate and Postdoctoral Studies.

Thesis Submission: Go to http://graduate.rice.edu/submitthesis to submit your thesis.

- Students registered for the previous semester that pass 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.
- No later than six months following the successful oral examination in defense of the thesis, the thesis must be submitted to Office of Graduate & Postdoctoral Studies.
Requirements for the MS degree

If you are accepted as an MSNE MS student but your Advisor is from another department, you must complete your MSNE requirements to get the MSNE MS degree.

Full-time students seeking the MS degree are expected to complete all the requirements for the degree within two calendar years, following entrance into the program. Continuation in the program beyond this time limit will require special approval by the Department.

The MS program is full-time and requires students to register a minimum of 9 credit hours per semester.

Residency: The minimum residence requirement for the MS degree is 2 semesters of full-time study at the university.

Course Requirement:
Candidates for the MS degree are required to complete at least 30 credit hours of study, of which at least 18 credit hours must be for coursework. Courses that are required for a B.S. degree in MSNE at Rice cannot be counted towards the credit hours to satisfy the degree requirements.

1. Coursework courses:
   (a) Core courses (required): MSNE 502, MSNE 503, MSNE 506 and MSNE 535
   (b) Elective courses: MSNE 500+ or 600+, or course(s) from other departments upon approval from their advisor or one member of the Graduate Committee.

2. Non-coursework courses:
Credit received for MSNE 500 and MSNE 800 will not be counted as coursework credits. They will count toward the degree total credit requirement (30 credit hours for MS).

MSNE 500 “Graduate Seminar”: MS students must attend at least 6 of the 13 MSNE seminars per semester for the full term of the program. The students are required to earn an “S” (satisfactory) grade in MSNE 500 for every semester. There will be a sign-in sheet available at seminars and the students need to sign in to prove attendance. Please go to the section “Grades” for more information.

MSNE 800 “Research and Thesis”: The students who register MSNE 800 are required to earn an “S” (satisfactory) grade. Please go to the section “Grades” for more information.

Instructional Assistance: (Teaching Assistant/Grader): MS students are required, as part of their research degree program and educational experience, to provide instructional assistance to the department. This instructional assistance, which could be in the form of grading, lecturing, assisting in labs or developing course material, will not exceed ten hours per week. MS students are required to perform such duties for at least 2 semesters but no more than 3 semesters.
1. **Requirement:** All first year students must meet with one of the members of the Graduate Committee prior to course registration, to seek advice on what courses to take, and how to choose your advisors (go to the section “Academics Policies and Procedures” section for more information).

2. **Recommendation:** register for Core courses - MSNE 502, MSNE 503, MSNE 506, MSNE 535, plus elective courses. Active research should begin as soon as possible but not late than the end of the first academic year.

3. **End of year 1: Preliminary Candidacy Evaluation (PCE)**
   Entering MS students pursuing a thesis degree program will be subject to a preliminary evaluation of their candidacy for the MS degree. The evaluation will be conducted by the end of the first year of enrollment, and will be based on a review of the academic performance up to the time of evaluation, including:
   - Performance in coursework
   - Research progress and other relevant information.

   A panel of three MSNE faculty members selected by the research advisor. The panel assessment will normally result in one of the following four possible outcomes:
   - Approve preliminary candidacy
   - Approve preliminary candidacy conditionally, and specify conditions
   - Extend the period of evaluation, and receive candidacy approval no later than the end of the third semester of enrollment in the MSNE graduate program
   - Disapprove candidacy

   Once a preliminary evaluation is completed, the reviewed material will be made available to the students. Students not progressing sufficiently within the first year will be dismissed from the program.

   **Note:** After the required coursework credit hours have been completed, students may register full-time under MSNE 800 (Research and Thesis) or take additional classes beyond the requirements.

