A Step Toward The Future
1998-2000 Graduate Catalog

Founded in 1923, and established as a four-year coeducational, state-supported college on September 1, 1951.

The provisions of this bulletin do not constitute a contract, expressed or implied, between any applicant, student and faculty member in Lamar University. Lamar University reserves the right to withdraw courses at any time, change fees, calendars, curricula, graduation procedures and any other requirement affecting students. Changes become effective when the proper authorities so determine the application to both prospective students and to the students already enrolled.

Lamar University is an equal opportunity/affirmative action educational institution and employer. Students faculty and staff members are selected without regard to their race, color, creed, sex, age, handicap or national origin, consistent with the Assurance of Compliance with Title VI of the Civil Rights Act of 1964; Executive Order 11246 as issued and amended; Title IX of the Education Amendments of 1972, as amended; Section 504 of the Rehabilitation Act of 1973. Inquiries concerning application of these regulations may be referred to the Vice President for Administration and Counsel.

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1998-99 Calendar
Fall Semester – 1998

August 1998
18 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.
20 Payment Day
21 Registration
24 Classes Begin
Schedule revisions – late registration with penalty fee
25 Last day for schedule revisions and/or
late registration with penalty fee
26 Applications for December 1998 graduation begin

September 1998
7 Labor Day – NO CLASSES
9 Twelfth Class Day

October 1998
2 Last day to drop or withdraw without academic penalty
Last day to petition for no grade
5 Last day to apply for December graduation
(graduate students only)

November 1998
9 Last day to pay for diploma, cap, and gown
12 Last day to drop and withdraw
16 Registration for Spring semester begins
27 Thanksgiving recess begins at 10:00 p.m.
Dining halls close at 6:00 p.m.
Residence halls close at 6:00 p.m.
29 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.
30 Classes resume at 7:00 a.m.

December 1998
8 Finals preparation day – no classes prior to 5:00 p.m.
Finals begin at 5:00 p.m.
9-15 Final examinations
16 Dining halls close at 9:30 a.m.
Residence halls close at 10:00 a.m.
Winter Mini-Session Begins
17 Grades for those graduating due by 8:30 a.m.
All other grades due by 4:00 p.m.
19 Commencement
Spring Semester – 1999

January 1999
10 Residence halls open at 1:00 p.m.
11 Dining halls open at 4:30 p.m.
12 Payment Day
13 Registration
14 Winter Mini-Session Ends
15 Classes Begin
18 Schedule revisions – late registration with penalty fee
19 Last day for schedule revisions and/or
late registration with penalty fee
29 Martin Luther King, Jr. birthday – NO CLASSES

February 1999
23 Last day to drop or withdraw without academic penalty
Last day to petition for no grade

March 1999
1 Last day to apply for May graduation
(graduate students only)
12 Spring recess begins at 5:00 p.m.
21 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.

April 1999
1 Last day to pay for diploma, cap, and gown
2 Good Friday – NO CLASSES
5 Registration for Summer and Fall begins
8 Last day to drop or withdraw

May 1999
4 Finals preparation day – no classes prior to 5:00 p.m.
Finals begin, 5:00 p.m.
5-11 Final examinations
12 Dining halls close at 9:00 a.m.
Residence halls close at 10:00 a.m.
Summer Mini-Session Begins
13 Grades for those graduating due by 8:30 a.m.
All other grades due by 4:00 p.m.
15 Commencement
# Summer Session – 1999
## First Term
### May 1999
- **28** Registration
- **Summer Mini-Session Ends**
- **Residence halls open at 1:00 p.m.**
- **Dining halls open at 4:30 p.m.**
- **31** Memorial Day – NO CLASSES

### June 1999
- **1** Classes begin – schedule revisions – late registration with penalty fee
- **2** Application for August 1999 graduation begins
- **4** Fourth Class Day
- **7** Last day to apply for August graduation (graduate students only)
- **14** Last day to drop or withdraw without academic penalty
- **29** Last day to drop or withdraw

### July 1999
- **1** Last day to pay for diploma, cap, and gown
- **2** Independence Day – NO CLASSES
- **7** Last class day
- **8** All grades due by 4:00 p.m.

## Second Term
### July 1999
- **7** Registration
- **8** Classes begin – schedule revisions and/or late registration with penalty fee
- **9** Last day for schedule revisions and/or late registration with penalty fee
- **13** Fourth Class Day
- **21** Last day to drop or withdraw without academic penalty
- **Last day to petition for no grade**

### August 1999
- **5** Last day to drop or withdraw
- **12** Last class day
- **13** Grades for those graduating due by 8:30 a.m.
- **14** Commencement

### Dates with Special Notes
- **31 May** – Memorial Day
- **30 June** – Independence Day
- **27 July** – Last day to drop course without academic penalty
- **29 July** – Last day to petition for no grade
- **29 August** – Last day to withdraw without academic penalty
- **30 August** – Commencement
1999-2000 Calendar
Fall Semester – 1999

August 1999
18 Residence halls open at 1:00 p.m.
19 Dining halls open at 4:30 p.m.
Payment Day
20 Registration
23 Classes Begin
Schedule revisions – late registration with penalty fee
24 Last day for schedule revisions and/or late registration with penalty fee
25 Applications for December 1999 graduation begin

September 1999
6 Labor Day – NO CLASSES
8 Twelfth Class Day

October 1999
1 Last day to drop or withdraw without academic penalty
Last day to petition for no grade
4 Last day to apply for December graduation
(graduate students only)

November 1999
12 Last day to drop and withdraw
12 Last day to pay for diploma, cap, and gown
15 Registration for Spring semester begins
24 Thanksgiving recess begins at 10:00 p.m.
Dining halls close at 6:00 p.m.
Residence halls close at 6:00 p.m.
28 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.
29 Classes resume at 7:00 a.m.

December 1999
7 Finals preparation day – no classes prior to 5:00 p.m.
Finals begin at 5:00 p.m.
8-14 Final examinations
15 Dining halls close at 9:00 a.m.
Residence halls close at 10:00 a.m.
Winter Mini-Session Begins
16 Grades for those graduating due by 8:30 a.m.
All other grades due by 4:00 p.m.
18 Commencement

AUGUST
S M T W T F S
1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31

SEPTEMBER
S M T W T F S
1 6 7 8 9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30

OCTOBER
S M T W T F S
1 2 3 4 5 6 7 8 9
10 11 12 13 14 15 16 17
18 19 20 21 22 23 24 25
26 27 28 29 30
31

NOVEMBER
S M T W T F S
1 2 3 4 5 6 7 8 9
10 11 12 13 14 15 16 17
18 19 20 21 22 23 24 25
26 27 28 29 30

DECEMBER
S M T W T F S
1 2 3 4 5 6 7 8 9
10 11 12 13 14 15 16 17 18
19 20 21 22 23 24 25 26 27
28 29 30
### Spring Semester – 2000

#### January 2000
- 9: Residence halls open at 1:00 p.m.
- 10: Payment Day
- 11: Registration
- 12: Winter Mini-Session ends
- 13: Classes Begin

Schedule revisions – late registration **with penalty fee**
- 17: Martin Luther King, Jr. birthday – NO CLASSES
- 18: Applications for May 2000 graduation begin
- 28: Twelfth Class Day

#### February 2000
- 29: Last day to drop or withdraw without academic penalty
- 29: Last day to petition for no grade

#### March 2000
- 6: Last day to apply for May graduation (graduate students only)
- 17: Spring recess begins at 5:00 p.m.
- 26: Residence halls open at 1:00 p.m.

### April 2000
- 7: Last day to pay for diploma, cap, and gown
- 7: Last day to drop or withdraw
- 10: Registration for Summer and Fall begins
- 21: Good Friday – NO CLASSES

#### May 2000
- 2: Finals preparation day - no classes prior to 5:00 p.m.
- 3-9: Final examinations
- 10: Dining halls close at 9:00 a.m.
- 10: Residence halls close at 10:00 a.m.
- 11: Summer Mini-Session Begins
- 11: Grades for those graduating due by 8:30 a.m.
- 13: Commencement
- 29: Memorial Day – NO CLASSES

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Summer Session – 2000
First Term

June 2000

1  Registration
   Summer Mini-Session ends
4  Residence halls open at 1:00 p.m.
   Dining halls open at 4:30 p.m.
5  Classes begin – schedule revisions –
   late registration with penalty fee
   Last day to apply for August graduation
   (graduate students only)
6  Application for August 2000 graduation begins
   Last day for schedule revisions and/or
   late registration with penalty fee
8  Fourth Class Day
16 Last day to drop or withdraw without academic penalty
   Last day to petition for no grade

July 2000

3  Last day to drop or withdraw
4  Independence Day Observed – NO CLASSES
7  Last day to pay for diploma, cap, and gown
   Last class day
13 All grades due by 4:00 p.m.

Summer Session – 2000
Second Term

July 2000

12 Registration
13 Classes begin – schedule revisions
   and/or late registration with penalty fee
14 Last day for schedule revisions
   and/or late registration with penalty fee
18 Fourth Class Day
26 Last day to drop or withdraw without academic penalty
   Last day to petition for no grade

August 2000

10 Last day to drop or withdraw
17 Last class day
   Dining halls and residence halls close at 6:00 p.m.
18 Grades for those graduating due by 8:30 a.m.
   All other grades due by noon
19 Commencement
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Dean of Graduate Studies: Robert D. Moulton, Ph.D.
Editor: Cynthia L. Hicks
A larger-than-life sculpture of Mirabeau B. Lamar, the father of Texas education, is located in the center of the Beaumont campus quadrangle.
General Information

Location

The Lamar University campus is located in Beaumont, Texas. With a population of more than 114,000, Beaumont is a diversified city, home not only to the University but also to businesses and industry stemming from a strong petrochemical and agricultural base. World-renowned companies are located in Beaumont to take advantage of the area’s resources and its educated workforce.

A host of cultural attractions offer a variety of leisure options from world-class museums and symphony presentations to shopping districts and many spring and fall festivals. A civic center, convention center and coliseum draw professional entertainers and a wide variety of business, social and professional groups to the city. Beaumont is convenient to lake, river and ocean recreation, located only a few miles from the balmy Gulf Coast and little more than an hour from the Big Thicket National Preserve, large lakes and piney woods.

The campus is home to the stately Mary and John Gray Library, Montagne Center coliseum, Setzer Student Center, Gladys City Boomtown, several residence halls and state-of-the-art computing and engineering facilities, including a leading-edge interactive video laboratory. Lamar University welcomes visitors. Information regarding tours may be obtained from the Office of Admission Services, P.O. Box 10009, Beaumont, Texas 77710, phone (409) 880-8888.

History

Lamar University originated on March 8, 1923, when the South Park School District in Beaumont authorized its superintendent to proceed with plans to open “a Junior College of the first class.” On September 17, South Park Junior College opened with 125 students and a faculty of 14. Located on the third floor of the South Park High School building, the college shared the library and athletic facilities with the high school. In 1932, separate facilities were provided and the name of the institution was changed to Lamar College, to honor Mirabeau B. Lamar, second president of the Republic of Texas and the “Father of Education” in Texas.

On June 8, 1942, as a result of a public campaign, a new campus was purchased and classes were held for the first time on the present campus in Beaumont. After World War II, the College grew to 1,079, and a bid to make Lamar University a state-supported senior college was introduced in the House of Representatives. The legislature approved the Lamar bill (House Bill-52) on June 4, 1949, creating Lamar State College of Technology effective September 1, 1951. Lamar was the first junior college in Texas to become a four-year state-supported college. Lamar continued to grow, building strong programs in engineering, sciences, business and education.

In 1962, a graduate school was established offering Master’s degrees in several fields. The Doctorate in Engineering was established in 1971. In the same year, House Bill-590 became law changing the institution’s status to the university level of higher education. Lamar State College of Technology, with an enrollment of 10,874, officially became Lamar University on August 23, 1971.

In 1969, an extension center was opened in Orange, and, in 1975, the long-standing private two-year Port Arthur College became Lamar University at Port Arthur. The Lamar University System, of which Beaumont was the primary component, was established by the 68th Session of the Texas Legislature with the passage of SB-620, which took effect in August 1983. In 1990, the Texas Higher Education Coordinating Board recommended
that all two-year programs at Lamar University be combined into the Lamar University Institute of Technology. The programs in the former College of Technical Arts, Allied Health programs, Office Technology and Restaurant/Institutional Food Management were placed in the new Institute. The Doctorate of Education in Deaf Education was established in 1993.

Lamar's growth has been steady and progressive, anticipating the evolving needs of its students. To facilitate this growth, the Texas legislature approved House bill-2313 to merge the Lamar University System with The Texas State University System. Effective September 1, 1995, Lamar University joined sister institutions Angelo State University, Sam Houston State University, Southwest Texas State University and Sul Ross State University.

Government

A board of nine regents, appointed by the Governor and approved by the State Senate for terms of six years, governs The Texas State University System. The Board of Regents delegates the direction of university affairs to the presidents, campus administrative officers and faculty.

Mission Statement

Lamar University is a comprehensive senior public university dedicated to providing a learning environment of the highest quality. The University is an educational, scientific, engineering, business, and cultural resource center committed to the three-fold mission of teaching, research and service. The University is committed to providing students with a liberal education in the context of a global and multicultural environment, and seeks partnerships with business, governmental, industrial and other educational organizations to more efficiently accomplish its goals.

Instructional Mission

Lamar University emphasizes quality teaching, student access to faculty, and careful student counseling. The University creates a liberating educational experience for each student which expands knowledge, awakens new intellectual interests, examines values, develops talents, provides new skills, and prepares each student to assume an effective role as a citizen in a democracy.

With historical commitments to quality educational programs in engineering, business, the arts and sciences, health sciences, education, and the visual and performing arts, the University focuses its unique strengths on significant problems of contemporary interest as evidenced by its recent initiatives in environmental science and engineering, gifted education, and deaf education.

Lamar University is strongly committed to the continual enhancement of teaching/learning methodologies and their systematic assessment.

The University's mission in graduate education is broad-based at the master's level, and includes the doctorate in engineering and in deaf education. Other doctoral-level educational opportunities for the region are enhanced through cooperative arrangements between Lamar University and other institutions of higher education. The University's mission in graduate education is characterized by an emphasis on professional fields of study.
Research Mission

As a comprehensive, regional university with extensive educational programs, Lamar University's academic efforts are directed to both applied and basic research, scholarship, and creative activities. Through its emphasis on the teacher-scholar model, the University encourages faculty members to be active in their respective disciplines, to involve both undergraduate and graduate students in research and creative pursuits, and to support the principle that research is inseparable from teaching.

Service Mission

The University's educational mission extends to all residents of the Southeast Texas area and, in special cases, beyond the region. In recognition of that mission, Lamar University provides a diverse outreach program including: credit and non-credit continuing education offerings responsive to the personal, career, and professional development needs of individuals in our region; specialized skills training and human resource development for business and industry on the Gulf Coast; and public service activities that respond to unique regional educational needs and cultural interests.

The University contributes to the cultural life of the region through cultural and artistic presentations and events utilizing the talents of faculty, students, and visiting lecturers, artists, and performers.

Students, faculty, and staff are encouraged to be involved in civic, cultural, service, and professional activities. By such volunteer and consultative activities, members of University demonstrate their citizenship within the larger community.

Accreditation and Approval

Lamar University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award degrees at the Associate, Baccalaureate and Doctoral levels. In addition, Lamar is approved by the Texas Education Agency. The College of Graduate Studies is a member of the Council of Graduate Schools in the United States, the Conference of Southern Graduate Schools and the Texas Association of Graduate Schools.

Programs in the College of Engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. In the College of Business, graduate programs are accredited by the American Assembly for Collegiate Schools of Business.

Other accreditations include Chemistry by the American Chemical Society; Music by the National Association of Schools of Music; the College of Education and Human Development by the Texas Education Agency; programs in Family and Consumer Sciences by the American Dietetic Association; Sociology by the Council on Social Work Education; programs in Speech-Language Pathology and in Audiology by the American Speech-Language-Hearing Association and in Deaf Education by the National Council for Education of the Deaf and the Texas Education Agency. The University is also a member of a number of academic councils, societies, associations and other such organizations.

The Library

The eight-story Mary and John Gray Library building dominates the campus from its central location. The Library occupies seven floors with on-line public access catalog to more than 1,000,000 volumes and 3,000 periodicals. Seating accommodates 1,200 students and faculty.
The first floor service areas include circulation, reference and interlibrary loans. The second floor houses reserve reading, current periodicals and government documents.

Four floors provide stacks for books and periodicals shelved in Library of Congress classification sequence from class A on the third floor through class Z on the sixth floor.

The seventh floor houses the library administrative offices, the Media Services Department, the Micro-Computer Lab and Special Collections.

The eighth floor offers expansion space for the future, but is presently shared with other University services. This spacious and elegant floor, furnished by community donors, serves as a University Reception Center for meetings and conferences.

Expanding library collections support continuously evolving academic programs. In addition to a collection of books and periodicals, the Library provides access to state and federal government documents and participates in the library networks which extend access to information resources. The Library coordinates multi-media programs on campus and has a basic collection of equipment and materials for central distribution.

**Research Office**

The Research Office is administered by the Associate Vice President for Research, who chairs the Research Council. This office promotes and funds internal research; oversees sponsored programs and technology transfer as well as patent, copyright and intellectual property policies; establishes liaison between the university and state and national funding sources; and assures that proposed projects comply with institutional and governmental regulations. This office also provides assistance to faculty in the development and submission of grant/project proposals by locating funding sources and providing editorial assistance in proposal preparation.

**Information Systems (Computing Facilities)**

The University Information Systems Division is responsible for providing the computing services required by the academic, administrative, and research communities of Lamar University.

The Computer Center, a department of the Information Systems Division, provides for administrative computing with a DEC 7620 computer system. This system is capable of processing 270 million instructions per second (MIPS), has 1.5 billion bytes of working memory and 61 billion bytes of disk storage. The operating system is Open VMS and is capable of handling in excess of 600 simultaneous users. The system supports two 1200 line per minute impact printers, one 600 line per minute impact printer, two laser printers, one reel-to-reel tape unit, and one cartridge tape units.

The Computer Center supports the academic mainframe computer needs with a DEC 2100 Alpha computer running Open VMS and a DEC 2100 Alpha computer running UNIX. Both DEC 2100 computers are capable of processing 70 million instructions per second (MIPS), has 256 million bytes of working memory, 14 billion bytes of disk storage, and a 4mm cartridge tape unit.

The Computer Center operates a DEC 2100 Alpha computer for the John Gray Library. This computer uses Open VMS as an operating system to run the third party library software package DRA. The library DEC 2100 is capable of processing 100 million instructions per second (MIPS), has 256 million bytes of working memory, and 20 billion bytes of disk storage, and one cartridge tape unit.

General use computer labs for students are located at various strategic locations on the campus. These labs utilize personal computers which can be used as terminals or work-
stations. The campus computer systems are connected using a fiber optic backbone which allows high speed data transmissions and connection to the Internet.

**Early Childhood Development Center**

Lamar University's Early Childhood Development Center is located at 950 East Florida. The Center provides high quality extended day-care services and pre-school, pre-kindergarten, and kindergarten programs for children between the ages of 18 months and five years.

The Center is staffed with degreed teachers who create a stimulating environment and provide unlimited opportunities for learning. In addition to providing care for young children, the Center, under the administration of the Department of Family and Consumer Sciences and the College of Education and Human Development, provides a site for college students to observe and work with children as part of their course work and training.

The Early Childhood Development Center accepts children on a part-time or full-time basis with the fees based on the number of hours children are in attendance.

**Career Center**

A full range of testing services is provided at 102 Galloway Business Building for aptitude, achievement, and career interests. Professional staff assist students with concerns, questions, problem solving, adjustment, decision making, goal planning, testing and skill development. Staff will refer students to other offices and personnel in accord with the needs and interests of the individual.

Educational counseling is available. In order to best serve as many students as possible, problems of a long-term, therapeutic nature cannot be addressed; however, initial consultation is available and, when feasible, referral to campus and community resources.

