

**PROCEDURES GOVERNING THE ADMISSION AND PROGRESS  
OF STUDENTS IN THE  
MEDICAL SCIENCES INTERDEPARTMENTAL AREA GRADUATE PROGRAM  
AT THE UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**Description of the Program:**

The Medical Sciences Interdepartmental Area (MSIA) Graduate Program of the University of Nebraska Medical Center (UNMC) allows a student to pursue graduate education in the research area of an adviser in one of the participating departments leading to the Master's of Science or Doctor of Philosophy degree.

The UNMC academic departments/units cooperating in the MSIA Graduate Program include:

- College of Dentistry
  - Oral Biology
- College of Medicine
  - Clinical & Translational Research
  - Family Medicine
  - Genetics, Cell Biology and Anatomy
  - Health Informatics
  - Internal Medicine
  - Obstetrics and Gynecology
  - Orthopedics
  - Pediatrics
  - Pharmacology and Experimental Neuroscience
  - Preventive and Societal Medicine
  - Psychiatry
  - Radiology
  - Surgery
- School of Allied Health Professions
  - Physical Therapy Education

The MSIA Graduate Committee consists of at least one member from each participating department or division and governs the MSIA program.

**The following requirements are specific to the MSIA program. In addition to these requirements, students and advisors should also conform to the general requirements and procedures of the Graduate College and any applicable rules and procedures of departments within the MSIA.**

**A. Application for Admission:**

Applications for admission to the MSIA program must be submitted to the UNMC Office of Academic Records. General requirements governing admission to the Graduate College and on-line application information are found in the Graduate Studies link at [www.unmc.edu](http://www.unmc.edu). In addition, the following requirements must also be satisfied:

1. The applicant must be a graduate of a college or university of recognized standing whose requirements for graduation are substantially the same as those of the corresponding college of the University of Nebraska. The student must have achieved a 3.00 GPA average on a 4.00 scale or its equivalent as an undergraduate.
2. The Graduate Record Examination (GRE) is required of all students seeking admission to the MSIA program. A student may apply to the MSIA Committee to have the requirement waived. As a general rule, the requirement will be waived only if some acceptable quantitative measure of ability to do graduate work has been filed with the Committee. Scores of the GRE or other academic measures serve only as general guidelines for admission.
3. The Test of English as a Foreign Language (TOEFL) examination for English proficiency is required of all students from foreign language countries. Applicants must meet the minimum test score requirements as a Graduate College requirement.
4. Each applicant must submit a brief narrative describing the reasons for applying to the MSIA program. The narrative should include a statement of career goals, area of research interest and an explanation as to how an interdisciplinary degree would aid in achieving these objectives.
5. **A complete application includes:**
  - a. **Application form**
  - b. **Three official transcripts from each university or college attended.**
  - c. **Three letters of recommendation**
  - d. **Official record of GRE or waiver from the MSIA Committee**
  - e. **Narrative letter from the applicant outlining his/her objectives and career goals.**
  - f. **Proof of English language proficiency, if the applicant is from a foreign language country.**

**B. Review of Application for Admission:**

The Chair of the MSIA Graduate Committee will initiate the review. If the applicant meets the general requirements for admission to the program, the Chair of the MSIA Graduate Committee in collaboration with the representative from the department identified in the application will appoint an ad hoc Admissions Advisory Committee.

**The ad hoc Admissions Advisory Committee:** If the applicant is seeking a graduate degree through a department or discipline that already has a designated Graduate Committee that reviews admissions then that committee may serve as the ad hoc Admissions Advisory Committee. If the department or area does not have a standing Graduate Committee an ad hoc Advisory Committee will be

formed that shall consist of a minimum of three members of the Graduate faculty including one member of the MSIA Graduate Committee or a designated representative.

**The functions of the ad hoc Admissions Advisory Committee are to:**

1. **Determine if a program can be developed for the applicant.**
2. **Identify a department and an advisor that seems appropriate to the applicant's objective.**
3. **Obtain a written commitment from the proposed advisor with approval of the appropriate supervisor (division chief, department chair or dean) to support the applicant's research program (e.g., research expenses, awarding of a graduate assistantship, etc.), and**
4. **Develop an initial program of study.**

Upon completion of the above responsibilities the Ad Hoc Admissions Advisory Committee shall submit a report to the MSIA Graduate Committee Chair. The recommendations concerning admission of the applicant to the MSIA Graduate Program are forwarded to the UNMC Dean for Graduate Studies and Research for final action. If the applicant is admitted, a letter of acceptance will include the name of the advisor and department that is willing to accept the student.

