

**THE UNIVERSITY OF SOUTHERN MISSISSIPPI  
DEPARTMENT OF MEDICAL TECHNOLOGY GRADUATE HANDBOOK**

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## ADMISSION

### A. Procedure

The Admissions Procedure details are found in The University of Southern Mississippi Graduate Bulletin. Once all information is received by the Graduate Office, the information is sent to the Department of Medical Technology. Three letters of reference from individuals who have ability to judge the candidates ability to perform graduate level work are sent to the Chair of Medical Technology, 118 College Drive, #5134, Hattiesburg, MS 39402. The Graduate Faculty evaluate the information and vote regarding acceptance. A majority vote of the faculty is required to admit a student. Data that the faculty review include: GPA in undergraduate program, GPA in science courses in undergraduate program, courses in undergraduate program, GRE scores, letters of recommendation, and Michigan Level II or TOEFL of at least 550 if applicable.

### B. Requirements

For regular admission in both programs, the applicant must:

- Hold a baccalaureate degree from an institution approved by a recognized accrediting agency.
- Be eligible to re-enter in good standing the last college or university attended.
- Present evidence, by official transcript, of a grade point average of at least 2.75 (figured on an A equals 4.0 scale) for the last two years of undergraduate courses in the field of proposed graduate study.
- Present GRE score on the verbal and quantitative sections of the GRE.
- Present a MTELP of "Proficiency II" or TOEFL of 550 (regardless of previous college experience, if English is not the native language this requirement must be met).
- Satisfy the appropriate department chair, college dean, and Graduate Dean that he/she shows promise of satisfying graduate degree requirements.

## PURPOSE OF THE GRADUATE MTC PROGRAM

The Master of Science in Medical Technology degree program seeks to provide the student with skills and knowledge for professional enhancement. Graduates of the programs may be candidates for positions as laboratory managers, education coordinators, hospital or college/university medical technology faculty members, researchers, departmental supervisors, etc. The program is structured to provide the student with an area of emphasis, i.e. areas such as microbiology, chemistry, hematology, genetics, immunology, computer science, management, or education.

## **ADVISEMENT AND COMMITTEE ASSIGNMENT**

Once the student has been accepted into the Master's program, the student will meet with the Chairperson preferably before the first semester, but definitely by the first day of class to plan the courses for the first semester. For the first semester, the Chairperson will try to register the student for courses that are generic and can be applied toward any emphasis. During the first semester, the student will select the emphasis area and identify three faculty members (two of which must be MTC faculty) to serve on the committee. The Chair of the Committee will typically be the MTC faculty member who teaches in the emphasis area selected by the student. A Committee form must be completed and sent to the Graduate Office by the Chairperson of the Department in order to confirm the Committee. After the Committee is appointed, the student should make an appointment with the Chair of the Committee to discuss a date for the Committee to meet and determine coursework to be taken. The student's input regarding courses will be considered by the Committee; therefore, the student should develop a list of courses which he/she wishes to take. At the conclusion of the meeting to determine coursework, a degree plan with course options will be prepared by the Chair of the Committee. All committee members and the student must sign. A copy of the signed degree plan form will be sent to the Graduate Office. If after the degree plan is developed a student wishes to take a course other than the options listed, the student must receive permission of the Committee. If the student has selected the Thesis Option, he/she will coordinate the thesis activities through the Chair of the Committee. Once appointed, the Chair of the Committee serves as the student's advisor each semester.

## **PROGRAM OF STUDY**

The Department of Medical Technology offers two curriculum plans leading to the Master's degree in Medical Technology. One program is for the individual who possesses certification as a medical technologist from a recognized national certifying agency. This certification is an entrance requirement.

The second program is for the individual who does not hold certification as a medical technologist from a recognized national certifying agency. This program includes a medical technology practicum at the 500 level with hours that do not count toward the total hours required for the Masters' degree, but that allow the individual to become eligible to take a national certification examination. Certification from a recognized national certifying agency is a mandatory exit requirement.

Two options are offered to students in either curriculum plan:

- 1) Thesis Option or Non-Thesis Option. The Thesis Option requires 30 hours of approved coursework and 6 hours of Thesis. The student must declare the option at the Committee meeting to determine coursework. The non-certified graduate student must also complete 46 hours of practicum courses. The Non-Thesis Option requires 36 hours of approved coursework.

## COURSEWORK

A. Requirements:

All students must take at least nine (9) hours of courses determined by the Committee to be scientific coursework. All courses may be in the College of Health or other colleges, as deemed appropriate by the Committee for the emphasis selected by the student.