The Center coordinates testing required by the University; provides individual interest, aptitude, and personality assessment; and, as a National Test Center, administers the following:

- SAT (Scholastic Aptitude Test) for undergraduate admissions. The SAT II Subject Area Tests are also given for students who wish to receive college credit (See Subject Area Tests).
- ACT (American College Testing Program) may be used instead of the SAT for undergraduate admissions.
- TASP (Texas Academic Skills Program) is required of all students before completion of 9 semester hours (unless exempted).
- PreTASP is used for some students in the admissions process to determine if developmental courses and special advising are needed for the student to have academic success.
- CLEP (College Level Examination Program) may be used to get credit by examination. See detailed description of CLEP elsewhere in this catalog.
- ORE (Graduate Record Exam required for admission to many graduate schools.
- GMAT (Graduate Management Admission Test) is required for admission to graduate Colleges of Business.
- LSAT (Law School Admission Test).
- MCAT (Medical College Admission Test).
• MAT (Miller Analogies Test) required for admission to some graduate programs.

The Career Center provides five core services:

1) Career Assessment, testing, exploration and decision making. This is appropriate for all students, and is particularly important for the person who is trying to make a decision on a major.

2) Training—seminars on topics of resume writing, interviewing and the job search are taught many times each semester. Internet possibilities and videotapes are also used in training.

3) Part-time job placement, summer jobs and internships.

4) Full-time job placement and on-campus recruiting, plus a resume referral system are available to graduating students and alumni.

5) The teachers career fair is held in April each year and features sixty school district recruiters to interview teaching candidates.

6) The Career Fair for all majors is held in February each year and affords students the opportunity to explore careers and to meet with future employers.

7) The Career library has information about employers, and has resources about career planning on video, hard copy and computer formats.

Information and registration forms for tests are available at 102 Galloway Building, phone 409-880-8444.

Health Center

The university maintains a Health Center for use by Lamar University, Beaumont campus, students for out-patient services. The student Health Center offers medical services, use of the pharmacy, short-term psychological counseling, and health education to students presenting a current validated ID during regular hours when the university is in session. When the university is not in session, health care becomes the individual student's responsibility.

A physician is available during regular hours to treat students for minor acute illnesses or injuries that do not require constant supervision. No appointment is needed and students are charged only for medications and supplies, not for the doctor's visit. More extensive laboratory tests and x-rays are available if requested by the Health Center Director or physician. Should the need arise, expenses incurred for ambulance service or off-campus medical services become the responsibility of the student.

Veterans Education

Lamar is approved for educational training under all of the Veterans Educational Assistance programs.

Veterans are encouraged to complete admissions and testing requirements 90 to 120 days prior to the period for which they wish to enroll. Veterans and their dependents who are interested in attending Lamar under federal laws which provide educational assistance are directed to secure information by consulting the Office of Veterans' Affairs, Wimberly Student Affairs Building.

This office advises veterans on program and training opportunities, academic assistance and counseling.
Loan Funds and Scholarships

Financial assistance in the form of loans, grants and scholarships is available for a number of qualified students. Details may be obtained on request from the Director of Financial Aid, P.O. Box 10042, Beaumont, TX 77710.

Graduate Assistantships

Teaching and research assistantships are available in the various graduate departments. Additional information may be obtained either from the department chair or from the Dean of the College of Graduate Studies. Assistantships are awarded only to those individuals who meet all requirements for admission to a graduate degree program.

Graduate assistantships at the master's and doctoral levels are available in a number of academic departments. All assistantships are intended to be of direct educational benefit to appointees. In order to be approved by the Graduate Dean, an assistantship appointment must relate to the student's academic objective and be supervised by Lamar University faculty.

Graduate assistants are Lamar University employees who are also graduate students. They are employed by a department or college to instruct in classrooms and labs, advise undergraduate students, proctor exams, supervise practica, assist in research and creative activity, or perform other teaching research and creative duties.

Under specified conditions, Texas law permits the waiver of out-of-state tuition status for some classifications of graduate assistants. When these conditions are met, graduate assistants may be allowed to pay tuition at the less expensive in-state or Texas resident rate. Contract the Graduate Office for a copy of applicable regulations.

Teacher Certification

Lamar University has been approved by the State Board for Education Certification to offer professional certification programs in administration, counseling and guidance, elementary, secondary, special education, reading, and supervision. Specific information concerning certification may be found in the College of Education and Human Development section of this catalog or may be obtained from the Director of The Division of Professional Services in the College of Education and Human Development.

Certification in Special Education and in Composite Science

The College of Education and Human Development has been approved by the State Board for Education Certification to offer an alternative certification program in the areas of Generic Special Education K-12 and Composite Science (Secondary, 6-12) and Elementary Bilingual Education (Grades 1-6). Information concerning either of these programs may be obtained from the Division of Professional Services.
Fees and Expenses

Lamar University reserves the right to change fees in keeping with acts of the Texas Legislature and the University's Board of Regents. By registering for classes at the University, the student agrees to abide by all the policies of the University.

Payment of Fees

A student is not registered until all fees have been paid in full or the student has paid the equivalent of a down payment on the installment plan (if available). Payment may be made by check, MasterCard/Visa/Discover/AMEX, money order, currency or any kind of financial aid (exemptions, loans, grants and scholarships). Checks and money orders should be made payable to Lamar University and will be accepted subject to final payment. The University will not accept counter checks, postdated checks, credit card checks or altered checks. Excess payments will be refunded either in cash or check at the discretion of the University. Students on a "cash only" basis will be restricted to paying by MasterCard/Visa/Discover/AMEX, money orders, currency or financial aid. Payments can be made:

1. All forms of payment at the Cashier's office during working hours.
2. Credit card payments can be made by phone by calling 839-2900.
3. Drop box at Plummer 116 for check (with social security number and campus) or credit card (SSN, campus, card number, amount, expiration date, card holder) in a sealed envelope. These payments will be considered part of the next business day's activity if paid after 7:00 a.m. No cash!
4. Drop box at Setzer Center for check (with social security number and campus) or credit card (SSN, campus, card number, amount, expiration date, card holder) in a sealed envelope. These payments will be considered part of the next business day's activity if paid after 7:00 a.m. No cash!
5. Drop box at Wimberly 114 for check (with social security number and campus) or credit card (SSN, campus, card number, amount, expiration date, card holder) in a sealed envelope. These payments will be considered part of the next business day's activity if paid after 4:00 p.m. No cash!
6. Mailed to the Payment Center at P.O. Box 200294, Houston, TX 77216-0294.
7. At Lamar University-Port Arthur and Lamar University-Orange, all payments except credit card can be made during regular hours at the cashier offices.

Students who are delinquent on obligations will be prohibited from registering for class until all obligations are paid in full. Also, holds are placed on academic records so that students cannot obtain transcripts until all obligations are paid in full.

Delinquent obligations to the University will be sent to a collection agency (409-838-8111) and reported to credit bureaus. All costs of collections are paid by the student which is generally an additional 33.333% of the student's obligations to the University. Delinquent accounts must be paid at the collection agency. Payment cannot be accepted by Lamar if the account has been forwarded to a collection agency.

Installment Payment Program

Students may enter into the installment program of the University upon verbal or written request in a Fall or Spring semester. Students who do not pay in full the tuition and fees will be placed in the installment program if the student has paid at least the amount for the down payment (otherwise classes will be dropped). The installment program generally requires a 50% downpayment with the next 25% due about a month after the semester starts and the final 25% due about two months after the semester starts.
A non-refundable service charge of $20 is assessed for the installment program. A late fee of $15 will be assessed beginning the first day after an installment due date for each delinquent installment payment. Reductions of fees for students in the installment program from drops or withdrawals are calculated as a percentage of the total fees assessed, not as a percentage of any partial payments.

**Tuition**

Tuition has two components to it: the portion set by the State (conventional tuition) and the portion set by the Board of Regents though regulated by State statutes (the general use fee). By State statute, both of these items must be billed together and called "tuition."

The State portion (conventional tuition) is based upon the number of hours for which the student registers, and is determined by the student's classification as a Texas resident or a non-Texas resident. Determination of legal residence for tuition purposes is made on the basis of statutes of the State of Texas by the Admissions Office. Tuition is remitted to the State by the University. The current rate is $34 per hour with a minimum $120 ($80 for Summer sessions) moving to $36 per hour in Fall 1998 and increasing by $2 per hour every Fall thereafter.

The general use fee portion is assessed to support University debt service and other University functions that are not supported by state funding. Approximately 70% of this fee is used to finance debt service. Other items supported by this fee include the post office, print shop, supply center, cashiering, and other institutional support functions. The current rate is $20 per hour moving to $22 per hour in Fall 1998 and increasing by $2 per hour every Fall thereafter.

Combined, the current rate is $54 per hour with a minimum $140 ($80 for Summer sessions) moving to $58 per hour in Fall 1998 with a minimum of $142 ($82 for Summer sessions) and increasing by $4 per hour every Fall thereafter.

**Student Responsibility for Residence Classification**

The responsibility of registering under the proper residence classification is that of the student. If there is any possible question of the student's right to classification as a resident of Texas, it is his/her obligation, prior to or at the time of registration, to raise the question with the Director of Admissions and have his/her status officially determined.

Every student who is classified as a resident student but who becomes a nonresident at any time by virtue of a change of legal residence by his/her own action or by the person controlling the student's domicile, is required to notify the Dean of Records and Registrar.

**Publication of and Public Access to Thesis/Field Study/ Dissertation Abstracts**

The Graduate Council requires that thesis, field study, and dissertation abstracts be published by University Microfilms. Fees for this service are included in the binding fees for the two copies of the thesis, field study, or dissertation that go to the library (one for the stacks and one for archives). Thus, the binding fees are $40 for the first two copies of a thesis and $50 for the first two copies of a field study or dissertation. The fee is $13.65 for each additional bound copy. If copyrighting is desired, another $35 is charged. All theses, field studies, and dissertations will be placed in the library if permission to do so is granted by the student.
Refund of Tuition and/or Fees

Students requesting a refund of tuition and/or fees resulting from dropped courses or from withdrawing from the University should direct questions to the Cashiers' Office. Refunds are calculated as a percentage of total fees assessed, not as a percentage of partial payments on installments. Refunds are generally processed at the end of the second week past the 12th semester day for Fall or Spring (2 weeks after the 4th semester day for summer session).

Dropped Courses

In order to receive a 100% reduction of tuition and fees for dropped courses, a student must drop according to the schedule below, and remain enrolled in some hours with the University. Questions should be directed to the Cashier's Office.

Fall or Spring Semester

1. Through the twelfth semester day, 100 percent.
2. After the twelfth semester day, no refund.

Summer Session

1. Through the fourth semester day, 100 percent.
2. After the fourth semester day, no refund.

Withdrawal from the University

Tuition and fees may be reduced when a student withdraws. Depending on the amount of reduction and what the student has paid, the student may receive a refund or may still owe money to the University. Any student who officially withdraws from the University will receive a reduction on tuition and fees according to the following schedule for tuition, Setzer Center fee, student service fee, course fees, library fee, computer use fee and private lesson fees according to the following schedule.

Fall or Spring Semester

1. Prior to the first semester day, 100 percent.
2. During the first through fifth semester days, 80 percent.
3. During the sixth through tenth semester days, 70 percent.
4. During the eleventh through fifteenth semester days, 50 percent.
5. During the sixteenth through twentieth semester days, 25 percent.
6. After the twentieth semester day, none.

Summer Session

1. Prior to the first semester day, 100 percent.
2. During the first, second or third semester day, 80 percent.
3. During the fourth, fifth or sixth semester day, 50 percent.
4. Seventh semester day and after, none.

The $10 Property Deposit is refundable upon written request by the student to the Cashiers' Office.
Withdrawing from the University does not relieve the student of any financial obligations under the Installment Payment Program or for any student loans as these are the student's legal financial commitments.

No reduction on student services fee or library fee is made unless the I.D. card is returned. No reduction on parking fee is made unless the permit is returned. Refund on property deposit is given only after written request to the Cashier's Office. Photo ID Services will replace the ID card when the student returns to the University and is paid in full for the semester. Questions should be directed to the Cashier's Office.

Summaries of Fees

Following are "Summaries of Fees" in effect at press time which can be used in determining total tuition and fee charges. The total amount of these fees are typical of other state universities in Texas though specific fees will vary from university to university. Note that these do not include course fees and it is assumed the student is enrolled only on the Beaumont campus.

Additional fees and charges which are applied on a selective basis are listed following the Summary of Fees.

Lamar University
Summer 1998

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<th>No.</th>
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Parking: $12; ID: $5; Property Deposit is a one-time fee; Other course and materials fees may apply.
Note: Fees are subject to change by action of the Board of Regents or the Texas State Legislature.
### Lamar University
#### Fall 1998/Spring 1999

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#### Summer 1999

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Parking: $12; ID: $5; Property Deposit is a one-time fee; Other course and materials fees may apply.

Note: Fees are subject to change by action of the Board of Regents or the Texas State Legislature.
**Student Service Fee**

The student service fee supports student activities such as athletics, recreational sports, the University Press, the Health Center and other student services. The current rate is $15 per hour with a maximum of $138.

**Setzer Student Center Fee**

This fee supports the Setzer Student Center and its programs. The current rate is $30 per long semester and $15 per summer session.

**Course Fees**

Various courses have additional fees associated with them. Students should always check with the departments offering the class to see if additional fees will be assessed. What follows is a summary of some fees associated with some classes.

<table>
<thead>
<tr>
<th>ARTS AND SCIENCES</th>
<th>EDLD 5398</th>
<th>$85.00</th>
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| ARTS 5305 | $55.00 |
| ARTS 5323 | $50.00 |
| ARTS 5325 | $28.00 |
| ARTS 5326 | $28.00 |
| ARTS 5335 | $28.00 |
| ARTS 5365 | $28.00 |
| ARTS 5385 | $44.00 |
| ARTS 5386 | $39.00 |
| CMDS 5309 | $25.00 |
| CMDS 5312 | $2.00  |
Computer Use Fee

This fee primarily supports both the administrative mainframe computer and the academic mainframe computer. The current rate is $3 per hour with a maximum of $30.

Library Use Fee

This fee is used to support the library. As every course (including field center courses) are given the mandate to use the library, all students are charged this fee. The current rate is $3 per hour with a maximum of $30.

Private Lessons in Voice and Instrumental Music

Graduate applied music courses (per semester hour) $18.00

Late Registration Fee

A charge of $10 is made for late registration or for paying after the start of the semester (not including the second or third payments under the installment plan).

Parking Fee

Each student who pays the necessary fee is issued a card that permits parking on the campus. This card is numbered and is to be displayed as instructed in official parking and traffic regulations, which are issued when automobiles are registered. Strict observance of traffic and parking regulations is necessary for the safe, orderly flow of vehicles in the campus area.

Charges for parking on campus are made at registration. Automobile registration fees are as follows: Fall Semester, $32; Spring Semester, $22; Summer, $12. Only one registration is required during an academic year, and a student’s parking fee is honored until the end of Summer Session II.

Property Deposit

Each student will be required to pay a $10 property deposit. Any unused portion of the $10 will be refunded upon request to the Cashiers’ Office after the student graduates or withdraws from the University. If a student attends the university for more than four years, this fee will be charged again.

Health and Accident Insurance

Health and accident insurance coverage is available at registration for students carrying nine or more semester hours. This or similar insurance is required of all international students. Additional information may be obtained from the Student Affairs Office.
Miscellaneous Fees

Microfilming of abstract and binding of first two copies of thesis ........................................ $40.00
Microfilming of abstract and binding of first two copies
  of field study or dissertation  ......................................................................................... 50.00
Thesis, field study, or dissertation binding (each copy after the first two) ....... 13.65
Diploma fees (with tax) ....................................................................................................... 18.45
Cap, gown and hood (disposable) – Master’s (plus tax) ......................................................... 41.00
Cap, gown and hood (rental) – Doctor’s (plus tax) ................................................................. 33.00
Copyrighting ....................................................................................................................... 35.00
 Transcript Fee .................................................................................................................. 5.00
Photo Identification .......................................................................................................... 5.00

Insufficient Funds Fees

Checks written to the University and returned unpaid for any reason will result in a
$25 charge plus applicable fees for a delinquent account (e.g. $10 late registration fee,
$15 late installment payment fee, etc.). Students with a returned check will be on “cash
only” status for the duration of their enrollment at Lamar, subject to appeal. Students on
a “cash only” basis are prohibited from paying with a personal check (all other payment
methods are acceptable).

Fine and Breakage Loss

All library fines, charges for breakage or loss of equipment or other charges must be
paid before a transcript of credit or a permit to re-enter the University will be issued.

Matriculation Fee

A matriculation fee of $15 will be incurred by students who withdraw prior to the first
day of class. This $15 fee will be deducted from refunds.

Housing

The student housing program at Lamar is designed to supplement the academic
program by providing opportunities for social and intellectual development and recre-
ation in a pleasant living environment. The University recently completed a multi-million
dollar renovation program, making its residence halls among the most modern in Texas.
A variety of living styles is available and includes modern furniture, semi-private rooms,
carpet, central heating and air conditioning and various color schemes in the dormitories.
Apartment accommodations in newly remodeled buildings also are available.

Students who do not feel the residence hall program meets their personal needs may
elect to find living accommodations off campus.

Questions concerning the housing system, its policies, room and board rates, should
be directed to the Student Housing Office, Lamar University, Box 10041, Beaumont,
Texas 77710.
The Mary and John Gray Library, centerpiece of the Lamar University campus, has on-line access to more than 1 million volumes and 3,000 periodicals.
Academic Information

Course Numbering

Semesters of a course are numbered separately and each number contains a four character prefix and a four digit number. The alpha portion is an abbreviation of the subject area, while the numeric portion provides specific information about the course. The first digit of the numeric portion indicates the level of the course (1=freshman level, 2=sophomore level, 3=junior level, 4=senior level, and 5 and 6=graduate level). The second digit indicates the number of semester credit hours earned by satisfactorily completing the course. The third and fourth digits are sequencing numbers. Master's level courses are numbered 5000. Doctoral level courses are numbered 5000 and 6000. Students are responsible for registering in the correct level of courses.

The second figure indicates the number of semester hours credit. The third figure or figures indicates the order in which the course normally is taken.

In this bulletin, each course title will be followed by three digits separated by colons such as (3:3:1). This code provides the following information. The first number is the semester hours of credit for the course. The second number is the class hours of lecture, recitation or seminar meetings per week. The third number is the required laboratory hours per week. The letter “A” indicates that the hours are arranged, usually with the instructor of the course.

Changing Schedules

All section changes, adds and drops must be approved by the department chair of the student's major field. All such changes are initiated by the completion of the proper form available in the department chair's office. Usually, a course may not be added after the first two days of a regular or summer session.

Dropping Courses

After consultation with their advisor and/or department chair, students may drop a course and receive a grade of “Q” during the first six weeks (two weeks in the summer session) of the semester. For drops after this penalty-free period, grades are recorded as “Q” or “F” indicating that the student was passing or failing at the time of the drop. A grade of “Q” may not be assigned unless an official drop has been processed through the Records Office or telephone Voice Response Registration System. A student may not drop a course within 15 class days of the beginning of the final examinations or five class days before the end of a summer term.

Students should check published schedule for specific dates. A written petition to the Dean of the College in which the course is offered is required of students wishing to drop after the official drop date.

Withdrawal from the University

Students wishing to withdraw during a regular semester or summer term should fill out a Withdrawal Petition available in the Records Office. Students must clear all financial obligations, and return all uniforms, books, laboratory equipment and other materials to the point of original issue. However, if the student is unable at the time of withdrawal to clear financial obligations to the University and files with the Records Office an affidavit of inability to pay, the student will be permitted to withdraw with the
acknowledgement that transcripts will be withheld and re-entry to Lamar University as a student will not be permitted until all financial obligations are cleared. Copies of the withdrawal form signed by the student and by the department chair must be presented to the Records Office by the student. The student will receive a receipt.

