



Graduate Manual

University of New Mexico

Department of Chemical and
Nuclear Engineering



INTRODUCTION TO THE PROGRAMS

This manual serves as a supplement to **THE UNIVERSITY OF NEW MEXICO CATALOG, GRADUATE PROGRAMS**, and as a guide to graduate studies in the Department of Chemical & Nuclear Engineering. In some instances, department requirements may exceed those specified in the Catalog. UNM Catalogs are available online at: <http://www.unm.edu/~unmreg/catalog.htm>. It contains information you will need during your degree program.

To assist new graduate students, the department has appointed a faculty member as a graduate student advisor until you choose your research advisor. The graduate advisor can assist you regarding curriculum, course load, departmental policies, procedures, etc. This document, in conjunction with the Catalog and the Fall/Spring course schedules should answer most of your questions.

The Office of Graduate Studies is also available to address student inquiries.

The Department of Chemical & Nuclear Engineering offers programs in both chemical engineering and nuclear engineering leading to the Master of Science and the Doctor of Philosophy degrees. The master's degree is normally awarded under Plan I (thesis) according to regulations specified by the Department and the School of Engineering. Plan II (non-thesis) is limited to special cases and is normally arranged prior to admission to the program. The M.S. level concentration in Radiation Protection Engineering (RPE) is strictly a Plan II program. Further information is provided in the Catalog and this manual. The doctorate is a degree representing broad scholarly attainments, a deep grasp of a particular field of study, and demonstrated expertise in conceiving, conducting and reporting individual research. Minimum requirements of coursework are presented in the Catalog. Major responsibility for the candidate's program lies with the candidate's Committee on Studies and dissertation advisor. The steps leading to this degree are discussed in both the Catalog and this manual.

M.S. PROGRAMS

The Master of Science degree is generally a two year program consisting of coursework and a directed research project.

ADVISOR

Each entering student will be assisted by either the Chemical Engineering graduate advisor or the Nuclear Engineering graduate advisor. Students should arrange for an appointment with their graduate advisor before or during the week before classes start. Students will transfer to a research advisor when they have arranged with a faculty member for a thesis/dissertation topic and support on a project. This usually occurs within one (1) month of the student's first semester.

LEVELING

For chemical engineering students with non-traditional backgrounds, leveling courses are required to give students sufficient depth in chemical engineering so that the students can pursue the normal M.S. program. Normally, **ChNE 311, Introduction to Transport Phenomena** and **ChNE 461, Chemical Reactor Engineering**, or their equivalent, are

required to level. Depending upon the student's background, other courses may also be required. Each individual's course plan is made in consultation with the graduate advisor.

For nuclear engineering students with non-traditional backgrounds, leveling courses are required to strengthen the student's knowledge base in order to successfully pursue the normal M.S. Program. Leveling course are determined by the student's Committee on Studies in consultation with the graduate advisor before or during the week prior to the beginning of the semester.

MONITORING OF PROGRESS

Each student's progress towards a degree will be reviewed once each year by the entire faculty. **INSUFFICIENT PROGRESS TOWARD A DEGREE MAY BE THE BASIS FOR DISENROLLMENT BY THE DEPARTMENT OR ESTABLISHMENT OF CONDITIONS TO BE SATISFIED TO REMAIN ENROLLED.**

PLAN I - THESIS

Normally students will follow Plan I. Students whose prior academic background is deficient, if accepted, must follow a leveling program, as described above, in addition to the normal Plan I requirements.

