

*Mechanical Engineering Department*  
**University information web site (<http://www.sacs.vt.edu/>)**  
**Procedure to Evaluate the Progress of Master of Science Graduate Students**

The procedure to evaluate the progress of graduate students is as follows:

1. The form will be sent electronically to the student and the examination committee prior to the exam.
2. The student will fill out the top portion of the form and bring it to the examination.
3. The committee must discuss and complete the form by marking the appropriate number in the box for each category after the exam.
4. The chair signs the form on behalf of the committee.
5. The entire form must be completed independent of the exam outcome (i.e., even if the student failed).
6. The advisor must return the signed form to the ME Graduate Student Office within two days.

**A: Productivity Information: To be completed by the student**

Number while completing the current degree	# Published/accepted	# Submitted	# Preparing to submit
Journal papers			
Conference proceedings			

**Student Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Student's Plan upon Graduation:**    **Employer:** \_\_\_\_\_

**Position:** \_\_\_\_\_

**Committee Members:** \_\_\_\_\_

**B. Exam Performance: To be completed by the Examination Committee**

**Chair Signature** \_\_\_\_\_

**Student Qualities**

**Student demonstrates technical competence in chosen area of study**

- 1 Poor: Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious.
- 2 Fair: Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue.
- 3 Good: Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/ hypothesis).
- 4 Very Good: Specific position (perspective, thesis/ hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/ hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).
- 5 Excellent: Specific position is imaginative, taking into account the complexities of an issue. Limits of position are acknowledged. Others' points of view are synthesized within position. Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.

**Student demonstrates quantitative analytical proficiency**

- 1 Poor: Uses the quantitative analysis of information as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.
- 2 Fair: Uses the quantitative analysis of information as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work.
- 3 Good: Uses the quantitative analysis of information as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.
- 4 Very Good: Uses the quantitative analysis of information as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.
- 5 Excellent: Uses the quantitative analysis of information as the basis for advanced calculations that are all successful and comprehensive to solve the problem and present conclusions clearly and concisely from this work.

**Student Qualities****Student demonstrates effective oral communication skills.**

- 1 Poor: Central message can be deduced, but is not explicitly stated in the presentation.
- 2 Fair: Central message is basically understandable but is not often repeated and is not memorable.
- 3 Good: Central message is clear and consistent with limited supporting material.
- 4 Very Good: Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported) with appropriate supporting material.
- 5 Excellent: Central message exhibits student's expertise in the subject matter using a variety of types of supporting materials to make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.

**Student demonstrates effective written communication skills**

- 1 Poor: Uses appropriate and relevant content to develop simple ideas in some parts of the work.
- 2 Fair: Uses appropriate and relevant content to develop and explore ideas through most of the work.
- 3 Good: Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.
- 4 Very Good: Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work and is virtually error-free.
- 5 Excellent: Uses appropriate, relevant, and graceful language that skillfully communicates meaning to readers with clarity and fluency, and is error-free.

**Student demonstrates ability to analyze prior literature on a research topic**

- 1 Poor: Chooses a few information sources. Selects sources using limited criteria (such as relevance to the research question).
- 2 Fair: Chooses a variety of information sources. Selects sources using basic criteria (such as relevance to the research question and currency).
- 3 Good: Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources using several criteria (such as relevance to the research question, currency, and authority).
- 4 Very Good: Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources after using multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view).
- 5 Excellent: Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources after considering the importance (to the researched topic) and uses multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view). Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth.

**Student demonstrates ability to contribute to scholarly research**

- 1 Poor: Very limited contribution to scholarly research; no peer-reviewed publications
- 2 Fair: Fair: Attempted developing scholarly work, but has not yet published anything
- 3 Good: Successful in at least one attempt to have own research peer-reviewed and accepted for publication.
- 4 Very Good: Very successful in disseminating own research via several peer-reviewed publications.
- 5 Excellent: Excellent dissemination of own research, as well as collaborative research within her/his group. Has multiple publications. Also, evaluates other conference papers.

**Student will be able to use information ethically and legally.**

- 1 Poor: Students correctly use the following information strategy (use of citations and references) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.
- 2 Fair: Students correctly use the following information strategies (use of citations and references; choice of paraphrasing, summary, or quoting) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.
- 3 Good: Students correctly use the following information strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.
- 4 Very Good: Students correctly use some of the following information strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information
- 5 Excellent: Students correctly use all of the following information strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.