The Finance Office, on application before the end of the regular semester or summer session, will return such fees as are returnable according to the schedule shown under the “Fees” section of this catalog. If a withdrawal is made before the end of the sixth week (second week of a summer term) or if the student is passing at the time of withdrawal after the sixth week, a grade of “W” is issued for each course affected. A grade of “F” may be issued for all courses not being passed, at the time of withdrawal after the penalty-free period.

A student may not withdraw within 15 class days of the beginning of final examinations during a regular semester or five class days before the end of a summer term. A student who leaves without withdrawing officially will receive a grade of “F” in all courses and forfeit all returnable fees. Students should check the published schedule for specific dates. Students wishing to withdraw after the official withdrawal date may review the issue with their Dean.

Enforced Withdrawal Due to Illness

The Director of the Health Center and the Vice President for Student Affairs, on the advice of competent medical personnel, may require withdrawal of or deny admission to a student for health reasons (mental or physical).

Academic Records

Academic records are in the permanent custody of the Records Office. Transcripts of academic records may be secured by an individual student personally or will be released on the student’s written authorization. College transcripts on file from other colleges will not be duplicated by Lamar University’s Records Office.

Students who owe debts to the University or who have not met entrance requirements may have their official transcripts withheld until the debt is paid or credentials are furnished.

Chapter 675, Acts of the 61st Legislature, 1969 Regular Session, provides that “no person may buy, sell, create, duplicate, alter, give or obtain a diploma, certificate, academic record, certificate of enrollment or other instrument which purports to signify merit or achievement conferred by an institution of education in this state with the intent to use fraudulently such document or to allow the fraudulent use of such document.”

“A person who violates this Act or who aids another in violating this Act is guilty of a misdemeanor and upon conviction, is punishable by a fine of not more than $1,000 and/or confinement in the county jail for a period not to exceed one year.”

Educational Records and Student Rights

The following information concerning student records maintained by Lamar University is published in compliance with the Family Education Rights and Privacy Act of 1974, PL 93-380.

Access to educational records directly related to a student will be granted to him or her unless the type of record is exempted from the provision of the law.

The types, locations and names of custodians of educational records maintained by the University are available from the Registrar.
Access to records by persons other than the student will be limited to those persons and agencies specified in the statute. Records will be maintained of persons granted such access and the legitimate interest in each case.

The release of information to the public without the consent of the student will be limited to the categories of information which have been designated by the University as directory information and which will be routinely released. The student may request that any or all of this information be withheld from the public by making written request to the Registrar. The request must be made by the last official day to register for a given session and applies to that session only. Directory information includes name, current and permanent address, telephone listing, date and place of birth, marital status, country of citizenship, major and minor, semester hours load, class schedule, classification, eligibility for and participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, with dates, and the last educational agency or institution attended.

A student has the right to challenge records and information directly related to him or her if they are considered to be inaccurate, misleading or otherwise inappropriate. Issues may be resolved either through an informal hearing with the official immediately responsible or by requesting a formal hearing. The procedure to be followed in a formal hearing is available in the Records Office.

The right of parental access to student records may be established by either of two methods; first, by the student filing a written consent statement or, second, by the parent validating the student's dependency as defined by IRS.

**Summons**

An official summons takes precedence over other university activities of the student and should be answered promptly on the day and hour designated.

**Falsification of Records**

A student who makes a false statement to any university official or office or on any official form submitted to the University is subject to immediate dismissal.

**Student Debts**

The University is not responsible for debts contracted by individual students or student organizations and will not act as a collection agency for organizations, firms or individuals to whom students may owe bills.

Students and student organizations are expected to honor contractual obligations promptly.

Penalty for failure to clear up these obligations may be (a) no readmission, (b) withholding of grades and transcripts, (c) withholding of degree.

**Parking**

At registration, each student who pays the necessary fee is issued a permit which allows parking on the campus. This permit is numbered and is to be attached to the back of the rear-view mirror of the car.
Change of Address or Name

Students are responsible for all communications addressed to them at the address on file in the Office of Student Development, in the Office of the College of Graduate Studies and in the Records Office. Any student who moves during a semester must immediately register the change of address in the above offices. Change of address forms are available in the Records Office.

Change of name due to marriage, or correction of name because of spelling errors, may be made by completing a name change card at the Records Office. All name changes must be accompanied by a copy of the legal document making the name change official. This document will be kept on file in the student's confidential folder.

Class Attendance

Regular class attendance is important to the attainment of the educational objectives of the University. Especially in lower division courses and in large classes at any level, the instructor should keep attendance records and should formulate an attendance policy consistent with departmental policies but suited to the needs of the particular course. The instructor's policy is to be explained in detail to the class at the beginning of the semester.

Policy on Student Absences on Religious Holy Days

In accordance with the Texas Education code 51.911, a student who is absent from classes in observance of a religious holy day will be permitted to take an examination or complete an assignment provided he/she notifies his/her instructor within 15 days of the beginning of the semester. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code.

"Religious holy day" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code.

Notifications of planned absences must be in writing and must be delivered by the student either (a) personally to the instructor of each class, with receipt of the notification acknowledged and dated by the instructor, or (b) by certified mail, return receipt requested, addressed to the instructor of each class. Upon review of the request, instructors will sign and date the receipt of the notice, retaining a copy for the instructor and returning one copy to the student.

Instructors may refer any questions regarding the qualification of the absence to the Associate Vice President and Dean of Students. Students may be required to present to the Associate Vice President and Dean of Students a written statement documenting that such absence qualifies under the terms of a religious-holy day.
College of Graduate Studies

History

The College of Graduate Studies was instituted in Fall 1960 with the offering of the Master of Arts degree in the fields of history and English.

In 1962, master’s degrees were begun in mathematics, engineering and elementary education; in 1965, in business administration, chemistry, special education and secondary education; in 1968, in health and physical education, political science, speech-language pathology, audiology, and guidance and counseling; in 1969, in biology, and in 1970, in educational supervision. Also in 1970, a doctor’s degree in engineering was authorized. In 1972, a master’s degree in school administration was approved. Master’s degrees in public administration and in psychology were authorized in 1974. In 1975, master’s degrees in music, music education and home economics were initiated. In 1981 the Master of Science in Deaf Education was approved and the Master of Engineering Management degree was begun in 1983. A Master of Science in Computer Science was added in 1984. Master’s degrees in Environmental Science and in Environmental Engineering were added in 1990. A Doctor of Education in Deaf Education was approved beginning in 1993.

Objectives

The objectives of the College of Graduate Studies are as follows:

1. Advancement of knowledge through research.
2. Intensification within a student’s chosen field of specialization and allied areas.
3. Development of the student’s skill in the methodology of research.
4. Promotion of the power of independent thought by teaching students to take charge of their own intellectual advancement.
5. Introduction to the profession and its organization and protocols.

Degrees Offered

Master of Arts
- English, History, Visual Arts (Art History)

Master of Business Administration
- General Emphasis

Master of Education
- Elementary Education, Counseling and Development, Secondary Education, Special Education, Supervision, Administration

Master of Engineering

Master of Engineering Management

Master of Engineering Science

Master of Music

Master of Music Education

Master of Public Administration
Master of Science
- Audiology, Biology, Chemistry, Community Psychology, Computer Science,
  Deaf Studies/Habilitation, Environmental Engineering, Environmental Studies,
  Industrial and Organizational Psychology, Speech-Language Pathology

Doctor of Education in Deaf Education
Doctor of Engineering

Regulations

Student Responsibility

It is the responsibility of each student to know the regulations of the Graduate College
and the major department, to enroll in the appropriate course work to complete the
degree plan, and to maintain the standards of the University, the College of Graduate
Studies, and specific departments and programs.

Enrollment

Admission to Graduate Programs

All students seeking admission to a graduate degree program must first meet the
minimum standards of the College of Graduate Studies. Applicants must also have the
approval of the department in which the degree program is offered. The admission
standards of departments may exceed those of the College of Graduate Studies.

Applications for admission to graduate programs are processed by the Graduate
Admissions Coordinator. The Graduate Admissions Coordinator sends to graduate
programs only those applications which meet the minimum standards of the College of
Graduate Studies. The graduate departments then select those to be recommended to the
Graduate Dean for admission. NOTE: Meeting the admission standards of the Graduate
College does not imply admission to a particular degree program. The Graduate Dean
notifies the Graduate Admissions Coordinator of admission decisions and the Coordinator
provides written notification of admission status to the applicants. Statements by
other university officers concerning the applicant’s admissibility are not valid until
confirmed by the Graduate Dean.

Admission to any degree program is valid for one year from the admission date. The
applicant who does not enroll during that period will be required to resubmit all
application materials and meet the admission standards in force at the time of the second
application.

Graduate students wishing to change from one major field to another must make
application to the Office of the Graduate Dean and must meet all specific program
admission requirements for the new major.

1. Application Deadlines: Domestic students (U.S. citizens and permanent resi-
dents) must submit all application materials at least 30 days before Fall, Spring,
or Summer registration. Deadlines for international students are May 15 for Fall
semester, October 1 for Spring, and February 15 for Summer terms.

2. Application Submission by Domestic Students (U.S. citizens or permanent
residents): Applicants for admission to the College of Graduate Studies must
submit the following to the Graduate Admissions Coordinator at least 30 days
before registration:
A. Completed Application Form

B. Transcripts. Submit an official transcript from each college or university attended. All transcripts submitted to Lamar University become the property of the University and are not returnable.

C. GRE and GMAT Test Scores. With two exceptions, all prospective graduate students are required to submit scores on the Graduate Records Examination (GRE). Applicants should have the Educational Testing Service, which administers the GRE, send test scores directly to Lamar University. The two exceptions to the GRE requirement are applicants for the Master of Business Administration (MBA) and deaf applicants. MBA applicants are not required to take the GRE, but must submit scores on the Graduate Management Admission Test, GMAT. See the College of Business section of this Bulletin for specific requirements. Deaf applicants may substitute performance intelligence and reading ability test scores for the GRE. GRE and GMAT scores more than five years old will be accepted only with permission of the Graduate Dean.

3. Deaf applicants who have a severe or a profound hearing loss acquired congenitally or prelingually will be considered on an individual basis and need not submit GRE or GMAT scores. In lieu of GRE/GMAT scores, deaf applicants must submit above-average performance intelligence scores (preferably the performance scale of the WAIS-R) and above-average university grades, pass an interview with an admission committee comprised of faculty from the receiving department, and demonstrate adequate literacy and communication skills for graduate training. Literacy in this case includes both the reading and writing of English, but not necessarily equivalent to hearing norms. Communication skill may be demonstrated in sign language and/or speech.

4. Admission Standards for Domestic Students (U.S. citizens and permanent residents):

A. Undergraduate Degree. A prospective student must have a bachelor's degree from an institution approved by a recognized accrediting agency.

B. GRE Scores and Grade Point Average (GPA). All applicants for full admission, except for deaf students and those seeking admission to the MBA program, must meet the institutional GRE and GPA standard according to the formula \((\text{GPA} \times 200) + (\text{GRE V+Q}) \geq 1350\). The GPA used in the formula may be either the overall or the last 60 semester hours, whichever is higher. The grade point average is calculated by dividing the total number of grade points earned by semester hours considered (either the total number of semester hours attempted or by the last sixty semester hours). For this computation “A” equals 4 grade points, “B” equals 3, “C” equals 2, “D” equals 1, and “F” equals 0. Individual departments may have GRE and GPA standards which exceed the institutional minimum. See the department sections of this catalog for admission standards which vary from the institutional minimum.

C. GMAT Scores. Admission to the Master of Business Administration (MBA) program is based on a formula which considers both the undergraduate GPA and the GMAT score. See the College of Business section of this catalog for details.

D. Undergraduate Grade Point Average. Our admission standard of \((\text{GPA} \times 200) + (\text{GRE V+Q}) \geq 1350\) is such that lower GPAs require higher GREs. Similarly, for the College of Business, the admission formula considers the GPA in such
a way that the GMAT and GPA are interdependent (the GPA minimum "floats" in relationship to the applicant’s GMAT score). See the College of Business section of this catalog for details.

E. Provisional Admission. In those departments or programs that have admission standards exceeding the institutional minimum, we allow, at departmental discretion, provisional admission. A student admitted provisionally must complete the first nine semester hours of graduate work with a GPA of at least 3.0. A student who does not meet the 3.0 GPA after nine semester hours is subject to dismissal.

F. Undergraduate Work in Intended Major Field, Prerequisites and Deficiencies. The applicant for graduate study ordinarily must have completed no fewer than 24 semester hours of undergraduate work in the intended major field, 12 of which must be at the junior and/or senior level. Applicants who do not meet this requirement may be required to make up such deficiencies as prescribed by the graduate major. A GPA of 3.0 for assigned deficiency/leveling courses must be maintained and grades below "C" will not be accepted. Departments which wish to do so may establish more stringent requirements. MBA students with deficiencies will be required to complete first year MBA courses as determined by the College of Business with a grade of "C" or better and an overall GPA of "B" or better in all course work taken.

5. Admission Procedures and Standards for International Students. International students are required to follow the procedures and meet the standards for domestic students as stated above. Additional requirements for international students include the following:

A. Transcripts. International students must submit official certified transcripts from all colleges and universities attended. If the transcripts are not in English, the student must provide certified translations.

B. TOEFL score. Most international students whose first language is not English must take the Test of English as a Foreign Language (TOEFL) and score better than 525. Lamar University must receive the official TOEFL scores before admission can be granted. For information about testing dates and places, write to TOEFL, PO Box 899, Princeton, NJ 08540, USA. The TOEFL is not required of those international students who have received an undergraduate or graduate degree from a university where English is the language of instruction (e.g., universities in the United States, Canada, and England). As part of the orientation process, international students with relatively low but passing TOEFL scores will be required to take one or more additional English as a second language (ESL) proficiency examinations and may be required to participate in ESL coursework as part of their graduation requirements.

C. TWE Score. International students who are required to take the TOEFL must also submit scores for the Test of Written English (TWE). The TWE is available at the same test centers that administer the TOEFL. The minimum TWE score required by Lamar University is 5. Those scoring less than 5 may be admitted to Lamar University but will be required to enroll in English as a Second Language Courses.

D. Proof of Financial Resources. International students must prove that they have the financial resources to attend Lamar University. As part of the application process, international students must submit an original Confirmation of Financial Resources form which asks for personal, family, and/or sponsor financial information and a bank verification of financial holdings.
All international students are required to have health and accident insurance for themselves and all their dependent family members in the United States. Insurance may be purchased at the University during the registration period.

E. Proficiency in spoken English may be required by some graduate programs.

6. **Admission Procedures and Standards for Doctoral Degrees.** Prospective Doctor of Engineering (D.E.) students must send a letter to the Dean, College of Engineering, Box 10057 Lamar University, Beaumont, TX, 77710. The letter should give information on the applicant's engineering experience, current employment and major research interests. For details on GPA, GRE, TOEFL and background requirements, see the College of Engineering section of this catalog.

Prospective Doctor of Education in Deaf Education (Ed.D.) students must send a letter to the Chair, Department of Communication Disorders (Speech and Hearing), Box 10076 Lamar University, Beaumont, TX 77710. The letter should give information on the applicant's deaf education experience, training, employment history, current employment, and major research interests. Deaf applicants are encouraged and experience as a teacher of the deaf is required. For details on GPA, GRE, TOEFL and background/experience requirements, see the College of Fine Arts and Communication section of this catalog.

7. **Readmission of Former Graduate Students.** A former graduate student who has not maintained continuous enrollment for two semesters (summers excluded), but who is academically eligible to continue in the graduate degree program where he or she was most recently enrolled, may be permitted to return, assuming the program is not at capacity. The procedures are dictated by the period of absence from enrollment as follows:

1. **Less Than Two Years.** The student must notify the Graduate School and the program coordinator or department chair of his/her plans to return. A new application must be submitted, and official transcripts must be provided if the individual has enrolled in another university since leaving Lamar University.

2. **Two to Four Years.** A new application must be submitted and endorsed by the department chair or program director and by the Graduate Dean. The application must show any intervening graduate work and he/she must provide official transcripts of such work. The applicable admission standards are those that were in effect when the student originally enrolled.

3. **Four or More Years.** The student is considered a new applicant and new supporting materials are required. The applicable standards are those in effect when the student applies for readmission. Coursework more than six years old may not be counted toward a graduate degree.

**Appeal of Admission Denial**

Prospective students who have been denied admission to the College of Graduate Studies have the right of appeal through the Graduate Appeals Committee. The Committee meets once each long semester, and once in the summer unless otherwise indicated. The Committee considers appeals on an individual basis and makes recommendations to the graduate dean. Contact the Office of Graduate Studies (219 Wimberly Building) for complete details on the appeals process.
Admission for Nondegree Students
Post Baccalaureate (PB)

1. **Definition.** The Post Baccalaureate (PB) classification carries undergraduate status, does not culminate in a graduate degree, and should not be considered as a means to enter graduate school. The PB admission category is designed primarily for students who do not intend to earn a graduate degree but wish to enroll in graduate courses. The PB classification may be used by students who are seeking teaching certificates, but it must be understood that PB status does not lead to a master's degree. Except for students classified as Pre Graduate (PG), all students who enroll in graduate courses without meeting admission standards or completing the admission process are given PB status.

2. **Admission.** To receive the PB classification, the applicant must:
   A. Have received a bachelor's degree
   B. Submit an application for admission with PB status to the Graduate Admissions Coordinator
   C. Submit an official transcript from each college previously attended, showing highest degree earned
   D. Be approved for admission with PB status by the University

3. **Enrolling in Courses as a PB Student.** PB students are not permitted to enroll in graduate courses without the prior consent of the chair of the department offering the course/s desired. PB students are not permitted to enroll in graduate business courses without the prior consent of the Associate Dean of the College of Business. PB students who want to enroll in elective undergraduate courses for personal or professional development are advised through the Center for Adult Studies – 106 Montagne Center.

4. **PB Classification and International Students.** International students will not be admitted with PB status.

5. **Application of PB Credits Toward a Graduate Degree.** If a PB student is eventually admitted to the Graduate College, a maximum of six semester hours earned under PB classification may be applied toward a graduate degree if approved by the department and by the Graduate Dean. In addition to these 6 hours, if a student is admitted to the graduate school during a semester in which the student is taking further graduate hours, those further hours will be counted towards the degree.

6. **Competitive Graduate Scholarships and Assistantships for PB Students.** PB students are not eligible for graduate assistantships and scholarships.

Pre Graduate (PG)

1. **Definition:** The PG admissions category is designed primarily for students who intend to enter a graduate program and earn a graduate degree but have not yet met all admission standards and/or submitted all application materials. The Pre Graduate (PG) classification carries undergraduate status and does not culminate in a graduate degree unless the student is eventually admitted to graduate school. The PG status allows the prospective graduate student to enroll in a limited number of graduate courses while completing the application and acceptance process.

2. **Admission:** To receive the PG classification, the applicant must:
   A. Have received a bachelor's degree.
   B. Submit an application for regular admission to the Lamar University College of Graduate Studies and a PG application form to the Graduate Admissions Office.
C. Be approved for admission with PG status by the University.

3. **Enrolling in Courses as a PG Student**: PG students are not permitted to enroll in graduate courses without the prior consent of the chair of the department offering the course/s desired. PG students are not permitted to enroll in graduate business courses without the prior consent of the Associate Dean of the College of Business.

4. **PG Classification and International Students**: International students will not be admitted with PG status.

5. **Application of PG Credits Toward a Graduate Degree**: If a PG student is eventually admitted to the College of Graduate Studies and to a graduate program, a maximum of six semester hours earned under PG classification plus current enrollment may be applied toward a graduate degree if approved by the department and by the Dean of the College of Graduate Studies.

6. **Competitive Graduate Scholarships and Assistantships for PG Students**: PG students are not eligible for graduate assistantships, fellowships, or scholarships.

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**Academic Policies of the College of Graduate Studies**

All graduate students are expected to be familiar with the policies and regulations of the College of Graduate Studies.

1. **Academic Year**. The University divides the academic year into two long semesters (Fall and Spring) and two summer terms of 6 weeks each.