COURSES - PLAN I

1. A total of at least 30 semester hours including a minimum of 24 hours of coursework including problems courses.
2. A minimum of 9 hours of 500-level courses.
3. Up to 50% of required coursework can consist of any combination of transfer credit, UNM non-degree credit, UNM extension credit or UNM Law credit.
4. Six (6) hours of Thesis (599) credit. (Additional credits may be taken, but not applied to the 30 credits required for the degree).
5. A maximum of 3 hours of graduate problems courses. (Additional credits may be taken, but not applied to the 30 credits required for the degree).
6. All M.S. students are required to enroll in ChNE 501/502 every semester up to a maximum of 4 semesters. All students should normally take section 02 of ChNE 501 in their first semester as a graduate student. Up to 3 credits of ChNE 501/502 may be applied toward the M.S. credit requirement. Students at remote locations who are unable to attend departmental seminars must make special arrangements with the seminar instructor to satisfy the seminar requirements.
7. Departmental core courses are required.
 - a. For Chemical Engineering students entering after Fall 1990 but before Fall 1995, the core courses are 521, 525 and 561.
 - b. For Chemical Engineering students entering Fall 1995 or later, the core courses are 521, 525, 561 and 542.
 - c. For Nuclear Engineering students entering after Fall 1990, the core courses are 410, 466, 525, in addition to 464 or 485.

All work offered toward a master's degree must be accomplished within a five-year period, including transfer work from another institution.

THESIS

Each candidate for the master's degree under Plan I must submit a thesis that gives evidence of capacity for sound research. The thesis must be approved by a committee of AT LEAST THREE MEMBERS APPROVED FOR GRADUATE INSTRUCTION, two of which must

hold regular full-time faculty appointments in the department. The thesis director (research advisor) will serve as chair of the committee and assume the major responsibility for guiding the student's work. The remainder of the committee will normally also conduct the Master's Examination (see MASTER'S EXAMINATION below). Once registered for thesis (ChNE 599) a student must continue to register each regular semester until the thesis is accepted by the Dean of Graduate Studies. A complete draft of the thesis should be submitted to the committee members well in advance (at least 2 weeks) of the anticipated Master's Examination date (see MASTER'S EXAMINATION below).

GRADUATION

There are several formal steps required in completing the M.S. degree. These are

- Program of Studies
- Notification of Intention to Graduate
- Master's Examination (Defense)
- Completion of Thesis (Plan I)

PROGRAM OF STUDIES

Admission to graduate study does not imply admission to candidacy for a degree. A program of studies for the master's degree is to be filed with the Dean of Graduate Studies soon after the student has completed 12 hours of graduate work in residence at the University and **NO LATER THAN ONE SEMESTER BEFORE** the student expects to complete degree requirements. All coursework to be applied to the degree credit requirements must be listed on the application.

This application requires approval of the research advisor, graduate advisor and department chair before being sent to the Office of Graduate Studies. The form can be obtained from the OGS website www.unm.edu/~grad

NOTIFICATION OF INTENTION TO GRADUATE

By October 1st, March 1st, or July 1st for Fall, Spring or Summer semesters, respectively, the student should inform the major department of their intention to complete all degree requirements during that semester. Degrees are awarded three times during the year; commencement exercises are held only in May and December.

MASTER'S EXAMINATION

The Master's Examination must be passed by all candidates for the master's degree. The examination may be taken only after the Program of studies has been approved by the Graduate Dean. The student must be in good standing.

Under Plan I, the Master's Examination consists of an oral presentation and defense of the M.S. thesis, and may include an oral examination of the student's discipline principles. The exam is conducted by a committee of at least three members approved for graduate instruction, two of which must hold regular, full-time faculty appointments in the department. This committee is normally the same as the thesis committee (see THESIS above). It is the student's responsibility to contact and arrange the Thesis/Master's Examination committee, to arrange a date, time and location for the exam which is acceptable to the committee, and submit the Announcement/Report of Exam to the OGS.

At least two weeks prior to the date of the Master's Examination, the major department must notify the Office of Graduate Studies of the date of this examination. The student must be notified of the result of the examination no later than two weeks from the date of examination.

Results of the examination shall be reported to the Office Of Graduate Studies, on the form provided, by November 15th, April 15th, or July 15th for Fall, Spring or Summer semesters, respectively. A candidate may take this examination only twice.