**C. Appointment of the Advisory Committee and Development of the Program of Study for Students seeking the Master of Science Degree:**

As soon as possible but no later than the beginning of the second semester of the student's program, the advisor after consultation with the student shall forward to the MSIA Graduate Committee a list of proposed members for the Advisory Committee.

1. The **Advisory Committee** shall be composed of at least two Graduate Faculty members from the area of the student's research interest. If more than two, at least one member of the committee shall be from outside the department of specialization. The student's advisor will serve as the Chair of the Advisory Committee.
2. The Chair of the MSIA Graduate Committee will review and maintain files on the membership of the Advisory Committee. The composition of the Advisory Committee will be forwarded to the Graduate Studies Office for review and for informational purposes.
3. The Advisory Committee shall meet prior to the end of the second semester following the student's initial registration to approve a full program of study.
4. Prior to the end of the first year of the student's program, the Advisory Committee shall approve the topic for thesis research.

5. The Advisory Committee shall meet at least once each semester to review the student's progress in courses and research. A copy of the minutes of the meeting shall be forwarded to the MSIA Graduate Committee and to the Dean for Graduate Studies and Research.
6. For Master's students, the Advisory Committee has the following principal responsibilities:
  - a. Assist the student in developing a program of study.
  - b. Advise the student regarding research direction and thesis preparation.
  - c. Administer the Comprehensive examination.
  - d. Serve as the Examination Committee for the Final Oral Exam, i.e., thesis defense
7. The Chair of the MSIA Graduate Committee and the Dean for Graduate Studies and Research will review and approve the format and examining committee for the comprehensive and final examinations.

**D. Appointment of the Supervisory Committee and Development of the Program of Study for Students seeking the Doctor of Philosophy Degree:**

After consultation with the student, the major advisor, identified at the time of admission, shall forward to the Chair of the MSIA Graduate Committee a list of proposed members for the Supervisory Committee for review.

2. The **Supervisory Committee** shall be composed of at least four Graduate Faculty members from the area of the student's research interest. One member on the Supervisory Committee shall be a representative of the MSIA Graduate Committee. The composition of each Supervisory committee must be approved by the Chair of the MSIA Graduate Committee and the MSIA Committee representative from the host department, and submitted to the Dean for Graduate Studies and Research for appointment.
3. Within four weeks following their appointment, the Supervisory Committee will meet to approve a full program of study and forward it to the Chair of the MSIA Graduate Committee and Dean for Graduate Studies and Research for approval.
4. The Supervisory Committee will meet at least once each six months to review the student's progress in courses and research. A copy of the minutes of each meeting shall be forwarded to the MSIA Graduate Committee and to the Dean for Graduate Studies and Research
5. For Ph.D. students, the Supervisory Committee has the following principal responsibilities:
  - a. Assist the student in developing a program of study.
  - b. Approve the topical area for dissertation research.

- c. Advise the student regarding research direction and dissertation preparation.
- d. Administer the Comprehensive Examination
- e. Serve as the Examination Committee for the Final Oral Examination, i.e., dissertation defense.

## **E. The Graduate Student Portfolio**

Once a doctoral or master's level student has been admitted to the MSIA Graduate Program and usually at the time of the first Advisory/Supervisory Committee meeting, the student will also be asked to complete the initial components of a **Graduate Student Portfolio**, a requirement for all students in the Graduate College. The initial components include:

1. **A statement of explanation for the choice of graduate field, the expectations for learning in the chosen field, and anticipated career goals (the summary should be one page or less in length)**
2. **A statement of what high ethical standards mean to the student in his/her chosen profession.**
3. The Advisory/Supervisory Committee will also **annually** approve progress of the student in the format of *curriculum vitae* to be included in the **Graduate Student Portfolio that includes:**
  - a. **A statement (1-2 paragraphs) of learning achievements**
  - b. **New research techniques learned.**
  - c. **Seminars presented.**
  - d. **Papers delivered at local or national meetings and publications (submitted, accepted and published).**
  - e. **Teaching exercises engaged in and teaching techniques used. A self assessment of teaching effectiveness.**
  - f. **An annual statement of skills developed in use of information technology**
  - g. **Involvement in technology transfer or translational research.**

For terminal year students, the annual progress report must also include an updated description of what high ethical standards means now and a statement of how his/her career goals and employment expectations have changed.