2. **Time Limit for Degree Completion**. All course work applied toward a given degree, except for doctoral degrees, must be completed within a period of six years. This time limit applies to all work at the graduate level, including work transferred from another institution. Time spent in active military service is not included in the six-year limit.

3. **Maximum Semester Course Load**. The maximum course load for graduate students during Spring and Fall semesters is 15 hours per term. The maximum course load for graduate students for any one summer term is 6 semester hours, or 7 hours if a lab is taken. These maximums apply even when the graduate student is enrolled in a combination of graduate and undergraduate courses.

4. **Definitions of Full and Part-Time**. A full-time graduate student is defined as a student taking at least nine semester hours of graduate work during Fall or Spring semesters, or both 5390 and 5391 (thesis) during the same semester, or enrolled in ENGR 6601 or 6602 (doctoral field study). After completing the course work for a graduate degree, students who are enrolled in a thesis, dissertation, or field-study course may be considered full-time even though they are enrolled in as little as three semester hours. This may occur for up to two semesters. Additional semesters of thesis, dissertation, or field-study writing require permission of the department chair and of the dean of the Graduate School. Students taking less than 9 semester hours of graduate work during a semester are considered part-time. In the summer, full-time is 6 hours per term and half-time is 3 hours per term. Full-time status is required for fellowships, scholarships, and teaching/research assistantships.

5. **Permission for an Undergraduate Student to Enroll in Graduate Courses, Reservation of Work by Undergraduates for Graduate Credit**. An undergraduate student who is within 12 semester hours of graduation may take a maximum of six semester hours of graduate courses which may be applied toward a master's degree. Both the chair of the intended graduate program and the graduate dean must approve, and the total academic load may not exceed 15 semester hours. The
6. Transfer of Graduate Credits to Lamar University. With the approval of the chair of the major department and the graduate dean, a student may transfer up to six semester hours of graduate work completed at another regionally-accredited institution and these transferred credits may be applied toward a graduate degree at LU. Only courses with grades of "A", "B", or "S" (satisfactory) which were accepted as graduate credit at the institution where the work was taken may be considered for graduate transfer. Transferred credits are not considered in the computation of the graduate grade-point average at Lamar University.

7. Application of Institute Hours Toward a Degree. A maximum of six semester hours of work done in institutes may be approved for graduate credit toward a degree. Institutes are defined as graduate courses of less than three weeks duration.

8. Application of Credits from One Master's Degree Toward a Second Degree. A maximum of six semester hours taken for one master's degree may be counted toward a second master's degree with the approval of the department in which the second degree is sought.

9. Use of Advanced Undergraduate Courses Toward a Graduate Degree. Undergraduate courses, even if senior-level, may not be applied toward a graduate degree.

10. Correspondence Credit, Credit by Examination, and Course Work Earned Through Distance Learning. Courses taken by correspondence and credits earned through examination are not accepted toward graduate degrees. Courses completed through Distance Learning may be applied toward a graduate degree if approved by the student's graduate committee.

11. Course Duplication, Repeating a Course. With approval of the Chair of the major department, a student may enroll for a course a second or subsequent time and have it counted as part of the semester's load. If a course is repeated, the last grade recorded will be considered the official grade, but the original grade remains on the student's record as a course taken. A repeated course will be included in the student's cumulative record and in the computation of the GPA. Independent study/special topics courses may have the same course number but are not considered to be the same course if the topics differ. If a student earns a D or F in a course required for his/her graduate degree, the course must be repeated and a passing grade of A, B, or C must be earned.

12. Change of Major. Except in the College of Business, changes of major must be approved by the chair and/or the graduate advisor in the new graduate program and by the Graduate Dean. In the College of Business, changes must be approved by the Associate Dean and by the Dean of the College of Graduate Studies. New international students may begin the process of changing majors during their first semester but may not actually make the change until their second term. Obtain forms for changing majors (G-16) at the Graduate Office (219 Wimberly). Caution: Financial assistance provided by an academic department is usually not transferable to other departments. Students who change their major and transfer from one department to another may lose their financial assistance.

13. Enforced Withdrawal or Course Drop. A graduate student may be required to drop a course or courses or withdraw from the University temporarily or permanently if the student's academic work is below the standards of the College
of Graduate Studies (see discussion of probation/suspension below), or if the student is found (through due process) to have engaged in academic dishonesty or misconduct. In those programs that provide clinical training or student teaching (e.g., audiology, speech-language pathology, nursing, Education and Human Development), a student can be removed from practicum and/or the program if it is found (through due process), that he/she is a threat to the well-being of patients, students, clients, etc.

14. **Academic Dishonesty, Misconduct, Discipline Code.** Student conduct regulations, as found in the Lamar University *Student Handbook*, apply to all graduate students. These regulations include policies relating to academic dishonesty, plagiarism, University disciplinary code, and student rights and responsibilities. It is the responsibility of all graduate students to read the *Student Handbook* and to abide by all University regulations.

15. **Grading System.** The grading system for graduate students is “A” (superior), “B” (good), “C” (marginal), “D” (poor), “F” (fail), “I” (incomplete), “S” (satisfactory), “U” (unsatisfactory), Drop, and Withdrawal. Credits applicable to graduate degrees are given only for the grades A, B, C, and S. Although C grades earned at Lamar University may be counted toward the requirements for a graduate degree, C grades are not considered acceptable graduate-level performance. Courses in which a student earns only a D or F may not be counted toward a graduate degree, although such grades are calculated in determining the grade-point average. Grades of C, D or F must be compensated for by the necessary hours of A if the student is to have the 3.0 grade-point average required before awarding the degree. In computing grade-point averages, an “A” is valued at four grade points, a “B” three, a “C” two, a “D” one, and an “F” zero. An overall grade point average (GPA) of “B” (3.0) on all graduate work attempted is required for graduation. Thesis grades are not included in the computation of grade point averages. Incomplete work that is not finished during the next long semester (Spring or Fall) will be credited with an “F”. With compelling justification, the graduate dean may grant an extension of the time limit for the completion of incomplete work.

16. **Additional Departmental GPA Requirements.** A department or graduate program may impose GPA standards for its majors which exceed those of the Graduate College when approved by the Dean of the academic college.

17. **Admission of Faculty to Graduate Degree Programs.** Lamar University faculty, will not be permitted to work toward a graduate degree within their own department. To pursue a graduate degree in another department, faculty must have the approval of the Graduate Dean.

18. **English Proficiency Required of International Students for Graduation.** International students whose first language was not English are required to pass an English proficiency test before they may be admitted to candidacy for a graduate degree. The test is not used as an admissions requirement to the Graduate College and is taken after the student is admitted and arrives on the Beaumont campus. International students who do not pass the test are required to enroll in an English as a Second Language (ESL) course until they pass the test.

19. **Rule Changes.** The University reserves the right to change any of its rules, regulations or course requirements without notice.

20. **Waiver of Regulations.** Graduate students have the right to file a petition for exemption from any academic regulation of the Graduate College. Petitions for exemption are considered by the Graduate Appeals Committee, which makes recommendations to the Graduate Dean. Decisions of the Graduate Dean may be
appealed through administrative channels (i.e., to the Executive Vice President for Academic, then to the University President, the Chancellor, and, finally, to the Board of Regents).

21. **Open Records Policy.** Student records, which generally include information concerning the student and the student's individual relationship to the educational institution, are available on request to Lamar University personnel who have an educational interest in the records. Individual records are also accessible to the student in question. Without written consent of the student, records are not released except as noted above.

**Quality of Work Required, Probation/Suspension Regulations**

The graduate student must maintain a 3.0 grade point average on all courses that receive graduate credit, whether or not they are to be applied toward a graduate degree. Leveling and elective courses taken for graduate credit are included in the computation of the grade point average. A student whose GPA in graduate work falls below 3.0 must make up the deficit, either by repeating courses in which the grades are low, or by completing other graduate courses with grades high enough to bring the GPA up to 3.0.

Graduate students who do not meet the academic standards of the Graduate College will be placed on probation or suspended. Students on probation may enroll in graduate courses but may not apply for graduation. Suspended students may be temporarily or permanently denied permission to enroll in graduate courses. In computing graduate academic status, all graduate work taken during the previous six years except thesis and field study courses apply. Graduate work taken at another institution will be included in the computation of semester hours toward a degree only when that work is applied toward a degree in progress at Lamar University. Transferred credits will not be used in the computation of the graduate grade point average at LU.

1. **Minimum Academic Performance.** Graduate students with grade point averages of 3.0 or better are in good standing. Students with GPAs below 3.0 will be placed on probation or suspended.

2. **Probation.** Students with full graduate admission status who fail to achieve and maintain an overall grade-point average of 3.0 after the completion of 12 semester hours of graduate enrollment will be placed on academic probation. Students on probation who fail to raise their GPA above 3.0 within 12 semester hours of graduate work will be suspended. Students on probation may enroll in courses but may not apply for admission to candidacy or for graduation. The probationary status applies whether or not the student receives a letter of notification from the Graduate Office.

3. **Suspension.** A graduate student who has been placed on probation and who fails to raise his/her GPA to at least 3.0 within 12 semester hours of graduate enrollment will be suspended. Suspended students may enroll in summer graduate courses and they may enroll in undergraduate courses during spring, fall, or summer semesters. Undergraduate grades earned while on suspension will not be used in the computation of the graduate GPA. Suspension for the fall semester may be removed if the student raises the graduate GPA to at least 3.0 during summer terms. The first academic suspension shall be for one long semester (fall or spring) and the second suspension will be for two long semesters. The third suspension will be permanent.

4. **Transfers to New Major Departments by Students on Probation/Suspension.** Suspended students may be admitted to another department only after they have completed their suspension, provided that they meet the admission standards of
the new graduate major. Students on probation may transfer to a different graduate program with the approval of the chair of the new program, but will remain on probation until their GPA is 3.0 or better.

5. **PB and PG Students and Probation/Suspension.** Post baccalaureate students taking graduate course work are not subject to probation or suspension until they have been admitted to the graduate college and a graduate degree program.

6. **Grades Earned in Deficiency, Leveling, or Background Courses.** A GPA of 3.0 must be maintained for all undergraduate and graduate courses assigned as deficiency, leveling, or background work by the student's major department. Such courses must be repeated if grades of "D" or less are received.

7. **Additional Departmental Regulations.** A department, with approval from the appropriate academic dean, may require its majors to meet additional standards with regard to probation, suspension, and dismissal. These may be found in the appropriate departmental section of this catalog.

**General Degree Requirements**

1. Students must earn the number of semester hours of graduate credit specified by their major departments. Specific details may be found in the departmental section of this Bulletin.

2. Any student who writes a thesis must defend it orally before his/her committee. Students who do not write theses must pass a comprehensive examination, which may be oral, written, or a combination of both. Please consult the departmental section of this catalog for specific details.

3. The student must meet the specific requirements as set forth in this catalog for a particular degree program.

**Master of Arts**

1. Meet all general degree requirements.

2. If writing a thesis, complete 30 semester hours of graduate work: 18 in the major field, six in thesis, six in an approved minor or six additional hours in the major.

3. If not writing a thesis, complete 36 semester hours of graduate work approved by the graduate committee.

4. Except for the non-thesis option in history, candidates for the M.A. degree must present evidence of a reading knowledge of at least one foreign language. This requirement may be satisfied by examination or by submitting college credit equivalent to that required for the degree of Bachelor of Arts in this institution.

**Master of Business Administration**

1. Meet all general degree requirements.

2. Complete 30 hours of second year MBA courses specified under College of Business degree requirements if a thesis is written, plus any first year MBA courses required.

3. If a thesis is not written, complete 36 hours of second year MBA courses as specified under College of Business degree requirements, plus any first year MBA courses required.

**Master of Education**

1. Meet all general degree requirements.

2. Complete 30 semester hours of graduate work if a thesis is written or 36 semester hours if a nonthesis program is selected.
3. Meet the specific requirements listed in the College of Education section of this catalog for each degree program.

Master of Engineering
1. Meet all general degree requirements.
2. Complete 36 semester hours of graduate work or complete 30 hours of graduate work plus a three-hour design project.

Master of Engineering Science
1. Meet all general degree requirements.
2. Complete 30 semester hours of graduate work, including six semester hours in thesis.
3. Meet the specific requirements listed in the College of Engineering section of this catalog.

Master of Music (Performance)
1. Meet all general degree requirements.
2. Complete 30 semester hours of graduate work: 12 hours in the Applied Major, six in Music Literature, six in Music Theory and six in Music Education.
3. Special requirements in addition to the above: a formal public recital and a research paper OR a lecture recital.

Master of Music Education
1. Meet all general degree requirements.
3. Exceptions: six additional hours in Music Education may be substituted for the Thesis, and six hours in Applied Music may be substituted for Music Education courses.

Master of Public Administration
1. Meet all general degree requirements.
2. Complete 36 semester hours of graduate work as specified for the degree in the Department of Political Science section of this catalog.
3. Pass both oral and written comprehensive final examinations.

Master of Science
1. Meet all general degree requirements.
2. Complete 30 semester hours of graduate work: 15 to 18 semester hours in the major field, six in thesis and six to nine semester hours in the minor field. With the approval of the head of the major department, a student may elect to take all work in the major field.
3. If a thesis is not required, complete 36 hours of approved course work.
4. The graduate degree in psychology requires 36 hours in approved course work and six hours in thesis.
5. Students applying to the Computer Science program must satisfy the depth and breadth requirements as defined by the Graduate Faculty of the Computer Science Department.
Doctor of Education in Deaf Education

1. Obtain credit for all courses required by the student's doctoral committee. The number of these courses will depend upon the student's pre-doctorate educational preparation, previous experience and specialization emphasis during the program. In general, a 30 semester hour core curriculum and a minimum of 30 semester hours of electives/cognates for a total of 60 semester hours beyond the Master's degree.

2. Satisfactorily pass preliminary written and oral examinations after the completion of 18 semester hours.

3. Complete a four consecutive semester (1 calendar year) residency requirement.

4. Obtain admission to candidacy by completing all coursework required for the degree, complete 12 hours of dissertation credit following admission to candidacy, and successfully defend the dissertation prior to graduation.

Doctor of Engineering

1. Obtain credit for all courses required by the student's doctoral committee. The number and extent of these courses will depend upon the student's diagnostic examination, engineering experience and educational objectives. In general, a minimum of 30 semester hours of 5000 and 6000 level course work, excluding ENGR 6601 and ENGR 6602, beyond the equivalent of a master's degree will be required.

2. The student shall complete a residency of one year.

3. Satisfactorily pass candidacy examinations as required by the student's doctoral committee.

4. Complete a field study, normally 30 semester hours, involving some technological innovation.

5. Submit and defend a formal engineering report on the field study.

Advisement and Admission to Candidacy

New graduate students do not have an advisory committee and are advised by the chair of the major department or a member of the graduate faculty designated as the initial advisor.

Graduate students are not considered to be candidates for a degree until they have completed a specified set of graduate courses and have proven their academic capability. In some programs, students must pass a qualifying exam before being admitted to candidacy. Students who have been admitted to candidacy are assigned an advisory committee, and the committee establishes a graduation plan.

1. **Initial Advisement.** For the first 12 hours of graduate work, students are advised by the chair of the major department or a member of the graduate faculty who has been designated by the chair as the initial advisor. In the College of Business, all graduate students are advised each semester by the Associate Dean.

2. **Timing of Admission to Candidacy.** Admission to the Graduate School does not imply admission to candidacy for a graduate degree. Students seeking a graduate degree must be admitted to candidacy after completing a minimum of 12 semester hours of graduate study and before their last 9 semester hours.

3. **Restrictions and Prohibitions to Admission to Candidacy.** Graduate students may not be admitted to candidacy if they a) are on probation, b) are suspended, c) have not removed all undergraduate deficiencies, and/or d) have not completed at least 12 hours of recommended graduate courses. International students
required to pass the Michigan Test to indicate English proficiency must do so before they can be admitted to candidacy.

4. **Procedure for Applying for Admission to Candidacy.** The student is responsible for initiating the process for admission to candidacy by submitting the "Application for Admission to Candidacy for Master's Degree" form (G2) to the chair of the major department. The form is available in the Graduate Office (219 Wimberly Building) and departmental offices. Students should submit the form after completing 12 graduate hours but before enrolling in their final 9 hours.

5. **Recommendation of Advisory Committee and Degree Plan.** After receiving the "Application for Admission to Candidacy for Master's Degree" form (G2), the departmental chair or the designated graduate advisor submits a recommended degree plan and suggested graduate committee to the Graduate Dean by filing a "Recommendation for Admission to Candidacy for Master's Degree" form (G3). If these recommendations are approved, the student is admitted to candidacy. The graduate dean has the option of appointing additional members to an advisory committee.

6. **Composition and Roles of the Advisory Committee.** The advisory committee will include a member of the graduate faculty designated as the supervising professor along with at least two other members of the graduate faculty. The committee will assist in monitoring/supervising the remainder of the student's program, including revision of the degree plan; supervision of research; writing and approval of the thesis, field study report, or dissertation; and administration and evaluation of the final comprehensive examination.

7. **Candidacy Examinations.** Departments may require passing examination scores in the admission to candidacy process.

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**Summary of Graduate School Master's Degree Requirements**

- **Language requirement:** M.A. only
- **Minimum GPA for good standing:** 3.00
- **Minimum TOEFL (international students):** 525
- **Probation:** less than a 3.00 GPA
- **Suspension:** less than a 3.00 GPA for more than 12 hours
- **Maximum transfer:** 6 semester hours
- **Maximum PB credits toward degree:** 6 semester hours
- **Minimum thesis credits:** 6
- **Time limit for degree:** 6 years
- **Maximum age of GRE scores:** 5 years
- **Minimum credit hours, most degrees:** 36 semester hours
- **Minimum credit hours, second degree:** 30 semester hours
- **Maximum registration, long semester:** 15 semester hours
- **Maximum registration, summer term:** 6-7 semester hours
- **File for candidacy after 12 hours and before final 9 hours**
Doctor of Engineering

A student will be admitted to candidacy for the Doctor of Engineering degree only upon the recommendations of his/her doctoral committee. In general, this committee will require the following:

1. Satisfactory progress in all course work.
2. Continuous pursuit of the degree by earning at least three semester hours credit in a two consecutive semester period. Any student who does not do so must apply to the graduate engineering faculty for permission to continue in the program.
3. Prepare a proposal for a field study involving a technological innovation and defend this proposal to a doctoral committee as part of the candidacy examinations.
4. Satisfactorily pass other examinations designed to determine whether the student is ready to do the field study.

A student who fails to be admitted to candidacy on the first attempt may take additional courses or otherwise prepare for an additional attempt as may be recommended by the doctoral committee. Any student who does not meet the minimum requirements as established by the student's doctoral committee may be required to withdraw from the doctoral program.

Doctor of Education in Deaf Education

A student will be admitted to candidacy for the Doctor of Education in Deaf Education degree only upon the recommendations of his/her doctoral committee. In general, this committee will require the following:

1. Satisfactory progress in all course work.
2. Continuous pursuit of the degree by earning at least three semester hours credit in a two consecutive semester period. Any student who does not do so must apply to the graduate faculty in deaf education for permission to continue in the program.
3. Preparation of a proposal for a research study involving deaf studies/education issues and defend this proposal to a doctoral committee as part of the candidacy examinations.
4. Passing satisfactorily other examinations designed to determine whether the student is ready to do the dissertation.

A student who fails to be admitted to candidacy on the first attempt may take additional courses or otherwise prepare for an additional attempt as may be recommended by the doctoral committee. Any student who does not meet the minimum requirements as established by the student's doctoral committee may be required to withdraw from the doctoral program.

Advisory Committees

Members of a student's advisory committee are appointed by the Graduate Dean upon recommendation by the Chair of the student's major department at the time the student is admitted to candidacy. After admission to candidacy, but before the date of the final examination or the oral defense, the student may request a change in the committee composition with the approval of the student's department chair. If the department Chair does not approve a request for a committee change, the student may request the Graduate Dean to appoint a three member Review Committee. In the event the Review Committee fails to effect an agreement between the student and the original committee, a new
committee may be selected for the student by the Graduate Dean, the Dean of the student's academic college and two members of the graduate faculty of the student's academic college chosen by the Graduate Dean. The time period should not exceed 10 class days from the date of receipt by the Graduate Dean of a written request for review and arbitration by the student and the appointment of a new committee, should one be necessary.