COMPLETION OF THESIS

Prior to graduation two unbound copies of the thesis, together with two copies of an abstract of 300-500 words, all in perfect form and approved by the committee, shall be submitted for the approval of the Dean of Graduate Studies by November 15th, April 15th or July 15th for Fall, Spring or Summer semesters, respectively. A form certifying that the thesis director has proofread the final manuscript must accompany the thesis. A fee of \$25 must be paid at the Bursar's Office. This includes \$10 graduation fee and \$15 thesis binding fee which covers binding the two copies turned into OGS. A third and fourth copy shall be deposited with the candidate's major department and thesis advisor respectively.

The copies submitted to the Graduate School are bound by the library after they are microfilmed. The first copy goes into special collections and may be used only in Zimmerman Library. The second copy is placed in the circulating collection for checkout. If a third copy is submitted, it is available for inter-library loan. If the student elects to publish through University Microfilms International (UMI) (see fees below), copies may be purchased from UMI, Ann Arbor, Michigan (microfiche or photocopy). This will involve completion of a contract, available from the Manuscript Coordinator at OGS and payment of a \$50 fee (subject to change) to UMI.

PLAN II - NON-THESIS

This option is not common and NORMALLY REQUIRES APPROVAL BY THE GRADUATE COMMITTEE PRIOR TO ADMISSION TO THE DEPARTMENT. This option is primarily intended for practicing engineers and engineers in management who would typically be pursuing their degree on a part-time basis. It is not normally available for students who have been supported by a Research Assistantship in this department. Students whose prior academic background is deficient, if accepted, must follow a leveling program, as described above, in addition to the normal Plan II requirements.

COURSES PLAN II

1. A minimum of 33 semester hours of coursework.
2. A minimum of 15 hours of 500-level courses.
3. A maximum of 6 hours of problems courses.
4. Up to 50% of required coursework can consist of any combination of transfer credit, UNM non-degree credit, UNM extension credit or UNM Law credit.
5. All M.S. students are required to enroll in ChNE 501/502 every semester up to a maximum of 4 semesters. All students should normally take section 02 of ChNE 501 in their first semester as a graduate student. Up to 3 credits of ChNE 501/502 may be applied toward the M.S. credit requirement. Students at remote locations who are unable to attend departmental seminars must make special arrangements with the seminar instructor to satisfy the seminar requirements.
6. Departmental core courses are required.
 - a. For Chemical Engineering students entering after Fall 1990 but before Fall 1995, the core courses are 521, 525 and 561.

b. For Chemical Engineering students entering Fall 1995 or later, the core courses are 521, 525, 561 and 542.

c. For Nuclear Engineering students entering after Fall 1990, the core courses are 410, 466, 525, in addition to 464 or 485.

MASTER'S PROJECT

In both Chemical and Nuclear Engineering each student under Plan II must complete a project under the direction of a faculty member. This would typically be done as part of a Problems course. The level of effort for the project should be consistent with what would be expected from a 3 credit course. Project work completed as part of the requirements of other courses may not be used. The Master's project should be a thorough examination of a specific chemical or nuclear engineering problem. It typically would not require new experimental or theoretical advancement, as a thesis does, but must demonstrate the ability to collect relevant information and analyze a scientific or engineering problem in their discipline at an advanced level.

The Master's project will be the basis for a portion of the MASTER'S EXAMINATION (see below), and a report on the project must be prepared and provided to the MASTER'S EXAMINATION committee members at least two weeks prior to the MASTER'S EXAMINATION.

The RPE Practicum involves a semester long project in the area of Health Physics and is conducted under the supervision of the RPE Program Advisor.

GRADUATION

There are several formal steps required in completing the M.S. degree. These are

- Application to Candidacy
- Notification of Intent to Graduate
- Master's Examination

APPLICATION TO CANDIDACY

Admission to graduate study does not imply admission to candidacy for a degree. An application for candidacy for the master's degree is to be filed with the Dean of Graduate Studies soon after the student has completed 12 hours of graduate work in residence at the University and **NO LATER THAN ONE SEMESTER BEFORE** the student expects to complete degree requirements. All coursework to be applied to the degree credit requirements must be listed on the application. This application requires approval of the research advisor, graduate advisor, and department chair before being sent to the Office of Graduate Studies. The application form may be obtained from the Program Advisement Coordinator.