In addition, typically the committee will not allow practicum courses to apply to the Master's degree for students who are certified medical technologists. Exceptions may be made if the student did not have the course in their original practicum or the Committee feels that the length of time has been such that an update is necessary.

B. Examples (not exhaustive) of courses acceptable as coursework:

BSC	510	Human Parasitology
BSC	512	Medical Entomology
BSC	560	Pharmacology
BSC	561	Histology
BSC	562	Microtechnique
BSC	563	Pathobiology
BSC	564	Microscopy
BSC	571	Advanced Genetics
BSC	575	Medical Genetics
BSC	576	Molecular Biology
BSC	581	Pathogenic Microbiology
BSC	582	Advanced Pathogenic Microbiology
BSC	584	Virology and Tissue Culture
BSC	585	Viral Pathogenesis and Diagnosis
BSC	586	Immunology and Serology
BSC	587	Microbial Physiology
BSC	760	Cell Ultrastructure
BSC	776	Topics in Gene Regulation
BSC	780	Principles of Immunochemistry
CHE	521	Biochemistry I
CHE	522	Biochemistry II
CHE	721	Proteins
CHE	723	Enzymes
CHE	725	Lipids
CHS	525	Health Administration
CHS	540	Introduction to Biostatistics
CHS	622	Epidemiology
CHS	623	Biostatistics
CHS	627	Health Policy

HE	711	Higher Education in the United States
HE	712	The Community/Junior College
HE	713	Curricula In Higher Education
HE	715	Administration & Supervision of College Teaching
HE	716	Legal Issues in Higher Education
HE	717	Continuing Education & Community Service
MBA	500	Organizational Behavior
MGT	500	Management Theory
MGT	620	Organizational Behavior and Practice
MTC	604	Oncology
MTC	612	Clinical Laboratory Program Development
MTC	615	Clinical Laboratory Management
MTC	689	Seminar
MTC	691	Research
MTC	697	Independent Study
MTC	698	Thesis
MTC	692	Special Problems in Medical Technology

### **COMPREHENSIVE EXAMINATION**

Comprehensive Examinations will be both written and oral defense of the written. The Comprehensive Examination will be composed of at least six questions prepared by the Committee Chair and members. The Chair of the committee will be responsible for notifying the members regarding the deadline for submission of questions, compiling the questions and giving to the student, establishing deadlines with the student for completion of answers and returning questions/answers to the Chair, distribution of answers to Committee members for grading, and scheduling the defense of the written examination. Students will be given thirty (30) days to complete the examination (which includes weekends). The written examination requires answers that are referenced to current literature, which is generally considered to be within the past five years. The document is to be and double-spaced, with one inch margins and in 12 pt. Times Roman.

The written comprehensive examination is to be in Standard English. Edit the document for correct use of sentence and paragraph structure, choice of words, use of punctuation, spelling and grammar. Most word processing programs have options to expedite the processes of revising editing.

Each response should begin on a separate page, and the question should be restated as the title for the response. The response must be referenced in APA format. (APA guidebooks are available in the bookstore if you are unfamiliar with the format.) Information can also be found on the library website. Although references are essential, the response is to be in the student's own words. Plagiarism is to be avoided. A lengthy definition of plagiarism can be found in the

Southern Miss Student Handbook, and on the library website. The penalty for plagiarism may be failure of the exam.

The members of the committee have the right to reject an exam, or any portion of it, that does not meet the above guidelines.

Usually, the Comprehensive Examination should be taken at the end of the semester that coursework is completed. The Comprehensive Examination absolutely must be taken within one semester following completing coursework. The time for the Comprehensive Examination must be established with and approved by the student's committee. For students on the thesis Option, the comprehensive and thesis may be defended at the same hearing if within one semester of completing coursework.

Thesis chapter, written oral exam questions, etc. must be submitted to the committee members so that the members have 10 working days for reading.

### **THESIS PERFORMANCE PROCEDURE**

For students selecting the Thesis Option, the procedure is as follows:

1. Meet with Major Professor and discuss thesis topic.
2. Perform literature search on topic to determine viability of idea.
3. Develop proposal to include: Literature Review, Statement of Problem, Purpose of the Study, Methods, Statistical Analysis Method, Materials Needed, Equipment Needed, and Approximate Cost.
4. The Proposal should be given to the major Professor.
5. After the major Professor approves the Proposal, the major Professor will inform the Chair of the Committee (major Professor and Chair of Committee may be the same person) who will call a meeting of the Committee to approve the Proposal. (Copies of the Proposal should be given to the Committee member two weeks prior to the meeting.)
6. After the Committee obtains approval, work can begin on the topic.
7. Thesis completion deadlines are according to the published Graduate Office calendar; therefore student should consult the Graduate Office.