**Thesis Requirements**

A thesis is required for the Master of Science degrees in biology, chemistry, and psychology, and for the Master of Engineering Science degree. It is not available in programs leading to the Master of Public Administration and Master of Music degrees, or the Master of Education degrees in Guidance and Counseling or in School Administration. A thesis is optional in all other degree programs. Students who write theses are expected to follow the procedure below.

1. Register for the departmental thesis course with the approval of the student's graduate advisor. The first registration is for Thesis 5390; all subsequent registrations are for Thesis 5391. All students are expected to register for Thesis 5391 until the thesis has been completed. NOTE: No academic credit is given for thesis courses until the thesis has been approved by the major department and accepted by the College of Graduate Studies. At that time, six semester hours credit will be awarded with a grade.

2. Write a thesis under the direction of the supervising professor. The form and style of the thesis must follow the thesis guidelines which are available from the College of Graduate Studies.

3. Submit a single, unbound copy of the thesis in final form to the Dean of the College of Graduate Studies at least 10 days before the oral defense and at least 30 days before the date of graduation.

4. Defend the thesis orally at least 10 days before the date of graduation at a time and place specified by the supervising professor. The defense must be scheduled in the Graduate College at least 10 days before the defense is to be held. The supervising professor will report the results of the defense to the College of Graduate Studies within two working days.

5. Submit three official final copies of the thesis on rag content paper to the Graduate College at least 10 days before graduation. Additional copies may be turned in for binding at the same time if desired or if required by the student's major department. All copies must be signed by the student's supervising professor and committee members, department head, and academic dean.

6. Submit two extra copies of the thesis abstract and a completed University Microfilms form at least 10 days before graduation.

7. Pay all binding and abstract publication fees in the University Bookstore at least 10 days before graduation.

**Non-Thesis Requirements**

1. Each candidate for a graduate degree who does not write a thesis must pass a comprehensive final examination which must be taken during the last semester of attendance and at least 10 days before the conferral of the degree. The form of this examination is determined by the student's major department, and may be oral, written, or a combination of both. An exception to this rule exists for Audiology/Speech-Language Pathology: those students who pass the ASHA
national boards may be exempt from master's oral and/or written comprehensive examinations.

2. A student registers for the comprehensive examination by applying for graduation in the Graduate College. Applications must be filed before the deadline established by the Graduate College. Those deadlines are:

   - For December graduation: First Monday in October
   - For May graduation: First Monday in March
   - For August graduation: First Monday of Summer Term I

   **Specific dates will be found in the calendar at the front of this Bulletin.**

3. If all requirements for graduation except the comprehensive examination have been completed, the student may take the examination during a later semester without being enrolled in the College of Graduate Studies. **NOTE: International students who want to do practical training must be enrolled in at least one class the semester that the comprehensive examination is taken.**

4. All oral examinations must be scheduled in the Office of the Graduate Dean at least 10 days prior to the date of the examination. The Dean may attend or may send a representative to attend.

5. Written comprehensive examinations will be administered in accordance with the following schedule.

   - Fall Term: First Thursday in November
   - Spring Term: First Thursday in April

   **NOTE: Written comprehensive examinations will be given only once during the summer: on the last Monday of the first summer term. If this date conflicts with the July 4 holiday, the examinations will be given on the last Monday in June. For specific dates, please consult the official calendar in the front of this Bulletin or call the Graduate College for details.**

6. Failure to pass a comprehensive examination in three attempts will result in a student being permanently suspended from that degree program. The examination may be taken only once each term. Students suspended under this provision may be admitted to another degree program if they meet the required standards and are accepted by the new degree program.

   A department may prescribe additional academic requirements for its majors with the approval of the Dean of the College of Graduate Studies.

**Graduation Procedure**

Students who intend to graduate at the end of a particular semester must apply for graduation in the office of the Graduate Dean on or before the official deadline for application as established by The College of Graduate Studies.

Participation in commencement exercises is not required for the receipt of a graduate degree, though participation is strongly recommended. Graduating students who elect not to attend graduation exercises should notify the Graduate Dean.
College of Arts and Sciences

The College of Arts and Sciences offers programs of study leading to the Master of Arts degree in the fields of English and history; the Master of Science degree in the fields of biology and chemistry; and the Master of Public Administration degree. In addition, graduate study is available in applied criminology, geology, nursing, and sociology as areas of support or specialization in other advanced degree programs.

Persons seeking admission to these programs must meet the requirements specified by the College of Graduate Studies and the individual department. Admission to a degree program is not an admission to candidacy.

Department of Biology

The Department of Biology offers a program of study leading to the Master of Science in biology degree. It is designed to enhance the professional competence of graduates in biology or closely related disciplines who are presently engaged in or planning to enter secondary school or college teaching, or who expect to be employed by private or governmental agencies in biologically oriented fields.

Applicants must 1) have completed a minimum of 24 semester hours in the biological sciences, 2) have completed a minimum of one semester of organic chemistry and one semester of statistics, 3) remove any deficiencies as provided in the section on admission, 4) score a total of 950 (Verbal plus Quantitative Sections) on the Graduate Record Examination, or if V + Q score falls between the Graduate College minimum score and 949, receive a majority vote of the biology graduate faculty; 5) have an undergraduate grade point average of at least 2.50/4.0 overall or 2.75 on the last 60 hours of undergraduate work.

Degree Requirements

The candidate for the M.S. in biology must meet all the College of Graduate Studies general requirements as listed in this catalog. Additional specific requirements are:

1. Submit a written proposal for the thesis. After the thesis proposal is written, pass an oral examination before the biology graduate faculty on the experimental design of the proposed thesis and related disciplines. Note: This requirement is a prerequisite to achieving candidacy and should be completed during the first year of enrollment and must be completed by the end of the second year of the program.

2. For their professional development, students will enroll in BIOL 5110 Graduate Seminar each Fall and Spring semester. A maximum of two semesters credit will be counted toward the Master's degree; subsequent enrollments will be for a grade but will not count toward the degree. Exceptions must be approved by the biology graduate faculty.

3. Thirty-three hours of graduate credit which may include a maximum of 16 hours in approved 400 level courses with augmented requirements. All course work will be in biology. Exceptions must be approved by major advisor and by the Chair, Department of Biology.
Graduate Faculty

Assistant Professor Mark S. Brunell
Botany, plant systematics

Professor Michael W. Haiduk
Genetics, vertebrate systematics

Professor Richard C. Harrel
Limnology, ecology, invertebrate zoology

Professor Madelyn D. Hunt
Medical microbiology, epidemiology
Assistant Professor Paul F. Nicoletta
Biology and zoology
Professor Michael E. Warren
Entomology, mosquito biology

Biology Courses (BIOL)

5100  Materials and Techniques of Research  1:1:0
Survey of laboratory and library research techniques, instrumentation and materials requisite to scientific investigation. Required of all entering graduate students.

5110  Graduate Seminar  1:1:0
Current topics in biological research. See requirement 3 under Degree Requirements.

5410  Animal Behavior  4:3:3
An analysis of the development and significance of various behavior patterns in animals from an evolutionary point of view.

5450  Mammalogy  4:3:3
Natural history, taxonomy and ecology of mammals. Required field trip.

5470  Ecology of Polluted Waters  4:3:3
Analyses of effects of water pollutants on aquatic ecosystems.
Prerequisite: Bio 443.

5301, 5401 Special Topics  3-4:A:0
Research in areas other than thesis.
Prerequisite: Approval of graduate advisor. May be repeated when topic changes.

5390-5391 Thesis  3:A:0
Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.
Department of Chemistry

The Department of Chemistry offers a program of study leading to the Master of Science degree in Chemistry. Those seeking admission to this program must meet the general requirements as set forth in this catalog for admission to the College of Graduate Studies and must have a minimum grade point average of 2.75 on the last 60 hours of undergraduate work or 2.50 on all undergraduate work. In addition, the applicant must offer the substantial equivalent of the course in general chemistry, inorganic chemistry, analytical chemistry, organic chemistry and physical chemistry required of undergraduate students in the chemistry curriculum. The applicant also must have completed one year of college physics and mathematics through integral calculus.

Students working toward the graduate degree in chemistry will take a set of four proficiency examinations, one in each of the fields of chemistry; analytical, inorganic, organic and physical. These examinations are taken on entrance and are offered in the fall and again during the beginning of the Spring semester. The results of these examinations are used for orientation and guidance.

Degree Requirements

The candidate for the M.S. degree in Chemistry must meet all the College of Graduate Studies general degree requirements as listed in the catalog. Additional specific degree requirements are as follows:

1. Fifteen to 18 semester hours of course work in Chemistry which must include CHEM 5310, 5330, 5350, 5370 and at least one 5000 level Selected Topics course in Chemistry with a grade point average of "B" (3.0) in these courses.
2. Presentation of a thesis.
3. Six to nine additional semester hours of 5000 level courses in an approved field of study.
4. Competence in computer science.
5. Examination results on the chemistry section of the GRE must be submitted before graduation.

Graduate Faculty

Professor Hugh A. Akers
Biochemistry

Professor Shawn B. Allin
Polymers chemistry, physical chemistry

Professor David L. Cocke
Analytical chemistry, environmental chemistry

Professor Kenneth Dorris
Physical chemistry, environmental chemistry

Professor Keith C. Hansen
Organic chemistry

Professor J. Dale Ortego
Inorganic chemistry

Associate Professor Shyam S. Shukla
Analytical chemistry, environmental chemistry
Chemistry Courses (CHEM)

5310 Advanced Analytical
   Prerequisite: Graduate standing or consent of instructor.
   3:3:0

5330 Advanced Inorganic
   Prerequisite: Graduate standing or consent of instructor.
   3:3:0

5350 Advanced Organic
   Prerequisite: Graduate standing or consent of instructor.
   3:3:0

5370 Advanced Physical
   Prerequisite: Graduate standing or consent of instructor.
   3:3:0

5301 Special Topics
   1-6:1-6:0
   The course is designed to meet special needs of students. Each topic is offered on an irregular schedule as the demand requires.
   Prerequisite: Departmental approval.

5390-5391 Thesis
   Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.
   3:A:0

Department of English and Foreign Languages

The graduate program of the Department of English and Foreign Languages offers opportunity for intensive study of language and literature. Scholarly interests of members of the department include old and middle English, the Renaissance, Shakespeare, eighteenth century studies, English and American romanticism, the Victorian age, modern English and American literature, African American and Caribbean literatures, and comparative literature. In addition to the study of literature through courses organized by genre, period and individual author, the student may explore the history and structure of language and language acquisition and the crafts of both creative and technical writing.

Degree Requirements

The degree of Master of Arts in English requires the completion of 30 semester hours of graduate work: 24 in English (or 18 with an approved six-hour minor), and six in thesis. In general, students are encouraged to emphasize graduate seminars (courses numbered 5000 or above) in their graduate coursework. In the non-thesis alternative, 12 semester hours of coursework may be substituted for the thesis. The creative thesis, as well as the traditional critical thesis, is an option.

All students must have a minimum undergraduate grade point average of 2.5/4.0 overall or on the last 60 hours of undergraduate courses. In addition, international students must score at least 550 on the TOEFL before admission. Students interested in pursuing an M.A. degree in English whose undergraduate major was not English should consult the English department chair.

Professional Certification Requirements (Texas) in English

The plan for the Professional Certificate—Secondary requires the completion of 36 semester hours of graduate work: 18 in English, six in resource areas and 12 in approved teacher education. At least 12 semester hours must be in English courses numbered 5000 or above. The courses in the resource areas must be approved by the Chair of the Department of English and Foreign Languages; such approval will be given on the basis of the support they can give to the major and on the specific needs of the graduate student. The 12 semester hours of teacher education must be taken in courses specifically approved for the Professional Certificate-Secondary.
Depending on the student's undergraduate course work, the graduate program in English will ordinarily include English 5330, 5389, and two courses from 5350, 5360, 5370, 5380 or 5311.

**Graduate Faculty**

Professor Lloyd M. Daigrepont  
American literature before 1900  
Assistant Professor Paul A. Griffith  
African American and Caribbean literature

Professor R.S. Gwynn  
Creative writing and post-modernism

Assistant Professor Emma Hawkins  
Old and Middle English language and literature

Assistant Professor Gregory Kelley  
Romanticism, Critical Theory

Associate Professor Max Loges  
Technical Writing

Associate Professor Joseph E. Nordgren  
Modern British Literature

Professor R. Victoria Price  
English as a second language, Modern American and British literature

Associate Professor Dale G. Priest  
English Renaissance, Eighteenth century

Associate Professor James Sanderson  
Creative writing, American literature

Associate Professor Pamela S. Saur  
German literature, the drama

Professor Sallye J. Sheppeard  
Medieval and Renaissance literature and rhetoric, women's literature

Professor Miriam J. Shillingsburg  
Southern American literature

Associate Professor Stephanie Yearwood  
Writing, English education, seventeenth century

**English Courses (ENGL)**

5110 **Composition Practicum**  
Practicum in the teaching of writing. Involves classroom experience, peer discussion and mentor consultation. Graded on S-U basis.  
Prerequisite: Graduate standing.

5330 **Special Topics in Old and Middle English Languages and Literature**  
Intensive study of the languages necessary for reading literature of the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.  
Prerequisite: Graduate standing.

5335 **Special Topics in Renaissance and Seventeenth Century English Literature**  
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.  
Prerequisite: Graduate standing.

5360 **Special Topics in Restoration and Eighteenth Century English Literature**  
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.  
Prerequisite: Graduate standing.

5370 **Special Topics in Nineteenth Century English Literature**  
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.  
Prerequisite: Graduate standing.

5380 **Special Topics in Twentieth Century Literature**  
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.  
Prerequisite: Graduate standing.
5385 Special Topics in American Literature
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.
Prerequisite: Graduate standing.

5311 Special Topics in Comparative Literature
Intensive study of an author or authors, genre or period selected from the range of world literature. Emphasis on analysis and literary method. Course may be repeated for a maximum of six semester hours credit when the topic varies.
Prerequisite: Graduate standing.

5313 Special Topics in English Instruction
Intensive study of theory and pedagogy of language or literature for secondary teachers.
Prerequisite: Graduate standing.

5390-5391 Thesis
Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

Department of Geology
The Department of Geology offers the following graduate courses to be used primarily as a support to other advanced degree programs.

Graduate Faculty
Associate Professor James W. Westgate
Vertebrate paleontology, paleoecology

Geology Courses (GEOL)

5320 Environmental Geology
The geological aspects of the environment. The environmental significance of man’s use of natural resources. Field and laboratory studies of the local environment. Field trip required. Term paper based on laboratory, library, or field studies.

5301 Institute in Earth Science
Summer, in-service, or other institutes for earth science teachers. Credit varies with duration. The description of the area of study of each institute will appear on the printed schedule. May be repeated for credit when nature of institute differs sufficiently from those taken previously.

Department of History
It is the purpose of the Department of History to impart a knowledge and understanding of the past to the students enrolled in the University. This objective is based upon the belief that such knowledge and understanding improves the quality of life for individuals and contributes to the welfare of our society. The Department seeks to accomplish this objective through a program of continued study and research by its members and students. Research interests of the Department focus on both American and European history.

Admission Requirements
Applicants for the Master of Arts in History must meet all Graduate College entrance requirements. Their background in history should include two semesters of American History, two semesters of world or western civilization, one advanced course in each area and a course in historical research and writing. Students may be admitted and begin taking graduate courses while completing these requirements.
Degree Requirements

I. THESIS OPTION. The thesis option is strongly recommended for those who plan to continue graduate study beyond the masters. The thesis program requires completion of 24 semester hours, 18 of which must be in 5000 level courses. Six hours may be taken in a related (minor) field chosen to support the student's primary interest OR the student may substitute six hours (two courses) in history for the minor. Six additional hours credit will be awarded at the completion of the thesis.

Thesis students must also demonstrate a reading knowledge of one classical or modern foreign language. This requirement may be satisfied by completing the 2312 course in a language, OR by passing a nationally recognized standardized language proficiency test, OR by completing a reading project administered jointly by faculty members in the Departments of History and of English and Foreign Languages.

II. NON-THESIS OPTION. The non-thesis option is intended to provide a strong foundation in a wide range of historical areas and periods. It is designed for those who do not intend to seek a higher degree. Non-thesis students must complete 36 hours in history, of which 21 hours must be 5000 level courses. The student may take six hours in an approved minor field or may take six additional hours in history. After completing their classwork, students must take a comprehensive examination which may be oral, written, or a combination of both. A foreign language is not required for the non-thesis Master of Arts in History.

Graduate Faculty

Professor Adrian N. Anderson
United States history, revolution, early national
Professor John M. Carroll
United States history, diplomatic, the South
Associate Professor Ronald H. Fritze
Tudor-Stuart England
Professor Howell H. Gwin, Jr.
European history, ancient, classical, medieval

Professor John W. Storey
United States history, urban, social, intellectual
Professor Walter A. Sutton
United States history, diplomatic
Professor Ralph A. Wooster
United States history, Civil War, the South

History Courses (HIST)

5320  Readings in American History
Course may be repeated when topic varies.
Prerequisite: Graduate standing.

5340  Readings in European History Since 1815
Course may be repeated when the topic varies.
Prerequisite: Graduate standing.

5370  Seminar in United States History
Course may be repeated when the topic varies.
Prerequisite: Graduate standing.
5311 Seminar in European History 3:3:0
Course may be repeated when the topic varies.
Prerequisite: Graduate standing.

5312 Directed Readings in History 3:A:0
Directed readings to be arranged by student in consultation with faculty member in area of mutual interest. Course may be applied to 5000 level course requirement for a maximum of 6 hours in the thesis program and 9 hours in the non-thesis option.

5390-5391 Thesis 3:A:0
Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

Department of Political Science

The Department of Political Science offers a program of study leading to the Master of Public Administration degree. Persons seeking admission must meet the general requirements for admission as outlined in the graduate catalog and must present an undergraduate grade point average of 2.5/4.0 overall or 2.75 on the last 60 hours of undergraduate work.

Degree Requirements

The degree of Master of Public Administration requires the completion of 36 semester hours of graduate work: 21 in the core curriculum (POLS 5350, 5351, 5352, 5353, 5354, and 5358) and 15 from an approved list of courses. Applicants must have completed the following undergraduate courses or their equivalents: introduction to public administration (three semester hours); urban politics (three semester hours), and statistics for social scientists (three semester hours). Students must pass both written and oral comprehensive final examinations.

Criminal Justice Management Track

The Criminal Justice Management track in the Master of Public Administration (MPA) degree program maintains a strong emphasis on a solid graduate education in Public Administration while introducing advanced training in justice administration. In addition, the student retains the flexibility of taking graduate work in a related field of interest. The degree program prepares students to assume positions of responsibility in the administration of law enforcement and correctional institutions.

Prerequisites include those for the MPA degree plus Criminal Justice 4321 – Responses to Crime. Students must complete 36 hours of graduate work including the following seminars.
Graduate Faculty

Professor David S. Castle  
American politics, methodology

Assistant Professor Terri B. Davis  
Judicial process and administrative law

Professor Bruce R. Drury  
Comparative politics, Latin American politics

Associate Professor Elbert T. Dubose  
Public administration

Assistant Professor James L. True  
Public administration and public policy

Professor Glenn H. Utter  
Political philosophy, American political thought

Assistant Professor James M. Vanderleeuw  
Urban politics, public policy

Political Science Courses (POLS)

5320 Directed Reading  3:3:0
Graduate students may study individually with an instructor in an area of mutual interest to the student and the instructor.

Prerequisite: Graduate standing and approval of Chair, Department of Political Science.

5350 Seminar in Administrative Theory  3:3:0
An examination of major theories dealing with organizations and their characteristics, scope and effect on public administration and executive behavior. Emphasis will be placed on the relationships between theories and supporting empirical research.