NOTIFICATION OF INTENT TO GRADUATE

By October 1st, March 1st or July 1st for Fall, Spring or Summer semesters, respectively, the student should inform the department of the intention to complete all degree requirements during the semester. The form for this notification is available from the Program Advisement Coordinator. Degrees are awarded three times during the year; fall spring and summer. Commencement exercises are held only in May and December.

MASTER'S EXAMINATION

The Master's Examination must be passed by all candidates for the master's degree. The examination may be taken only after the Application to Candidacy has been approved by the Graduate Dean. The student must be in good standing.

Under Plan II, the Master's Examination consists of an oral presentation and defense of the student's major project, as well as oral examination of the student's discipline principles. The exam is conducted by a committee of at least three members approved for graduate instruction, at least two of which hold regular, full-time faculty appointments in the department. It is the student's responsibility to contact and arrange the Master's Examination committee, to arrange a date, time and location for the exam which is acceptable to the committee, and to notify the Program Advisement Coordinator of the committee members and exam details at least three weeks prior to the exam.

At least two weeks prior to the date of the Master's Examination, the major department must notify the Office of Graduate Studies on the date of this examination. The student must be notified of the results of the examination. Results of the exam shall be reported to the office of Graduate Studies, on the form provided, by November 15th, April 15th or July 15th for Fall, Spring or Summer semester, respectively. A candidate may take this examination only twice.

A \$10 graduation fee must be paid at the Bursar's Office. There is no thesis under Plan II.

ADMISSION TO Ph.D. PROGRAM AFTER COMPLETION OF M.S

If you complete the Master's program and want to go into the Ph.D. Program you must complete a Change of Degree/Program Form immediately. This form is available from the Program Advisement Coordinator. **PRIOR ADMISSION TO THE M.S. PROGRAM DOES NOT GUARANTEE ADMISSION TO THE Ph.D. PROGRAM.** Transfer from the M.S. to Ph.D. program normally implies prior arrangement between the student and research advisor regarding the dissertation research area and/or financial support. Students planning to transfer from M.S. into Ph.D. program should take note of the University regulation on transfer of credit into the Ph.D. program. See items 2 and 3 under Courses in the Ph.D. program section. **M.S. LEVEL CONCENTRATION IN RADIATION PROTECTION ENGINEERING AND MASTERS OF ENGINEERING ARE CONSIDERED TERMINAL DEGREES, AND DIRECT CONTINUATION INTO A Ph.D. PROGRAM WOULD NOT NORMALLY BE ALLOWED.** Admission would only be considered pending a fresh application and meeting all requirements.

Ph.D. PROGRAM

The Ph.D. degree in Engineering is offered under the regulations of the University. Majors in both Chemical Engineering and Nuclear Engineering are offered under the combined department in the School of Engineering.

The doctorate degree usually requires a minimum of three years of full-time graduate study after the master's degree, and must be completed within five years after the student has passed the comprehensive examination and been advanced to candidacy by the Office of Graduate Studies.

There are several steps required to complete a Ph.D. These are listed below in chronological order and discussed in greater detail in subsequent sections.

- Admission (or approval of Change of Degree Form for students continuing from M.S. program)

- Ph.D. Qualifying Exam (Chemical Engineering only)
 - Comprehensive Exam, when passed must submit results with application for candidacy
 - Application for Candidacy (Committee on Studies and coursework must be approved at this time)
 - Appointment of Dissertation Committee (First semester 699 is taken)
- Notification of Intention to Graduate
- Dissertation Defense (Ph.D. Final Exam)
 - Turn in final copies of Dissertation

ADMISSION

Admission to the graduate School is the first step in admission to a doctoral program, although regular graduate status carries no commitment to admit a student to a doctoral program. Students are admitted as Post-Master's students until they are advanced to doctoral candidacy.