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All the core courses (MSNE 401, MSNE 502, MSNE 506 and MSNE 535) must be completed before petition for MS Candidacy
Year 2

Conduct research, take courses approved by advisor and petition for MS Candidacy (http://gps.rice.edu/candidacy)

**Petition for Candidacy:** Achieving candidacy for the MS implies that a graduate student has:

- Completed core courses
- Maintain a 3.0 cumulative GPA (please go to the section "Grades" for more information)
- Demonstrated the ability for clear oral and written communication, and shown the ability to carry on scholarly work in his/her subject area.

Petition for Approval of MS Candidacy form is submitted to the graduate administrator with

a) The current unofficial transcript.
b) Checklist of courses.

Additionally, if a student plans to defend and submit a thesis for the next degree conferral, students must file their petitions for approval of MS candidacy at the Office of Graduate and Postdoctoral Studies before the deadline, see http://ga.rice.edu/Home.aspx?id=123 and http://registrar.rice.edu/calendars/

Each candidate for the MS degree must complete a thesis demonstrating ability in research of a fundamental nature (analytical or experimental). It is expected that the research will be of sufficient importance and quality that positive results would lead to publication. Instructions for preparation of theses can be obtained at the appropriate time through the office of graduate and postdoctoral studies.

Candidates for the MS degree must register for Research and Thesis (MSNE 800) during the year preceding the anticipated date of graduation.

**Oral defense:** [http://graduate.rice.edu/oraldefense](http://graduate.rice.edu/oraldefense)

- A committee consisting of at least three members will conduct the defense. The committee includes your advisor (the committee chair), a faculty member from MSNE and one from another department within the university. The committee members should be announced early enough so that the candidate may discuss with them the nature of the thesis research and the contents of the thesis. The thesis must be made available to the members of the examining committee at least two weeks before the defense date. Although the defense will be concerned primarily with the candidate’s thesis, the questioning may also cover other related areas.
- Schedule the final oral defense of thesis to take place at a time agreeable to all members of the committee. Be sure to consult the deadlines listed in the Academic Calendar ([http://registrar.rice.edu/calendars/](http://registrar.rice.edu/calendars/)) to ensure that you meet the defense deadline for commencement. In order to graduate, the final thesis must be submitted to the Office of Graduate and Postdoctoral Studies before noon on the deadline listed in the Academic Calendar [http://registrar.rice.edu/calendars/](http://registrar.rice.edu/calendars/) (or six months after the oral defense, which ever occurs first).
For the MS degree, the examination must be publicly announced. Students should note that announcements should be made at least one week before the scheduled defense. Defense announcements can be submitted to the Office of Graduate and Postdoctoral Studies by filling out the following form: http://events.rice.edu/rgs/. The thesis defense cannot take place without announcements being sent out.

- Should a student fail the oral defense, the committee chair may schedule a second examination. Students who fail a second time will be dismissed from the university.
- Within a week after passing the oral thesis defense, please upload a scanned version of your Approval of Candidacy for the MS degree form, signed (and dated) by the thesis committee, along with the defended draft of the thesis. This signifies a successful defense of the thesis. Directions to upload documents to the thesis.rice.edu website can be found here http://gps.rice.edu/submitthesis
- Students registered for the previous semester that pass 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.

**Thesis Preparation:** Instructions for preparation of thesis can be obtained at the appropriate time through the Office of Graduate and Postdoctoral studies. http://gps.rice.edu/thesis.

**Thesis Deadline:** http://gps.rice.edu/thesis

Students must observe the deadlines set by the Office of Graduate and Postdoctoral Studies for submission of the final thesis to receive their degree for either January or May conferral. Otherwise students have six months from the date of defense to submit their final thesis to the Office of Graduate and Postdoctoral Studies.