Prerequisite: Graduate standing.

5351 Seminar in Personnel Administration  3:3:0
Personnel theory and practice in the public setting. The basic methods and functions of personnel administration in the context of public organizations, employee motivation, employee relations and collective bargaining will be emphasized.

Prerequisite: Graduate standing.

5352 Seminar in Fiscal Administration  3:3:0
The study of formulation and administration of government budgeting, including the role of the budget in the policy process, approaches to budget formulation and analysis, the development of PPB approach and other basic concepts and practices in government budget and finance administration.

Prerequisite: Graduate standing.

5353 Seminar in Public Policy Formulation  3:3:0
The process of policy-making within governmental agencies and within the total political process. Emphasis will be placed on decision-making, public policy analysis and policy implementation.

Prerequisite: Graduate standing.

5354 Seminar in Special Studies in Public Administration  3:3:0
Analysis of selected problems in public administration: urban and regional planning and management, administrative reorganization, the environment and related problems.

Prerequisite: Graduate standing.

5358 Internship  3:0:0
Practical administrative experience in a local, state, regional or federal office or agency that is the equivalent of one-half time for one semester, full-time in a summer semester. Examinations and reports on practices and problems in agencies are required.

This course may be waived for students already employed in an administrative capacity in a government agency if they elect three additional hours from the approved program courses.

Prerequisite: Graduate standing.

Criminal Justice Management Track Courses (CRIJ)

CRIJ 5310 Criminal Justice Administration  
Advanced study of the administration of justice. Emphasis on problems and relationships, both within and among components of the criminal justice system and between these components and other human service agencies.

CRIJ 5320 Criminal Justice Theory and Policy  
Theoretical sources of current crime control policies; examination of the effectiveness of selected policies and programs; new directions in policy.
**CRIJ 5330 Criminal Justice Planning and Evaluation**

Formal planning and research methods for criminal justice practitioners. Includes the application of techniques such as systems analysis, cost-benefit analysis, and PERT to problem areas in criminal justice.

*Prerequisite: A course in research, and demonstrated ability to use a personal computer.*

**CRIJ 5340 Special Studies in Criminal Justice**

Analysis of selected issues in Criminal Justice administration and theory development. Can be taken for elective credit.

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**Department of Psychology**

The Department of Psychology offers a program of study leading to the Master of Science degree in applied psychology. It is designed to prepare professional personnel for employment in business, industry or community mental health. Students may elect to take their primary coursework in industrial/organizational psychology or in community/counseling psychology. Those seeking admission to this program must meet the general requirements as set forth in the catalog for admission to the College of Graduate Studies and must offer the substantial equivalent of a bachelor’s degree in psychology (24 semester hours) including courses in statistics and research methods. The department has flexible admission criteria which will allow the faculty to review applicants individually. However, students with GRE scores less than 1000 (V + Q) are not usually accepted. International students must present a minimum TOEFL score of 600. All students must also have a 2.5/4.0 undergraduate grade point average overall or 2.75/4.0 on the last 60 hours of undergraduate course work. Post Baccalaureate students are not permitted to enroll in psychology graduate courses without special permission from the department chair.

**Degree Requirements**

The candidate for the Master of Science degree in Psychology must meet all of the College of Graduate Studies general degree requirements. Additional specific degree requirements are as follows:

1. Forty-two semester hours of course work in psychology which must include 23 semester hours in Psychology 5300, 5301, 5311, 5302, 5320, 5323, 5350 and two semester hours in Psychology 5120. For the Community Psychology Program, an additional 9 semester hours in Psychology 5310, 5312 and 5313 is required. In the Industrial Psychology Program, an additional 6 semester hours is required in Psychology 5321 and 5322.

2. Candidacy examinations devised by the Psychology Department graduate faculty. A student may petition to be administered the candidacy (qualifying) examination during the semester in which the appropriate course work listed in No. 1 above is to be completed provided the student is in good academic standing. Dates to sit for the examination will be announced each year. A student must have satisfactorily passed candidacy examinations prior to enrolling in Psychology 5330, 5390, 5310 or 5313.

3. One to three additional semester hours of 5000 level courses in an approved field of study.

4. Practicum: Six semester hours in Psychology 5330 and 5331 for I/O students; three semester hours in Psychology 5330 for community students.

5. Thesis: Submission of an acceptable thesis and satisfactory performance on a final oral examination with a minimum of six semester hours in Psychology 5390 and 5391.
Departmental Policies

Special attention is called to the following departmental policies:

1. Graduate students are prohibited from providing psychological services except when supervised by a faculty member as part of a course requirement or when regularly employed by a licensed psychologist, an exempt agency as defined by the Psychologist's Certification and Licensing Act or a departmental approved nonexempt agency. Students in training are expected to be aware of and abide by the Psychologist's Certification and Licensing Act and the Ethical Principles of Psychologists. A violation of this policy will result in the student's dismissal from the program.

2. More than six hours of "C" level work will result in the student's dismissal from the program.

3. Students may not enroll in the same course more than twice.

4. Qualifying and/or final examinations may be repeated once if failure occurs. In general, a student repeating any portion of the examinations must do so at the next administration of the examination.

5. After admission to candidacy, a student must be enrolled in a thesis course each regular semester until requirements for the degree are completed. In addition a student must be registered for a thesis course each session of the summer term if the student is to receive the degree in August or is involved in research or writing.

Under unusual circumstances and with the approval of the department chair and the student's supervising professor, a student may postpone registration for the thesis course for one or more semesters. Unless special permission has been granted, a student who is not continuously enrolled in a thesis course must repeat the candidacy examinations and apply for re-admission to candidacy.

Graduate Faculty

Professor James K. Esser
Social, industrial-organizational psychology

Associate Professor Oney D. Fitzpatrick
Developmental psychology, health psychology, medical compliance

Associate Professor Joanne S. Lindoerfer
Clinical psychology, community psychology

Assistant Professor Judith R. Mann
School psychology, psychological measurement, developmental psychology, community psychology

Professor Richard G. Marriott
Behavioral neuroscience, learning-cognition, methodology

Psychology Courses (PSYC)

5120 Professional Orientation 1:1:0
An orientation to the discipline and professional activities. Includes ethics, legalities, training standards, and professional roles. Assignments supplement other course work including research, teaching and field projects. Required of all graduate students for two semesters with a maximum of three semester hours allowed.
Prerequisite: Consent of instructor.

5140 Special Topics 1:1:0
Course work, library and/or laboratory work, and conferences with faculty member. A description of the particular area of study will be indicated. May be repeated for credit when topic varies.
Prerequisite: Consent of instructor.
5301 Advanced General Psychology II
A comprehensive overview of the following areas of psychology: personality, developmental, social and abnormal. Emphasis will be placed on both background material and current research. May be taken out of sequence.

Prerequisite: Consent of instructor.

5302 Experimentation Design
A study of the research procedures and statistical techniques commonly used by the applied and theoretical psychologist in the design, execution, control and evaluation of experiments.

Prerequisite: Consent of instructor.

5303 Individual Study
Independent study of special topics or problems in industrial/organizational or community psychology. May be repeated for credit.

Prerequisite: Consent of instructor.

5340 Special Topics in Psychology
Includes coursework, library and/or laboratory work and conferences with a faculty member. A description of the particular area of study will be indicated. A student may repeat the course for credit when the area of study varies.

Prerequisite: Consent of instructor.

5310 Introduction to Psychological Assessment
An introduction to intellectual assessment. Includes principles of psychological testing, test statistics, and critical evaluation of a variety of intellectual and achievement measures. Practicum in administration, scoring, interpretation, and formal psychological report writing for all Wechsler measures and the Stanford-Binet.

Prerequisite: Admission to candidacy and Psy 5320.

5311 Community Psychology: Introduction to Psychotherapy
Specific psychotherapy skills, therapeutic communication and therapeutic practices are introduced using didactic techniques and role-playing. Includes models of individual, family and multimodal therapy, ethical principles in therapy, DSM-IV and diagnosis of psychopathology, Employee Assistance Programs, consultation and referral to other agencies. Other topics include professional orientation of the therapist, obtaining supervision and continuing education, and evaluating the effectiveness of therapy.

Prerequisite: Consent of instructor.

5312 Advanced Psychological Assessment
An introduction to the broad area of personality assessment including DSM-IV classifications. Practicum in administration, scoring, interpretation, and formal psychological report writing with the MMPI-2, Rorschach, TAT, SCII, KOIS, and other objective and projective assessment devices. Includes coverage of lifestyles and career/vocational choices.

Prerequisite: Psy 5310.

5313 Community Psychology: Advanced Psychotherapy
An in-depth study of psychotherapy theories and intervention strategies for individuals and groups. Distinctions will be made between normal human growth and abnormal human behavior. Includes ethics, legal/cultural considerations, and lifestyles.

Prerequisite: Psy 5311 and admission to candidacy.

5320 Theory and Techniques of Psychological Measurement
A study of procedures used in the development, evaluation, and application of psychological measuring instruments. Topics include bivariate linear correlation, nonlinear correlation, multiple and partial correlation, classical true score theory, validation techniques, and test construction techniques.

Prerequisite: Consent of instructor.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>5321</td>
<td>Advanced Industrial Psychology I</td>
<td>3:3:0</td>
<td>Social and organizational factors in the work place. Emphasis on theories of organizational/group dynamics, social foundations of influence, leadership and growth/development.</td>
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<td><strong>Prerequisite:</strong> Consent of instructor.</td>
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<tr>
<td>5322</td>
<td>Advanced Industrial Psychology II</td>
<td>3:3:0</td>
<td>Psychological principles and techniques applied to human resources management. Techniques include job analysis, personnel selection, placement and training, performance appraisal, compensation and career development.</td>
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<td><strong>Prerequisite:</strong> Psy 5320 or consent of instructor.</td>
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<tr>
<td>5323</td>
<td>Advanced Experimental Psychology</td>
<td>3:3:0</td>
<td>Theory and application of experimental design in psychological research. Students will have an opportunity to design and conduct an original research study.</td>
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<td><strong>Prerequisite:</strong> Psy 532 or consent of instructor.</td>
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<tr>
<td>5330</td>
<td>Practicum I</td>
<td>3:3:0</td>
<td>Supervised training and experience in a local, state or regional agency, institution or employment setting. The specific nature of the practicum depends on the professional background and goals of the candidate and will be determined by the candidate, his/her faculty advisor and a member of the cooperating agency/organization. For Community Psychology students, practicum involves a minimum of 300 hours of work in a mental health setting, including a minimum of 100 hours of direct client contact, and one hour a week of individual supervision from a licensed professional.</td>
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<tr>
<td>5331</td>
<td>Practicum II</td>
<td>3:3:0</td>
<td>Supervised work in an area of interest to the student, includes supervision by both a faculty member and a member of the cooperating agency/organization.</td>
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<td><strong>Prerequisite:</strong> Psy 5330.</td>
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<tr>
<td>5390-5391</td>
<td>Thesis</td>
<td>3:3:0</td>
<td><strong>Prerequisite:</strong> Admission to candidacy. Must complete both for required 6 credits.</td>
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College of Business

The College of Business offers a program of study leading to the Master of Business Administration degree (MBA). The MBA program is fully accredited by the American Assembly of Collegiate Schools of Business (AACSB). The objective of the MBA Program at Lamar University is to provide intensive, rigorous training to produce managerial professionals with a thorough conceptual understanding of the economic, legal, and ethical environment of public and private sector organizations and the capability of applying analytical, problem solving skills to a broad range of decision situations that may arise within one or a combination of functional areas within the organization.

Students with degrees in non-business fields as well as business undergraduates are encouraged to earn the Master of Business Administration degree. Students are encouraged to make an appointment with the Associate Dean 60-90 days in advance of the semester in which they wish to enroll, and to take the GMAT in the semester prior to the desired date of enrollment.

Admission

Persons seeking admission to this program must meet the general requirements for admission outlined elsewhere in this Bulletin, with the following exceptions:

1. The student is required to take the Graduate Management Admission Test, GMAT.
2. The applicant's undergraduate grade point average and GMAT scores must equal or exceed the minimum standards. The student must meet at least one of the following standards:
   A. A total of at least 950 points based on the formula: 200 times the overall undergraduate GPA for the first baccalaureate degree (4.0 system) plus the GMAT score. (See Note below)
   B. A total of at least 1,000 points based on the formula: 200 times the GPA (4.0 system) of the last 60 hours of undergraduate work for the first baccalaureate degree, plus the GMAT score. (See Note below).

   Note: Students must make a minimum score of 450 on the GMAT for unconditional acceptance regardless of GPA. Students who make 400-450 and meet either standard “A” or “B” above will be admitted conditionally pending satisfactory completion of nine hours with a “B” (3.0) average. A student who makes less than 400 on the GMAT will not be admitted regardless of GPA.

3. A student whose native language is not English is expected to score over 525 on the TOEFL.
4. Post Baccalaureate students are not permitted to enroll in Business courses for graduate credit without the prior consent of the Associate Dean.

Degree Requirements

First Year Courses (Designed primarily for students whose undergraduate degree is not Business).

- ECON 5300: Foundations of Economics
- BULW 5300: Legal Environment of Business
- BUAL 5300: Statistical Analysis for Decision Making
- MGMT 5310: Foundations of Organization Behavior
- MGMT 5320: Operations Management and Information Systems
MGMT 5300 Transactions and Management
MGMT 5330 Administrative Policy and Strategy
OFAD 5300 Administrative Communications
MKTG 5300 Marketing Concepts
FINC 5300 Foundations of Finance

Note:
1. Please see course descriptions for prerequisites for each course.
2. Students with previously approved academic training may have some or all of the first year courses waived. (See the Associate Dean, College of Business, prior to enrollment.)
3. Students must have met the entrance requirements for the MBA Program to enroll in first year courses. All exceptions must have the prior approval of the Associate Dean, College of Business.
4. First year courses may not be taken as second year course electives.
5. All students need to be advised by the Associate Dean prior to each semester.

Second Year Courses

Note:
1. All first year courses must normally be completed before beginning the second year courses.
2. The candidate for the MBA degree may follow either of the two plans described below.

Plan I: Thesis Route

ACCT 5370 Managerial Accounting
MGMT 5340 Seminar in Management
ECON 5370 Managerial Economics
FINC 5310 Financial Management
MKTG 5310 Seminar in Marketing
BUAL 5310 Advanced Statistical Theory and Analysis for Business
ECON 5380 Environment of Business
Three semester hours of approved electives in the College of Business
BUSI 5390 Thesis
BUSI 5391 Thesis

Note: Once enrolled in thesis, a student must be continually enrolled in the thesis course each Fall, Spring, and once in the summer, until the thesis is completed.

Plan II: Non-Thesis Route

ACCT 5370 Managerial Accounting
MGMT 5340 Seminar in Management
ECON 5370 Managerial Economics
FINC 5310 Financial Management
MKTG 5310 Seminar in Marketing
BUAL 5310 Advanced Statistical Theory and Analysis for Business
ECON 5380 Environment of Business
MGMT 5380 Business Research

Twelve semester hours of approved electives in the College of Business is required. A written comprehensive exam will follow the completion of course work.

The MBA degree with an accounting emphasis is available for students that have an undergraduate degree in Accounting who wish to meet the requirements for the 150 hour program which will be required to sit for the CPA Examination in Texas.
beginning in May 1998. This program requires the student to follow Plan II (non-thesis route). For those under the accounting emphasis, ACCT 5320 (Accounting Theory) is substituted for ACCT 5370. In addition, ACCT 5330 (Advanced Auditing) and ACCT 5340 (Tax Research) are substituted for six of the twelve hours of electives in Plan II.

Graduate Faculty

Associate Professor Soumava Bandyopadhyay  
Marketing
Professor Cynthia Barnes  
Office Administration
Professor Melvin F. Brust  
Finance
Professor Jai-Young Choi  
Economics
Professor Richard A. Drapeau  
Business Statistics
Professor Lynn Godkin  
Management
Professor Charles Hawkins  
Economics
Professor Richard W. Jones  
Accounting
Professor D. L. Jordan  
Management Information Systems
Associate Professor Huei Lee  
Management
H. A. Barlow Professor Marvin Lewis  
Accounting
Associate Professor Howell Lynch, Jr.  
Accounting
Assistant Professor Bradley Mayer  
Management
Professor Carl B. Montano  
Economics
Professor Jimmy D. Moss  
Finance
Professor Donald Price  
Economics
Assistant Professor Kabir C. Sen  
Marketing
Professor Larry W. Spradley  
Business Statistics
Professor Robert A. Swerdlow  
Marketing
Assistant Professor Celia B. Varick  
Accounting

Business Courses

Accounting (ACCT) courses must be selected from the following list:

5320* Accounting Theory  
3:3:0
An in-depth examination of both existing and normative accounting theory. The text is supplemented with outside readings. Significant oral and written reports are required.
Prerequisite: Graduate standing with a minimum of eighteen semester hours of accounting which must include six semester hours of Intermediate.

5330* Advanced Auditing  
3:3:0
Advanced study of the role of auditors as a profession. In depth discussion of professional ethics and liability to clients and other third parties. Study of audit failures, employing the case method. Also, the use of statistical sampling methods in auditing.
Prerequisite: Graduate standing and ACCT 4300.

5340* Tax Research  
3:3:0
An extensive examination of the methods employed to determine defensible solutions to problems in federal taxation. Emphasis is placed upon research methodology, proper documentation of research findings and effective communication of research findings to interested parties. The text is supplemented with outside readings and case studies. Significant oral and written reports are required.
Prerequisite: Graduate standing with a minimum of eighteen semester hours of accounting that include ACCT 3380 and ACCT 3390 or their equivalent and six semester hours of Intermediate.
Managerial Accounting 5370
Application of accounting data in decision making: cost analysis as applied in the development of budgets and standards; accounting as a tool for cost control and pricing; case problems, using the micro-computer as a decision-making tool, which require students to interpret and discuss their analysis in the context of managerial decision-making. Course must be completed with a grade of "B."
Prerequisite: Graduate standing.

Economics (ECON) courses must be selected from the following list:

Foundations of Economics 5300
This is a fast-paced course which discusses both macro and micro economic theory and international economic issues. Macroeconomic topics covered include: inflation, unemployment, fiscal and monetary policy. Microeconomic topics include: demand theory, production and cost theory, price and output determination in markets, demand for and pricing of society's scarce resources.
Prerequisite: Graduate standing.

Managerial Economics 5370
A study in the depth of the principles and techniques of economic analysis applicable to the problems of business management.
Prerequisite: Graduate standing, ECO 530.

The Environment of Business 5380
A study of business, government, and consumer interaction in the economy. Efficiency concepts for both the private and public sectors are discussed. Government activities in antitrust, traditional regulation, and new firms operating in foreign markets are reviewed.
Prerequisite: Graduate standing, ECO 530.

Finance (FINC) courses must be selected from the following list:

Foundations of Finance 5300
A survey of the financial management function in private business firms, with emphasis on major financial policy decision issues and the analytical techniques used to assist management in making those decisions.
Prerequisite: Acc 530, ECO 530.

Financial Management 5310
A study of the financial policy of business firms along with the theory supporting that policy. Topics include capital budgeting, capital structure, cost of capital, dividend policy, and management of working capital, as well as the unique international dimensions of the financial policy of multinational firms.
Prerequisite: Graduate standing, Fin 530 or equivalent.

Seminar in Finance 5320
Study of selected topics reflecting contemporary trends and problems in the field of Finance. The course may be repeated for a maximum of six semester hours when the topic varies.
Prerequisite: Graduate standing, Fin 531 or consent of instructor.

Management (MGMT) courses must be selected from the following list:

Transactions and Management 5300
This course is intended for graduate business students who do not have an undergraduate degree in business. The class examines business transactions with a focus on their implications for managers.
* Pending Approval

Foundations of Organization Behavior 5310
A study of organizational behavior and management concepts. The course will examine the development of management thought, with special emphasis on motivation, leadership and organizational theories. Topics will include awareness of individual behavior, social interaction, the dynamics of group and intergroup behavior and the effects of the total system of behavior observed with the organization.
Prerequisite: Graduate standing, ECON 5300, MGMT 5300.