QUALIFYING EXAM

Chemical engineering students, including those who hold the M.S. degree upon initial enrollment, must take the Ph.D. Qualifying Examination before proceeding to the Comprehensive Exam or applying for Candidacy. In order to take the Qualifying Exam, it will be necessary to have completed all of our core graduate courses ChNE 521- Advanced Transport Phenomena, ChNE 525- Methods of Analysis in ChNE, ChNE 542- Advanced Chemical Engineering Thermodynamics, ChNE 561- Kinetics of Chemical Processes. The student must earn a grade of B- or higher in every course. A cumulative grade point average of 3.0 or higher for the core courses is required. The academic records for students substituting core classes from other institutions (e.g., if the M.S. was obtained elsewhere) will be reviewed on an individual basis. A superior performance on this examination, an outstanding record in coursework and a demonstrated potential for independent study and research are required to proceed in the doctoral program. The Exam should be taken at the first opportunity after completing the required core courses. This is typically one year after joining the program with a B.S. degree or an M.S. in another field. Leveling students may take longer. If you join the program with an M.S. degree in chemical engineering you should normally take the Exam in your first semester on campus. A student may petition for a second attempt if the first one is unsuccessful.

The qualifying exam in chemical engineering consists of a written and oral exam. A detailed description of the Qualifying Exam format and procedures will be provided after the application to take the exam has been granted.

The Nuclear Engineering program does not have a qualifying examination.

COURSES

1. The minimum amount of coursework required is 48 semester hours beyond the bachelor's degree, exclusive of dissertation hours.
2. At least 24 hours of coursework applied to the degree (exclusive of dissertation hours) must be completed at UNM, and at least 18 hours must be completed after formal admission to the doctoral program (or approval of Change of Degree Form for continuing students).
3. The remaining coursework may include credit applied or transferred as follows.
 - a. 30 hours maximum credit applied to a master's degree, which may include up to 6 hours of thesis credit

b. 1-12 credit hours of graduate-level UNM credit taken prior to admission to the doctoral program or approval of Change of Degree Form (that was not previously applied toward a master's degree)

c. 1-6 hours of transfer credit (graduate level coursework taken at an accredited institution in graduate or non-degree status), or up to 12 hours from New Mexico institutions covered by cooperative agreements

4. The coursework applied to the degree must include a minimum of 18 hours of 500-level or higher courses.

5. A maximum of 6 hours of problems courses (ChNE 551/552) are allowed beyond the master's degree.

6. All students are required to enroll in ChNE 501/502 every semester up to a maximum of eight semesters beyond the B.S., or 4 semesters beyond the Masters degree. All students should normally take section 02 of ChNE 501 in their first semester as a graduate student in this department. Up to 3 credits of ChNE 501/502 (not previously applied to the M.S.), or 6 credits total beyond the Bachelors degree, may be applied toward the 48 credit coursework requirement for the Ph.D. Students at remote locations who are unable to attend departmental seminars must make special arrangements with the seminar instructor to satisfy the seminar requirements.

7. Students admitted to the chemical engineering doctoral program and not already possessing an M.S. in chemical engineering are generally required to complete the chemical engineering core courses. This would normally be done prior to taking the Ph.D. Qualifying Exam. Otherwise no specific courses are required for doctoral students. Courses are selected by the student in consultation with the research advisor and Committee on Studies.

8. There is no foreign language requirement.

9. At least 18 hours of dissertation credit (ChNE 699) are required in addition to coursework credit. See DISSERTATION below.

COMMITTEE ON STUDIES

Each post master's and doctoral student is guided by a Committee on Studies in planning an individual program of studies. This committee consists of at least three members approved for graduate instruction, of which at least two must hold regular, full-time faculty appointments in the department. The committee's chair must be a regular faculty member in the department and would normally be the student's research advisor. Members assist in developing a program based on the individual student's background and research interests. THIS COMMITTEE MUST BE FORMED PRIOR TO APPLICATION TO CANDIDACY AND THE COMPREHENSIVE EXAM. It is organized by the student in conjunction with a faculty research advisor. Approval of the committee, by the department chair, is required on the Application for Candidacy Form. These committee members generally form the nucleus of the comprehensive exam and dissertation committees.