**Thesis Submission:** Go to http://graduate.rice.edu/submitthesis to submit your thesis.
Requirements for the Professional Master's Degree

The Department of Materials Science and NanoEngineering at Rice University offers a non-thesis (Professional) master's degree of Materials Science (MMSNE) in two focus areas: Materials Science and NanoEngineering. Students must complete at least 30 semester hours of courses approved by the department (a one-semester course is usually three semester hours credit). Of these 30 credit hours, at least 24 must be taken at Rice. Requirements and specific courses to be taken depend on each student's field of study. Students must have their individual degree plans and programs of study approved by the advisor of MMSNE program.

For the MMSNE degree with focus area in Materials Science, students in the program are required to complete:

- At least three core courses from the following list: MSNE 502, MSNE 503, MSNE 506, MSNE 535.
- A total of three technical electives (9 semester hours), with at least 6 credit hours must be taken as MSNE courses. Students may take 3 credit hours from another department without the need for approval from the advisor. The technical electives courses offered by MSNE are: MSNE 533, MSNE 523, MSNE 545, MSNE 555, MSNE 580 and MSNE 650.
- Complete two MMSNE research project courses (MSNE 621 and 622) supervised by a MSNE faculty member.
- At least one but no more than two courses from the following list: ENGI 505, ENGI 510, ENGI 529, ENGI 540, ENGI 610, NSCI 511.
- The remaining semester hours of graduate level (500+ and above) courses depend upon each student's interest and discussions with his/her advisor. See the Course Catalog for a full list of courses [https://courses.rice.edu/admweb/I$WKSCAT.cat?p_action=CATASRCH&p_acyr_code=2015&p_onebar=msne&p_mode=AND](https://courses.rice.edu/admweb/I$WKSCAT.cat?p_action=CATASRCH&p_acyr_code=2015&p_onebar=msne&p_mode=AND)

For the MMSNE degree with focus area in NanoEngineering, students in the program are required to complete:

- At least three core courses from the following list: MSNE 502, MSNE 503, MSNE 506, MSNE 535
- A total of three technical electives (9 semester hours), with at least 6 credit hours must be taken as MSNE courses. Students may take 3 credit hours from another department without the need for approval from the advisor. The technical electives courses offered by MSNE are: MSNE 533, MSNE 523, MSNE 545, MSNE 555, MSNE 580 and MSNE 650.
- Complete two MMSNE research project courses (MSNE 621 and 622) supervised by a MSNE faculty member.
- At least one but no more than two courses from the following list: ENGI 505, ENGI 510, ENGI 529, ENGI 540, ENGI 610, NSCI 511.
- The remaining semester hours of graduate level (500+ and above) courses depend upon each student's interest and discussions with his/her advisor. See the Course Catalog for a full list of courses [https://courses.rice.edu/admweb/I$WKSCAT.cat?p_action=CATASRCH&p_acyr_code=2015&p_onebar=msne&p_mode=AND](https://courses.rice.edu/admweb/I$WKSCAT.cat?p_action=CATASRCH&p_acyr_code=2015&p_onebar=msne&p_mode=AND)

PETITION FOR NON-THESIS MASTER’S DEGREE

Professional Master’s students must submit a Petition for a Non-thesis Master's prior to the deadline of the academic calendar [http://www.registrar.rice.edu/calendars/](http://www.registrar.rice.edu/calendars/) for the semester in which they plan to graduate.
General Announcement
International Student Information
Graduate and Postdoctoral Studies
Registration information for Graduate students
Academic Calendars
GPS Form Library
General Information for thesis
Thesis format guidelines
Thesis template documents
Online Thesis Submission
Information Technology
Student Health
Wellness Center
Rice Counseling Center
http://ga.rice.edu
http://oiss.rice.edu
http://gps.rice.edu/current-students
http://gps.rice.edu/registration
http://registrar.rice.edu/students/calendars/
http://gps.rice.edu/forms
http://graduate.rice.edu/thesis
http://gps.rice.edu/thesisformat
http://graduate.rice.edu/thesistemp
http://graduate.rice.edu/submitthesis
http://it.rice.edu
http://health.rice.edu
http://wellness.rice.edu/home/
http://rcc.rice.edu/home/