Operations Management and Information Systems 5320
Fundamentals of management information systems, including computer applications; mathematical modeling techniques and decision support systems will be examined with respect to production and information systems. Emphasis is given to the concepts, processes, and institutions in the production of goods and services, and to the integrating role of information systems in the effective, efficient use of organizational resources.
Prerequisite: Graduate standing, BUAL 5300.
5330 Administrative Policy and Strategy 3:3:0
Socio-political change taking place in even remote areas of the globe are impacting on the strategic initiatives of businesses, small and large, international and domestic. This course will focus on the role of top management in welding functional areas such as marketing, management, and finance to fulfill strategic organizational aims. Economic and socio-political conditions existing in various world regions will be considered.
Prerequisite: Graduate standing, MGMT 5310.

5340 Seminar in Management 3:3:0
A course designed to give students an integrated approach to management through the application of theory to problem solving situations. Students perform in consulting roles applying management as both science and art. Emphasis is placed on national and international problems and a synergistic effect made to provide positive and applied solutions to actual managerial decisions making.
Prerequisite: Graduate standing, MGMT 5330.

5380 Business Research 3:3:0
The student will design and carry out an individual research project under the supervision of a faculty member. Emphasis will be placed on research design and methodology, sources of business and economic data and the use of quantitative techniques to achieve substantive research results.
Prerequisite: Graduate standing, MGMT 5330.

5390 Special Topics in Management 3:3:0
Investigation into special areas in management under the direction of a faculty member.
Prerequisite: Graduate Standing and approval of the instructor, department chair, and deans.

Marketing (MKTG) courses must be selected from the following list:

5300 Marketing Concepts 3:3:0
Marketing orientation and concepts; marketing programs of domestic and global perspectives in the formulation and development of strategies with regard to price, product, channels of distribution, and promotion of goods and services within an ever-changing environment.
Prerequisite: Graduate standing, ECON 5300, MGMT 5300.

5310 Seminar in Marketing 3:3:0
An intensive study of specific marketing concepts and theories. Marketing strategies for the national and multinational firms are surveyed. Emphasis is placed on reading from current journals and other related publications.
Prerequisite: Graduate standing, MKTG 5300.

5340 International Marketing 3:3:0
Analysis and planning of marketing mix on an international scale. The course focuses on the aspects of international marketing such as the international market, the identification of global opportunities and threats, the formulation of international marketing strategy, and the organizations and control of global marketing.
Prerequisite: Graduate standing, MKTG 5300.

Administrative Service courses must be selected from the following list:

BUAL 5300 Statistical Analysis for Decision Making 3:3:0
Theory and applications of presenting and utilizing data for decision making in business situations. Topics include methods of gathering, presenting, and analyzing quantitative data; probability theory; probability distributions; sampling theory; estimation and tests of hypotheses; simple linear regression/correlation analysis; classical time series; and other statistical procedures commonly used in business analysis.
Prerequisite: Graduate standing.

BUAL 5310 Advanced Statistical Theory and Analysis for Business 3:3:0
An advanced course in statistical theory and application of the quantitative techniques commonly used in business research and analysis. Advanced topics in sampling theory, statistical inferences, and regression/correlation analysis are presented. Specific topics include analysis of variance; multiple linear and non-linear regression/correlation analysis; classical time series and forecasting; decision theory; and other statistical models. Students will have the opportunity to use a standard statistical software package.
Prerequisite: Graduate standing, BUAL 5300 or equivalent.

BULW 5300 The Legal Environment of Business 3:3:0
A survey of the legal environment of business including concepts of legal rules, the legal framework to resolve disputes, a study of the concept of property rights, contracts, commercial paper, agency and employment laws, government regulations of business through administrative agencies, and introduction to international law.
Prerequisite: Graduate standing.
BULW 5350 Estate Planning Fundamentals 3:3:0
A survey of the federal and state laws dealing with the estates of individuals, including living trusts, estate tax-saving trusts, charitable trusts, spendthrift trusts, providing for children, avoiding probate, minimizing estate taxes, second marriages, protecting businesses at death, gifts, wills, and living wills.
Prerequisite: Graduate standing.

BULW 5390 Special Topics in Business Law 3:3:0
Intensive investigation of topics in business law. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.
Prerequisite: Graduate standing and approval of instructor, department chair, and dean.

MISY 5340 Multimedia Applications 3:3:0
This course covers the use of personal computers to develop multimedia applications. The use of various hardware and software components in the production of multimedia systems is stressed. Working in a workgroup using a Local Area Network with shared resources is emphasized. The most current hardware and software tools for processing text, graphics, sound, video and animation are made available to the student. Class projects require hands-on use of authoring and applications packages. Students develop and present an interactive multimedia system project.
Prerequisite: Graduate standing.

MISY 5360 Seminar in Information Systems Management 3:3:0
This seminar provides a broad overview of the information systems management function. The course emphasizes information systems management with particular attention to planning, organizing, and controlling user services and managing the computer information systems development process.
Prerequisite: Graduate standing.

MISY 5390 Special Topics in Management Information Systems 3:3:0
Intensive investigation of topics in management information systems. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.
Prerequisite: Graduate standing and approval of instructor, department chair, and dean.

OFAD 5300 Administrative Communication 3:3:0
Communication theory and practice with emphasis on variables affecting organizational communication. Intrapersonal, organization, and technological dimensions of communications. Specific areas include cultural and international differences in communication; one-to-one, small group and large group communications; formal and informal networks; electronic transmission; business letters and memoranda; and research papers and formal reports.

OFAD 5390 Special Topics in Office Administration 3:3:0
Intensive investigation of topics in office administration. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.
Prerequisite: Graduate standing and approval of instructor, department chair, and dean.

Thesis courses necessary for graduation under Plan I.

BUSI 5390-5391 Thesis
Students must be continually enrolled in Thesis each Fall, Spring, and at least once in the Summer, until the thesis is completed.
Prerequisite: Approval of Associate Dean, College of Business. Must complete both for required 6 credits.
College of Education and Human Development

The College of Education and Human Development offers graduate programs of study leading to the Master of Education degree in six different areas and to the Master of Science degree in Kinesiology and in Family and Consumer Sciences.

Persons seeking admission to these programs must meet the general admission requirements of the College of Graduate Studies and of the individual department in which they plan to enroll. Admission to a degree program does not imply admission to candidacy for a degree.

Degrees Offered
- Master of Education in Counseling and Development
- Master of Education in Educational Administration
- Master of Education in Elementary Education
- Master of Education in Secondary Education
- Master of Education in Special Education
- Master of Education in Supervision
- Master of Science in Kinesiology
- Master of Science in Family and Consumer Sciences

Professional Certificates Available
- Counselor
- Educational Diagnostician
- Elementary Education
- Mental Retardation
- Mid-Management Administrator (Principal)
- Reading Specialist
- School Superintendent
- Secondary Education
- Special Education Supervisor
- Supervisor
- Visiting Teacher

General Information Concerning Professional Certificates

The Professional Certificate is valid for life unless cancelled by lawful authority, and gives the holder legal authority to perform duties in the specialized areas designated on the face of the certificate. Information about requirements for a particular certificate can be obtained from the department offering the certification program. Once all requirements for a certificate are completed it is the responsibility of the student to go to the Office of Professional Services and Admissions in the College of Education and Human Development and make application for the certificate to be awarded by the Texas Education Agency.

Early Childhood Development Center

The Early Childhood Development Center is an educationally oriented model program for children between the ages of 18 months and five years. The Center, under the direction of the Department of Family and Consumer Sciences and The College of Education and Human Development, is an integral part of professional development for graduate students.
The Center is used extensively by the Department of Family and Consumer Sciences, the Department of Professional Pedagogy, the Department of Health, Kinesiology and Dance, and the Department of Educational Leadership. The Center provides opportunities for University students to direct learning of young children who exhibit both typical and atypical development as well as to investigate effective teaching strategies for promoting optimal development among young children. Students have the opportunity to observe and interact with children which enhances understanding of child growth and development. In addition the students are able to relate understanding about the family, nutrition, prenatal care and community interaction to child behavior.

In addition, the Center provides interdisciplinary research opportunities for faculty and graduate students. The laboratory school is also used for strengthening leadership skills in the field of child development through seminars, workshops, and other educational events.

Department of Educational Leadership

Department Chair: Dr. Carolyn Crawford
Program Advisors: 204 Education Bldg.
Counseling and Development: Dr. Carolyn Crawford, Dr. William Holmes, Dr. George McLaughlin, Dr. Curtis Wills
Educational Administration: Dr. Bob Thompson, Dr. Dorman Moore, Dr. Elvis Arterbury
Supervision: Dr. Dorman Moore

The Department of Educational Leadership offers graduate programs leading to the Master of Education (M.Ed.) degree in Educational Administration, Supervision, Counseling and Development and in Elementary, Secondary and Special Education. For students already holding a master’s degree and teacher certification, the Department offers course work leading to certification as a Superintendent, Mid-management (principal), Supervisor, and School Counselor.

Course prerequisites for the state examination for Licensed Professional Counselor certification are also offered by this department.

Admission

Admission to a master’s degree program or a post-master’s “certificate only” program is required of all students taking courses in the Educational Leadership Department. A maximum of six semester hours may be taken prior to admission. Non-admitted students wishing to transfer courses to another department or another university must have permission of the department chair before registering.

Admission to a Master’s Degree Program

To be admitted to a program leading to a Master’s degree in Educational Administration, Counseling and Development, or Supervision, students must fulfill the general requirements for admission to the Graduate College as stated elsewhere in this bulletin plus the departmental requirements. The Educational Leadership Department requires a minimum score of 400 on the Verbal and Quantitative sections of the Graduate Record Exam with a minimum combined Verbal and Quantitative score of 900. Test of English as a Foreign Language (TOEFL) is not accepted as a substitute for minimum scores on the Graduate Record Exam. If a student has applied for admission to a degree program and has not received notification of acceptance (or non-acceptance) within 30 days after application the student should check with the Graduate Admissions Office.
Admission to Candidacy for Master's Degree

After completing at least 12 semester hours of course work on the master's degree with a minimum of 6 semester hours in his/her major field, the student should apply for Admission to Degree Candidacy. Forms for admission to candidacy should be obtained from the Educational Leadership Department Office and returned there upon completion. (NOTE: University regulations require the student be admitted to candidacy prior to beginning the last nine hours of course work). If a student does not have a letter certifying admission to candidacy within 30 days after making application the student should check with the department office.

Step by step procedure for admission to a Master's degree program

1. Apply for Admission to the Graduate College of Lamar University.
   A. Obtain application packet from the Graduate Admissions Office in Room 118 of the Wimberly Building or call (409) 880-8356.
   B. Successfully complete the Graduate Record Examination and have scores sent to Graduate Admissions, Lamar University, P.O. Box 10078, Beaumont, TX 77710.
   C. Have all transcripts sent to Graduate Admissions as in B above.

2. Meet with program advisor to develop a degree plan. NOTE: No deviations from the degree plan will be permitted without prior written permission of advisor or department head.

3. In consultation with graduate advisor, select members of graduate committee. (The program advisor will chair this committee.)

4. Complete at least 12 hours of course work from their degree plan (at least six semester hours must be from courses in their major) and apply for Admission to Candidacy. NOTE: A Student must be admitted to candidacy prior to beginning the last nine hours of course work.

5. Complete remaining course work.

6. Complete requirements for graduation.
   A. Apply for graduation in the Graduate College office (219 Wimberly).
   B. Take and pass comprehensive examination during the last semester of attendance. To take the comprehensive examination a student must be in his/her last semester of coursework, have no incompletes ("I" grade) or unsatisfactory ("D" or "F" grades) on their transcripts and have met all other requirements for graduation.

7. Graduate.
   NOTE: Completion of some Master's programs also includes completion of all course requirements for an additional certification. Student desiring the additional certificate must apply to take the appropriate ExCET Exam at the Office of Professional Services and Admissions. After successfully passing the exam, the student should apply at the Certification Office for the certificate.

Admission to a “Certification Only” (non-degree program)

The Educational Leadership Department offers post master's certification programs leading to certification as a Superintendent, Mid-Management (Principal), Supervisor and School Counselor. Students who hold a master's degree and teacher certification and seek an additional certification offered by this department should apply to the Educational Leadership department for admission to the appropriate certification program. Upon completion of the application and receipt of an official transcript, a program
advisor will be assigned. The advisor will develop a certification plan for the student. After completion of the certification plan requirements the student must apply for and pass the ExCET examination and file for the certificate at the Certification Office. Students seeking a program leading to examination for certification as a Licensed Professional Counselor should follow the process designated above and then contact the State Board of Examiners for Professional Counselors in Austin, Texas to apply for licensure and take the licensure exam.

Master’s Degree in Counseling and Development

The Master’s Degree in Counseling and Development requires the successful completion of a comprehensive 45 semester hour program of study. Students interested in pursuing a degree in Counseling and Development can secure an up-to-date degree plan from the Department of Educational Leadership, in the Education Building or by writing to the Department of Educational Leadership, P.O. Box 10034, Lamar University, Beaumont, Texas 77710.

Certification in Counseling and Development

Professional School Counselor’s Certificate

A student who completes requirements for a Master of Education degree in Counseling and Development will have fulfilled all curriculum requirements for a Professional School Counselor’s Certificate.

Students already holding a Master’s degree from an accredited university may enter the “Certification Only” program by making application in the office of the Department of Educational Leadership and providing an official transcript of all applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan for the student. After completion of the certification plan the student must take and pass the ExCET examination and apply for the certificate at the Office of Professional Services and Admissions in the Education Building. Prerequisites for the certificate include Texas teacher certification and three years of acceptable classroom teaching experience. Approval to take the ExCET is normally granted in the last semester of student’s course work.

Licensed Professional Counselor’s Certificate

The Texas State Board of Examiners of Professional Counselors regulates licensing requirements for counselors to render services in the state of Texas through private practice, group practice, institutions, organizations and similar types of arrangements. Students who need additional information or wish to complete academic work toward licensure as a Licensed Professional Counselor (LPC) should see the Counseling and Development faculty in the Department of Educational Leadership or contact the Texas State Board of Examiners of Professional Counselors in Austin, Texas.

Master’s Degree in Educational Administration

The Master’s degree in Educational Administration requires successful completion of a 36 semester hour program of study. A student may choose a degree plan with an emphasis in building administration (mid-management) or in school business administration. Students who choose the Master’s degree in mid-management and wish to apply for Professional Mid-Management Administrator certification must complete all degree
requirements plus 12 additional semester hours of prescribed course work. The Master's degree with emphasis in school business administration prepares students for proficiency in that field. Texas has not adopted standards for school business administrator certification.

**Certification in Educational Administration**

**Professional Mid-Management Administrator Certification**

A student who completes requirements for a Master of Education degree in Educational Administration will have fulfilled the first 36 semester hours of the 48 semester hours required for a Mid-Management certificate. An additional twelve semester hours are required for the Mid-Management certificate. The student’s degree plan will include the additional courses required for certification.

Students already holding a Masters Degree from an accredited university may enter the "Certification Only" program for Mid-Management certification by making application in the office of the Department of Educational Leadership and providing an official transcript of all applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan.

To receive the Mid-Management certificate a student must complete all requirements for Master’s Degree in Educational Administration, complete the additional twelve semester hours of course work, hold a valid Texas Teacher certificate, have 2 years of classroom teaching experience, take and pass the ExCET examination, and apply for the certificate at the Office of Professional Services and Admissions in the Education Building. Students normally register for the ExCET in their last semester of course work.

**Professional Superintendent Certificate**

Prerequisites for the Professional Superintendent Certificate include a Master’s degree and Professional Mid-Management Administrator certification. Students who meet these prerequisites and wish to seek certification as a school superintendent should apply to the Department of Educational Leadership. Upon completion of the application and receipt of an official transcript of graduate work an advisor will be assigned to develop a certification plan for the student. Students meeting the prerequisites can usually obtain certification as a superintendent by completing twelve to fifteen additional semester hours plus a year-long internship. After completion of the certification plan the student must take and pass the ExCET examination and apply for the certificate at the Office of Professional Services and Admissions in the Education Building. Students normally register for the ExCET in their last semester of course work.

**Master’s Degree in Supervision**

Students interested in pursuing a master’s degree in Supervision can secure an up-to-date degree plan from the Department of Educational Leadership in the Education Building or request a copy by writing to the Department of Educational Leadership, P.O. Box 10034, Lamar University, Beaumont, Texas 77710.

**Certification in Supervision**

A student who completes requirements for a Master’s degree in Supervision will have fulfilled all curriculum requirements for a Professional Supervisor Certificate. Students already holding a Master’s degree from an accredited university may enter the “Certifi-
cation Only' program for Supervision certification by making application in the office of the Department of Educational Leadership and providing an official transcript of all applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan.

To receive the certificate a student must complete all requirements for a master's degree in Supervision, hold a valid Texas teacher certificate, have 3 years of acceptable classroom teaching experience, take and pass the ExCET examination, and apply for the certificate at the Office of Professional Services and Admissions in the Educational Building. Students normally register for the ExCET in their last semester of course work.

**Graduate Faculty**

Professor Elvis Arterbury  
Educational administration and supervision

Professor David L. Bost  
Educational foundations

Associate Professor Carolyn Crawford  
Counseling and development

Associate Professor William R. Holmes  
Counseling and development

Professor George McLaughlin  
Counseling and development

Associate Professor Dorman Moore  
Educational administration and supervision

Professor Bob Thompson  
Educational administration and supervision

Associate Professor Curtis E. Wills  
Counseling and development

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**Counseling and Development Courses (CNDV)**

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>5301</td>
<td>Human Growth and Development</td>
<td>3:3:0</td>
<td>A study of normal human development and the stages of physical, intellectual, social, and emotional growth from prenatal origins through old age. (Approval pending)</td>
</tr>
</tbody>
</table>
| 5310     | Individual and Group Facilitation Skills   | 2:3:0   | An introduction of facilitation skills and theory. In-depth analysis and demonstration of various facilitation techniques for use with both individuals and groups. (This is a pre-practicum course.)  
**Prerequisite:** CNDV 5311 or CNDV 5312 or permission of instructor.

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<th>Title</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>5311</td>
<td>Individual Counseling Theories and Techniques</td>
<td>3:3:0</td>
<td>Theories of individual counseling with an emphasis on techniques and applications.</td>
</tr>
</tbody>
</table>
| 5312     | Group Counseling Theories and Techniques   | 3:3:0   | An analysis of group counseling theories, processes and techniques.  
**Prerequisite:** CNDV 5311 or permission of instructor.

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<tr>
<th>Course</th>
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<th>Credits</th>
<th>Description</th>
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</table>
| 5321     | Test Administration and Interpretation     | 3:3:0   | Theoretical and practical study emphasizing the administration, scoring and basic interpretation of individual psychological tests. Students will be trained to administer the Wechsler tests, the Stanford-Binet or other individual assessment instruments.  
**Prerequisites:** EDLD 5334 or permission of instructor.

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<th>Description</th>
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<tbody>
<tr>
<td>5322</td>
<td>Program Development, Administration, Ethics and the Law</td>
<td>3:3:0</td>
<td>Organizing and implementing a counseling program or practice with an emphasis on legal issues, ethical principles and professional standards of conduct.</td>
</tr>
</tbody>
</table>
5323 Career Development 3:3:0
A focus on theories of vocational choice, vocational assessment, sources of occupational and educational information and the career decision process.
Prerequisites: CNDV 5322.

5350 Abnormal Human Behavior 3:3:0
A study of various symptom categories in psychopathology. The course will include an analysis of the diagnostic categories as well as the research concerning etiology and treatment.
Prerequisites: Approval of instructor.

5351 Consultation 3:3:0
This course has an emphasis on developing consultation skills for the counselor. Methods and techniques to assist the counselor in implementing appropriate consultation skills for problem management, intervention or prevention.