COMPREHENSIVE EXAM/ADMISSION TO CANDIDACY

Students are admitted to candidacy for the doctoral degree by the University following application for candidacy and successfully passing a Doctoral Comprehensive Examination. This examination is conducted in addition to the previously mentioned Qualifying Examination for chemical engineering. Once this exam is passed all students must submit an Application for Candidacy form along with comprehensive exam paperwork to the Office of Graduate Studies.

CHEMICAL ENGINEERING

For Chemical Engineering students the major portion of this examination consists of an oral presentation and defense of a research proposal and an oral examination of the student's general grasp of the proposed research field and the suitability of the material as a basis for dissertation. A written document of the research proposal should be prepared and delivered to the Committee on Studies at least two weeks prior to the exam. The research proposal should include the motivation and objectives of the research, a thorough knowledge of the appropriate background and literature, the proposed methods, preliminary results and anticipated results and significance. These elements should also be communicated in the oral presentation. It is the student's responsibility to notify the Program Advisement Coordinator of the committee members and exam details at least three weeks prior to the exam.

NUCLEAR ENGINEERING

For Nuclear Engineering students the Comprehensive Exam consists of a one day written examination over the fundamentals of nuclear engineering. This exam consists of two four hour sessions, one in the morning and the second in the afternoon. The comprehensive examination may also contain an oral component as determined by the Committee on Studies based on results of the written examination. In addition to the comprehensive examination, nuclear engineering doctoral candidates are also required to prepare a written doctoral dissertation proposal, and successfully make an oral presentation and defense of this proposal to the student's doctoral dissertation committee. Students will be notified in November of January's date for the Comprehensive Exam and in July for August's exam. A student may take the Comprehensive Exam a maximum of two times.

The Office of Graduate Studies must be notified two weeks prior to the date of the exam. The student is responsible for contacting the committee members and scheduling the exam. Three weeks prior to the exam, the student must inform the Program Advisement Coordinator of the exams details. The Application for Candidacy and Comprehensive Exam SHOULD BE COMPLETED BY THE TIME 12 CREDIT HOURS HAVE BEEN COMPLETED BEYOND THE MASTER'S DEGREE OR ITS EQUIVALENT, and no later than two semesters before the anticipated completion of the Ph.D. program. The exam may be taken a second time if recommended by the examination committee.

DISSERTATION

A major part of the Ph.D. degree is research and the completion of a dissertation approved by the Dissertation Committee and the Office of Graduate Studies. Following admission to doctoral candidacy the student in consultation with the research advisor must form a Dissertation Committee to supervise the student's research. The Appointment of Dissertation Committee form is available from the Program Advisement Coordinator and must be approved by the department chair and Office of Graduate Studies before the dissertation defense. You should do it the first semester you enroll in ChNE 699. The chair of the Dissertation Committee usually assumes major responsibility for guiding the research. This committee consists of at least four members approved for graduate instruction, two must hold regular, full-time faculty appointments in the department. The committee's chair must be a regular faculty member approved by the departmental chair and would normally be the student's research advisor. A third external member must be a regular, full-time faculty member outside of the students department. One member may be non-faculty with graduate instruction approval. The Dissertation Committee may include some or all of the members of the Committee on Studies. The dissertation presents experimental and/ or theoretical results of an

independent, original investigation. It is expected that the dissertation will provide the basis for one or more journal publications.

A minimum of 18 semester hours of dissertation credit (ChNE 699) is required. Enrollment may begin the semester in which the student takes and passes the comprehensive exam. Once registered for dissertation a student must continue to register each regular semester until the dissertation is accepted by the Dean of Graduate Studies. Dissertation hours taken before passing the Comprehensive Exam will not count toward your degree. See the Graduate Catalog for further details on Dissertation Credit.