The Graduate Student Portfolio should be reviewed by the Advisory/Supervisory Committee annually and a copy with the evaluation statement forwarded to the MSIA Graduate Committee and the Dean for Graduate Studies and Research.

## **F. Degree Requirements:**

### **1. Master of Science Degree:**

The Master of Science Degree for the MSIA may be earned only under Option I. Under this option, a candidate must complete six graduate courses, three of which may be “introductory” course (800 level). Specific coursework may be dictated by the student’s department. A Master’s thesis must be completed in the candidate’s research area. Candidates are encouraged to submit data contained in the thesis for publication before completion of the degree requirements. Regular participation in the seminar program of the major area of study is a requirement for all MSIA students. The MSIA Graduate Committee or the student’s Advisory Committee may also require the student to complete the “Ethics Training” requirement of the Graduate College and various technique courses, language courses, or other special topics courses (often with a pass/fail grading system) that may not be used to meet the requirements for the six graduate courses.

The subject of the thesis must be approved by the student’s Advisory Graduate Committee. The thesis work should reveal a capacity to carry on independent study or research and should demonstrate the student’s ability to use the techniques employed in the field of investigation. The thesis must conform to the style accepted at UNMC. Specimens may be examined in the McGoogan Library of Medicine. The thesis must be presented in final form to the Graduate Committee or the student’s Advisory Committee at least two weeks before the date for the candidate’s final oral examination (defense of thesis). A candidate shall not be eligible for the defense until the thesis is completed and approved by the major advisor. When the thesis defense has been completed successfully, one copy of the thesis must be supplied to the major department and two copies of the thesis must be deposited in the McGoogan Library of Medicine. To meet requirements for completion of the degree in a given semester, the approved thesis and evidence of the successful completed defense must be in the Graduate Office one week before the end of the semester.

### **2. Doctor of Philosophy (Ph.D.) Degree**

A minimum of four full years of graduate study are normally required to complete a program for the degree of Doctor of Philosophy for a student who enters the program with a Bachelor’s degree. Neither the courses completed nor the time spent in study determines completion of requirements for the Ph.D. degree. It is earned primarily through the pursuit of excellence in some special field of scholarship which involves the demonstrated ability to conduct independent research.

The Ph.D. degree must be completed within seven years from the date of initial registration as a Ph.D. objective student.

To complete the Ph.D. degree, certain minimum course requirements must be met. The student must complete at least nine graduate level courses that are relevant to the student's research objectives. The student's Supervisory Committee may require additional course requirements. Certain courses (usually with pass/fail grading) such as Seminar and Dissertation Research as well as completion of the Ethics workshop requirement of the Graduate College, do not qualify for these basic course requirements. Courses completed as part of a professional degree program also do not meet the basic course requirements. It is the responsibility of the Supervisory Committee to ensure adequate didactic preparation of the student. All students are required to participate in the seminar program within their major area. A dissertation of publishable quality must be completed and successfully defended (see below). In addition, evidence must be presented that the dissertation material has been submitted for publication in a peer review journal.

## **F. Examination Requirements:**

### **1. Master of Science Degree Program Examinations**

#### **a. Comprehensive Examination**

For any student in the MSIA Master's Program, a written and/or oral Comprehensive Examination covering material in a student's approved program of study is required.

The student's Advisory Committee will define the format of the Comprehensive Examination. The format of the written component may be a classic written exam over course work with questions submitted by course directors. Alternately it may be the preparation of a review paper or grant proposal in the specific research area with a comprehensive oral examination of that material.

Information on the scope of the examination, the examiners (usually the Advisory Committee) and the time and the place for the examination should be submitted to the Advisory Committee one month prior to the scheduled exam. This information should also be distributed to the MSIA Graduate Committee and the Dean for Graduate Studies and Research. Within two weeks following completion of the Comprehensive Examination, the results will be delivered to the student and the Dean for Graduate Studies and Research, a copy will be forwarded to the MSIA Graduate Committee.

#### **b. Final Oral Examination for Master of Science Degree**

A final oral Examination with primary emphasis on a defense of thesis research is also required. The Advisory Committee will normally be

appointed by the Dean for Graduate Studies and Research to serve as the Examining Committee for the Final Oral Examination.