Instructions for the preparation of dissertation are available on the web at <http://math.unm.edu/~pinter/sheila.html>. The student must provide a copy of the dissertation in penultimate form to the dissertation committee members at least two weeks prior to the Dissertation Defense.

NOTIFICATION OF INTENTION TO GRADUATE

By October 1st, March 1st or July 1st for Fall, Spring or Summer semesters, respectively, the student must inform the Department and the Office of Graduate Studies, in writing, of the intention to complete all degree requirements during that semester.

DISSERTATION DEFENSE

A Final Oral Examination, or Dissertation Defense, dealing primarily with the dissertation and its relation to the major is conducted by the Dissertation Committee. This is a public presentation and must be scheduled by the student after consulting with the Dissertation Committee. The defense is scheduled through the Department of Chemical & Nuclear Engineering Office with the Office of Graduate Studies. **THIS SCHEDULING MUST BE DONE AT LEAST THREE WEEKS PRIOR TO THE DESIRED EXAM DATE.**

COMPLETION OF DISSERTATION DEFENSE

Prior to graduation two unbound copies of the dissertation, together with two copies of an abstract of 300-500 words, all in perfect form and approved by the committee, shall be submitted for the approval of the Dean of Graduate Studies by November 15th, April 15th or July 15th for Fall, Spring or Summer semesters, respectively. A Certification of Final Form stating that the dissertation director has proofread the final manuscript, and a Survey of Doctorate Degree must accompany the dissertation. A third and fourth copy shall be deposited with the candidate's major department and thesis advisor respectively. the Program Advisement Coordinator will coordinate the binding of the third and fourth copies of the dissertation.

The copies submitted to the Graduate School are bound by the library after they are microfilmed. The first copy goes into special collections and may be used only in Zimmerman Library. The second copy is placed in the circulating collection for checkout. If a third copy is submitted, it is available for inter-library loan. Copies (microfiche or photocopy) may also be purchased from University Microfilms International, Ann Arbor, Michigan. (see below).

All doctoral students must, as part of graduation requirements, have their dissertations published through University Microfilms International (UMI). This will involve completion of a contract, available from the Manuscript Coordinator at the Office of Graduate Studies and payment of a fee to UMI which is currently \$50.00 (subject to change). A fee of \$25.00 must be paid at the Bursar's Office. This includes \$10.00 graduation fee and \$15.00

dissertation binding fee which covers binding of two copies turned into the Office of Graduate Studies.

MASTER'S CHECK LIST

Name: _____ SS#: _____

Admission: _____ Initial Advisement: _____

Program of Studies: _____ Advisor: _____

COURSE:	SEMESTER:	GRADE:
CORE: _____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

ELECTIVES: _____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Application for Candidacy Form: (NO LATER THAN ONE SEMESTER BEFORE YOU INTEND TO GRADUATE)

SENT TO OGS: _____ APPROVED: _____

Notification of Intention to Graduate:

RECEIVED IN OFFICE: _____ SENT TO OGS: _____

M.S. Examination: (MUST BE FILED WITH OGS 2 WEEKS PRIOR TO EXAM DATE)

SENT TO OGS: _____ APPROVED: _____

Thesis Completed: _____

Ph.D. CHECK LIST

Name: _____ SS#: _____

Admission: _____ Initial Advisement: _____

Program of Studies: _____ Advisor: _____

Qualifying Exam: _____

COURSE:	SEMESTER:	GRADE:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Committee on Studies Form Received by Department: _____

Dissertation Committee:

1) _____ 3) _____

2) _____ 4) _____

SENT TO OGS: _____ APPROVED: _____

Comprehensive Exam: (MUST BE FILED WITH OGS 2 WEEKS PRIOR TO EXAM DATE)

SENT TO OGS: _____ APPROVED: _____

Application for Candidacy Form: (NO LATER THAN ONE SEMESTER BEFORE YOU INTEND TO GRADUATE)

SENT TO OGS: _____ APPROVED: _____

Dissertation Completed: _____