## **2. Doctor of Philosophy Degree Program Examinations**

### **a. Comprehensive Examination for Ph.D. Degree**

Passing a Comprehensive Examination is required of all students in the MSIA Doctoral program.

The Comprehensive Examination must include a written and oral portion. The objective of the examination is to determine the extent of the student's knowledge and the ability to apply that knowledge in problem solving situations. The format of the Comprehensive Examination is determined by the Supervisory Committee. However, the MSIA Graduate Committee strongly recommends that the written examination include the preparation and defense of a scientific grant proposal. The Supervisory Committee will decide whether the proposal is to be evaluated by external or internal reviewers. The oral examination should include a defense of the proposal and may cover areas related to the student's program of study. The Supervisory Committee will inform the student in writing of the format and scope of the written and oral examinations and will forward a copy of the information to the MSIA Graduate Committee.

As with the research proposal format, the names of the examiners for the Comprehensive Examination will be provided to the student and the MSIA Graduate Committee. The results will be sent to the student and to the Dean of the Graduate College and a copy sent to the MSIA Graduate Committee.

### **b. Admission to Candidacy**

After the student has passed the Comprehensive Examination, satisfied the requirements of his/her approved program, and other requirements of the Supervisory Committee, the committee will recommend to the Graduate Office, the student's admission to candidacy for the Ph.D. degree. The recommendation must be filed at least seven months prior to the final oral examination (defense of dissertation). A student is formally recognized as a candidate as of the date of completing the comprehensive examination. If the term of candidacy is extended beyond three years, the candidate must pass another comprehensive examination. Following admission to candidacy, the student must be continuously registered in the Graduate College until receipt of the Ph.D. degree. Students not in residency may register for a minimum of one semester hour credit in dissertation on forms available from the Graduate Office. Failure to maintain continuous registration will result in the termination of candidacy.

**c. Dissertation**

The dissertation is not of a fixed length. It should treat a subject from the candidate's field as approved by the Supervisory Committee. It should show the student's technical mastery of the field and should advance or modify former knowledge; i.e. it should treat new material, or find new results, or draw new conclusions, or it should interpret old material with new insights. Each candidate for the degree shall submit, with the dissertation, an abstract, for electronic filing, not exceeding 350 words in length including the title. Before completion of the degree, there must be evidence that the dissertation material has been submitted for publication in a peer review journal.

The dissertation and abstract shall be available to the Supervisory Committee at least three weeks in advance of defense of dissertation. An application for the defense signed by the advisor and the student must be presented to the Graduate Office at least three weeks before the examination.

Following the successful completion of the defense (see below), two copies of the dissertation and one copy of the abstract must be presented to the Graduate Studies Office before being deposited by the student in the UNMC McGoogan Library of Medicine. The first page of one copy of the dissertation shall bear the signatures of all members of the Supervisory Committee who approve the dissertation. The first page of the second copy shall indicate the names (typed) of all members of the Supervisory Committee who signed the original sheet. The student must also present to the library a signed agreement conforming to the Graduate Studies Office requirements for publication of the abstract and the dissertation. The student is responsible for the cost of any electronic submission of the dissertation and publishing the abstract. To meet requirements for completion of the degree in a given semester, the approved dissertation and evidence of the successful defense must be in the Graduate Studies Office one week before the end of the semester.

**d. Final Oral Examination or Defense of Dissertation**

The final examination is oral and public. It is given by the Supervisory Committee after all other requirements have been met. The committee also determines the character and length of the defense. The examination may be devoted to the special field of the dissertation or to related matters, or it may be designed to test the candidate's judgment and critical thinking.

The defense of dissertation will not be scheduled unless the Chair of the Supervisory Committee and at least two other members of the Committee are available for the examination.

A report of the outcome of the defense of dissertation must be filed in the Graduate Office within seven days following the examination. If more than one member of the Supervisory Committee recommends failure, the student shall be considered to have failed the examination. In the event of failure, the Supervisory Committee shall recommend to the Dean for Graduate Studies whether the student should be given the option of retaking the examination, and if so, the Committee shall identify general areas of weakness which require specific attention, and any remedial actions which the student should complete prior to re-examination. No student shall be permitted to take the final oral examination more than twice.

Procedures document last amended by the MSIA Committee: August, 2006