5360 Seminar in Counseling and Development 3:3:0
Designed to advance the professional competence of participants. For each seminar, a description of the particular area of study will be indicated. May be repeated for credit when nature of seminar differs sufficiently from one previously taken. A maximum of six hours in institutes may be applied toward a Master’s degree.

5381 Advanced Seminar in Social and Family Relations 3:3:0
An intensive exploration of the dynamics of interpersonal relationships, including family and social issues. A critical analysis of various techniques and approaches will be established. Development of personal counseling skills will be of major concern.
Prerequisites: CNDV 5322, CNDV 5311. (Approval pending)

5382 Selected Instruction Topics 3:3:0
Significant topics in Counseling and Development. The description of the particular area of study will appear on the printed schedules of Lamar University each semester. Contact hours are the same as those required by a formal instructional course. With permission of advisor in student’s major field, course may be repeated when topic varies.

5390/5391 School Counseling Practicum 3:3:0
A field-based course with supervised observation and practice of guidance and counseling in a school setting during the school day.
Prerequisite: Must be within 6 semester hours (excluding practicum) of completing program requirements before beginning internship. A maximum of one additional course may be taken any semester in which a student is enrolled in a practicum.

5392/5393 Community Counseling Practicum 3:3:0
A field-based course of supervised observation and practice of guidance and counseling in an agency setting.
Prerequisite: Must be within 6 semester hours (excluding practicum) of completing program requirements before beginning internship. A maximum of one additional course may be taken any semester in which a student is enrolled in a practicum.

Educational Leadership Courses (EDLD)

5301 Research Methods 3:3:0
Introduction to skills and techniques necessary for descriptive research in education problems. Emphasis on planning, designing, and methodology. One-third time in laboratory exercises and writing a research proposal and report.

5306 Educational Technology for Administrators 3:3:0
Functional knowledge of educational computing and technology with an emphasis on productivity tools for professional use. (Pending approval)

5311 Fundamentals of Administration 3:3:0
A study of the relationships between and among human behavior, belief systems and administrative style.

5326 School-Community Relations 3:3:0
Developing personal and mass media communication skills with emphasis on improving school-community relationships through effective communication techniques.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.

5332 School Organization and Management Issues 3:3:0
Study of the administrative proficiencies necessary in the organization and administration of an effective school. Should be the last course before or in conjunction with an Internship. (Pending approval)
Campus Planning and Problem Solving 3:3:0
A study of short and long-range planning and problem solving techniques of effective school leaders. Special emphasis will be given to applications in an individual campus and the relationship to district planning processes.

Tests, Measurement, and Evaluation 3:3:0
Analysis and evaluation of types of tests and measurement devices will be conducted. Methods of determining the reliability and validity of tests are investigated. Designs for testing programs and selection of appropriate tests will be included. Evaluation systems of individuals and programs will be discussed.

Curriculum Management 3:3:0
Models of curriculum development and evaluation with particular emphasis on the management of these functions.
Prerequisites: EDLD 5311, EDLD 5352 and admission to the program.

Organizational Behavior 3:3:0
Study of school as an organization and how individuals behave in organizations. Students will assess and compare their own personal competencies to the administrative needs of a selected school.
Prerequisite: EDLD 5311.

School Finance 3:3:0
Analysis of principles of school finance to include problems of budgeting, accounting, and administration of funds.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.

Educational Facilities Planning 3:3:0
Evaluation and administration of school facilities and the relationship of facilities to the achievement of educational objectives.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.

School Law 3:3:0
Interpretation and implementation of school law including a study of the Texas Education Code and the Handbook for Public School Law.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.

Personnel Administration 3:3:0
Fundamentals of human relations and organizational behavior in developing programs of recruitment, selection, assignment, evaluation, promotion and termination of personnel. Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.

Techniques of improving instruction through application of research on effective schools and models of instruction.
Prerequisite: Advisor's approval. (Pending approval)

Team Facilitation 3:3:0
Role of peers in school evaluation and improvement initiatives. Emphasis on team approaches, team leadership, and models to improve group processes.
Prerequisite: Advisor's approval. (Pending approval)

Educator Evaluation 3:3:0
Study of techniques of effective educator evaluations with emphasis on appraisal as a component of professional development. All requirements for PDAS training are included as are requirements for other administrative assessments.
Prerequisites: EDLD 5352 and admission to the program. (Pending approval)

The School Superintendent 3:3:0
Role and responsibilities of the superintendent as chief administrative officer of the district.
Prerequisite: Certification in Mid-Management.

Information Systems for Educators 3:3:0
An analysis of the Public Education Information System and district-wide system management issues including financial, curriculum and human resource applications.
Prerequisite: EDLD 5306 or equivalent. (Pending approval)

Independent Study 3:3:0
Supervised investigation into special areas of education under the direction of a graduate faculty member. May be repeated for credit when topic of investigation varies.
Prerequisite: Consent of department chair.

Seminar in School Administration 3:3:0
Study of concepts and principles of school administration as applied to selected topics. Special attention will be given to new and developing programs and to administrators' roles in these programs.
Prerequisites: Permission of instructor.
Selected Instructional Topics  3-6:3:0
Study of significant topics related to administration and supervision of schools. The description of the particular area of study will appear on the printed schedules of Lamar University each semester. Contact hours are the same as those required by a formal instructional course. With permission of advisor in the student's major field, course may be repeated when topic varies.
Prerequisites: Permission of advisor.

Internship in Administration  3:3:0
Designed to develop administrator proficiencies and skills specific to a job title under the joint supervision of a school administrator and faculty of Lamar University. (Pending approval)

Internship for Supervision  3:A:0
Designed to give the prospective supervisor job-related experience under the joint supervision of a school district supervisor and faculty of Lamar University.
Prerequisite: Must have completed all courses in the major and be within 3 semester hours (excluding internship) of completing certification requirements.

Internship for Mid-Management  3:3:0
Designed to give the prospective principal or middle level administrator job-related experience under the joint supervision of a school administrator and faculty of Lamar University. (Must be taken in 2 consecutive semesters or 1 long term and 1 summer term.) May be repeated once for credit.
Prerequisites: Masters Degree in Educational Administration and within 3 semester hours (excluding internship) of completing mid-management certification.

Internship for School Superintendent  6:A:0
Designed to give the prospective superintendent job-related experience under the joint supervision of a school superintendent and faculty of Lamar University. Must be completed in consecutive semesters (Fall & Spring) in the same academic year.
Prerequisites: Certification in Mid-Management and within 6 semester hours (excluding internship) of completing superintendency certification. A maximum of one additional course may be taken in any semester in which a student is enrolled in an internship.

Department of Professional Pedagogy

Department Chair: Dr. Ravic Ringlaben  202 Education Building
Phone: 880-8673

Director of Professional Services and Admissions:
Dr. Charles Burke  206 Education Building
Phone: 880-8902

The Department of Professional Pedagogy offers programs leading to the Master of Education (M.Ed.) degree in Elementary Education, Secondary Education, and Special Education. In addition, the Department offers course work leading to six different Professional Certificates. It is the goal of the Master of Education and the Professional Certificate programs to provide the academic climate and practical experience necessary to produce teachers and other specialists of superior competence in their chosen areas of specialization.

Students who wish to pursue a Master of Education and/or a Professional Certificate should contact the Director of Professional Services and Admissions well before the beginning of the semester in which they plan to enroll.
Master of Education (M.Ed.)

General Requirements

To be accepted into a program leading to a Master's Degree in Education the student must:

1. Fulfill the general requirements for admission and the general degree requirements as stated elsewhere in this bulletin.
2. Meet the undergraduate prerequisites appropriate to the chosen program of study. These requirements include:
   A. The applicant in elementary education must have completed 18 semester hours in education, including 6 semester hours in elementary education methods and materials courses.
   B. The applicant in secondary education must have completed a minimum of 18 semester hours in education. At least 12 of the 18 hours must be at the 300 level or higher.
3. The student may elect to write a thesis. If so, the student is required to complete a minimum of 30 hours plus the thesis.
4. The student who does not write a thesis must earn a minimum of 36 hours of graduate credit and is required to pass a written comprehensive examination administered during the last semester of attendance.

Step by Step Procedure

1. Apply for Admission to the Graduate College of Lamar University.
   A. Obtain application packet from the Graduate Admissions Office in Room 118 of the Wimberly Building or call (409) 880-8356.
   B. Take the Graduate Record Examination and have scores sent to: Graduate Admissions, Lamar University, P.O. Box 10078, Beaumont, Texas 77710.
   C. Have all transcripts sent to Graduate Admissions as in B above.
2. Meet with program advisor to develop a degree plan. NOTE: No deviations from the degree plan will be permitted without written permission of the Director of Professional Services and Admissions.
3. In consultation with the Director of Professional Services and Admissions, select members of graduate committee. (The program advisor will chair this committee.)
4. Complete at least 12 hours of graduate-level course work in the department and apply for Admission to Candidacy. NOTE: Students must be admitted to candidacy before beginning their last nine hours of course work.
5. Complete remaining course work.
6. Complete requirements for graduation
   A. Apply for graduation in the Graduate College office (219 Wimberly).
   B. Pass comprehensive examination
7. Graduate
Degree Plan in Elementary Education

To meet individual needs, considerable flexibility is allowed in planning the student's program; however, the usual pattern of course work is as follows:

1. **Professional Development.** Six semester hours must be selected from the following courses:
   - PEDG 5310 Research for Teachers (Req)
   - PEDG 5340 Advanced Study in Human Development
   - PEDG 5350 Psychology of Pedagogy
   - PEDG 5370 Public School Curriculum

2. **Resource Area.** 12 semester hours must be selected from the following courses (nine semester hours if the student elects to write a thesis):
   - PEDG 5306 Problems in Teaching Science and Social Studies in the Elementary School
   - PEDG 5380 Modern Mathematics in the Elementary School
   - PEDG 5387 Teaching of Reading in the Elementary School
   - PEDG 5389 Diagnostic/Prescriptive Procedures in Reading

3. **Specialization Area.** Six semester hours of courses must be taken for graduate credit from one or a combination of the following disciplines: history, English, foreign languages, mathematics, science, art, music, speech or health and physical education.

4. **Electives.** 12 semester hours (nine semester hours if student elects to write a thesis) from any of courses listed below or in a concentrated area.

   A. **Reading Specialist**
      - PEDG 5387 Teaching of Reading in the Elementary School
      - PEDG 5385 Literature: Pre K-12
      - PEDG 5389 Diagnostic/Prescriptive Procedures in Reading

   B. **Early Childhood Education**
      - PEDG 5351 Advanced Study in Early Childhood Curriculum
      - PEDG 5352 Creative Activities in Early Childhood Education
      - PEDG 5355 Analysis of Program Implementation in Early Education

   C. **Supervision**
      - PEDG 5334 Tests Measurements & Evaluation
      - PEDG 5353 Leadership and Evaluation of Instruction

   D. **Special Education**
      - PEDG 5361 Survey of Learning Potentials of Exceptional Children
      - PEDG 5364 Behavior Modification and Contingency Management of Disabled Learners
      - PEDG 5365 Instructional Processes With Exceptional Children
      - PEDG 5366 Modification of Curriculum and Instruction for the Atypical Learner

   E. **Gifted/Talented Endorsement**
      - PEDG 5356 The Gifted Learner
      - PEDG 5357 Creativity and the Gifted Learner
      - PEDG 5358 Identification and Assessment of Gifted/Talented Learner
      - PEDG 5359 Gifted/Talented Curriculum
      - PEDG 5360 Practicum
NOTE: To fulfill requirements concurrently for a Master's degree and for a Professional Certificate, a student may complete 12 additional graduate hours in an area of undergraduate specialization and substitute these hours for 12 hours in the elective area.

**Degree Plan in Elementary Education With Professional Certification in Reading**

1. To fulfill requirements concurrently for a Master's degree and Professional Certification in Reading, the student:
   A. Must meet general requirements for a Master of Education degree.
   B. Must hold a valid Texas Provisional Elementary or Secondary Certificate.
   C. Must have completed a minimum of three years of creditable classroom teaching.

2. A. **Professional Development Area:** Six semester hours.
   - PEDG 5310 Research for Teachers (Req)
   - PEDG 5340 Normal Human Growth and Development
   - PEDG 5350 Psychology of Pedagogy
   - PEDG 5370 Public School Curriculum

   B. **Resource Area:** Six semester hours.
   - PEDG 5367 Cross Cultural Counseling

   C. **Reading Specialization Requirements:** Eighteen semester hours
   - PEDG 5387 Teaching of Reading in the Elementary School (Req)
   - PEDG 5389 Diagnostic/Prescriptive Procedures in Reading (Req)
   - PEDG 5385 Literature: Pre K-12 (Req)
   - PEDG 5306 Problems in Teaching Science and Social Studies in the Elementary School
   - PEDG 5380 Modern Mathematics in the Elementary School

   D. **Professional Secondary:** Six semester hours
   - PEDG 5321 Adolescent Development

**Professional Certificates in Elementary Education**

The applicant should hold or be eligible for a Provisional Certificate before admission into a professional program and have three years of teaching experience before being recommended for the Professional Certificate.

Requirements for the Professional Certificate follow an outline prescribed by the Texas Education Agency, consequently, the format for the certificate and the format for the degree are not identical. By selecting a program and with careful planning, a student may fulfill concurrently requirements for the Master's degree and requirements for a Professional Certificate in Elementary Education or the Reading Specialist Certificate. Specific information concerning these certificates may be obtained from the College of Education and Human Development Director of Professional Services and Admissions.
Other Certificates

It is possible for students to complete part or all of the requirements for a Provisional Teaching Certificate or an endorsement to such a certificate while working on a Master of Education degree in Elementary Education. Endorsements in areas such as mental retardation, physically handicapped/minimally brain injured, emotionally disturbed, learning disabilities, early childhood/exceptional children, gifted and talented may be adapted to such an arrangement. Specific information concerning these certificates may be obtained from the Director of Professional Services and Admissions.

Degree Plan in Secondary Education

To meet individual needs, considerable flexibility is allowed in developing the student’s plan for a nonthesis or a thesis program; however, the usual pattern of course work is as follows:

1. **Professional Development.** 18 semester hours must be taken as follows:
   - Required: Six semester hours
   - PEDG 5310 Research for Teachers (Req)
   - PEDG 5321 Adolescent Development
   - **Electives:** 12 semester hours should be in one of the following areas:
     - Classroom Specialist
     - Foundations of Education
     - Reading Specialist
     - Gifted/Talented Supervision

   A list of specific courses required or recommended in each of the concentrations is available from the Director of Professional Services and Admissions.

2. **Specialization Area.** For the nonthesis route to the degree, 12-18 semester hours of graduate work must be completed in one of the approved disciplines. A minimum of 12 hours must be taken at the 5000 level for the 18-hour specialization. If the student elects to write a thesis or chooses the route leading to the Professional Teaching Certificate which requires a six-hour resource area exclusive of professional education and the specialization, the specialization requirement is reduced to 12 semester hours with at least six at the 5000 level.

   A plan listing the specific courses required to recommended is available through the Director of Professional Services and Admissions. Specialization areas are available in the following disciplines:
   - Biology
   - Chemistry
   - Earth Science
   - Physics
   - Speech
   - Kinesiology
   - History
   - Mathematics
   - English
   - Political Science

**Degree in Secondary Education With Professional Certification in Reading**

With a valid junior high school or high school teaching certificate and three years of classroom teaching experience, a student may fulfill requirements for a Professional Reading Specialist Certificate (all levels) by completing the program below in lieu of content specialization.
1. **Professional Development:** Nine semester hours.
   - PEDG 5310 Research for Teachers (Req)
   - PEDG 5350 Psychology of Pedagogy
   - PEDG 5340 Normal Human Growth and Development
   - PEDG 5370 Public School Curriculum

2. **Resource Area:** Six semester hours.
   - PEDG 5367 Cross Cultural Counseling

3. **Reading Specialization Requirements:** Eighteen semester hours
   - PEDG 5387 Teaching of Reading in the Elementary School
   - PEDG 5385 Literature: Pre K-12
   - PEDG 5389 Diagnostic/Prescriptive Procedures in Reading

4. **Professional Secondary:** Three semester hours
   - PEDG 5321 Adolescent Development

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**Program Leading to Professional Teaching Certificate – Secondary**

The Texas Education Agency issues a Professional Teaching Certificate to the candidate recommended by the college when he/she has completed an approved 30 semester hour program of credit beyond the bachelor's degree. This program must include work in professional development, in a teaching specialization area and in a resource area. Requirements also indicate that the candidate must hold a Provisional Teaching Certificate and have three years of teaching experience. Specific requirements for the certificate may be obtained from the Director of Professional Services and Admissions.

**Degree Plans in Special Education**

To meet individual needs, some flexibility is allowed in planning the student's program; however, the usual pattern of course work is indicated below. If a student desires, he/she may complete requirements for a Provisional Certificate as an Educational Diagnostician or in Mental Retardation or in Supervision. In addition, the student may complete requirements for a Provisional Certificate in Special Education-Generic as part of the degree plan. This degree, if the student is pursuing one of the described certifications, is planned as a 36 semester hour non-thesis program. A student not seeking a certificate within the degree hours may complete a degree with a minimum of 30 semester hours plus a thesis.

To fulfill requirements concurrently for a Master's degree and Professional Certification in Supervision, the student also must have or complete a special education endorsement. The student should secure information concerning requirements for certification from the Director of Professional Services and Admissions. General information concerning Professional Certificates is presented in another portion of the College of Education and Human Development section of this bulletin.

**A. M.Ed. in Special Education-Generic Certification**

1. **Professional Development Area:** Nine semester hours required
   - PEDG 5310 Research for Teachers (Req)
   - PEDG 5340 Normal Human Growth and Development
   - PEDG 5350 The Learning Process
   - PEDG 5370 Public School Curriculum

2. **Resource Area:** (12 hours)
   - PEDG 5334 Tests, Measurements and Evaluation (required)
   - PEDG 5361 Survey of Learning Potentials of Exceptional Children (required)
3. **Specialization Area:** (15 hours)
   PEDG 5388 Reading and Language Arts for the Exceptional Child
   PEDG 5362 Psychoeducational Evaluation of Exceptional Children
   PEDG 5364 Behavior Modification and Contingency Management of Disabled Learners
   PEDG 5365 Instructional Processes with Exceptional Children
   PEDG 5366 Modifications of Curriculum and Instruction for the Atypical Learner

B. **M.Ed. in Special Education-Mental Retardation Certification**

1. **Professional Development Area:** Nine semester hours required
   PEDG 5310 Research for Teachers (Req)
   PEDG 5340 Normal Human Growth and Development
   PEDG 5350 The Learning Process
   PEDG 5370 Public School Curriculum

2. **Resource Area:** (12 hours)
   PEDG 5334 Interpretation and Analysis of Tests and Measurements (required)
   Select three courses from those listed below:
   PEDG 5341 Microcomputers for Educators
   PEDG 5351 Advanced Study in Early Childhood Curriculum
   PEDG 5367 Psycho-Social Foundations of Educating the Culturally Different
   PEDG 5362 Psychoeducational Evaluation of Exceptional Children
   PEDG 5363 Practicum in Psychoeducational Procedures
   PEDG 5365 Instructional Processes with Exceptional Children
   PEDG 5366 Modifications of Curriculum and Instruction for the Atypical Learner
   * Other selections must be approved by the chairperson of the student's committee and by the Director of Admissions and Advisement

3. **Specialization Area:** (15 hours)
   Must be selected from the following courses or in concentrated area when attaining a specific certification.
   PEDG 5361 Survey of Learning Potentials of Exceptional Children
   PEDG 5364 Behavior Modification and Contingency Management of Disabled Learners

4. **Student must select six additional hours from courses listed below:**
   PEDG 5362 Psychoeducational Evaluation of Exceptional Children
   PEDG 5363 Practicum in Psychoeducational Procedures
   PEDG 5365 Instructional Processes with Exceptional Children
   PEDG 5366 Modifications of Curriculum and Instruction for the Atypical Learner

C. **M.Ed. in Special Education-Educational Diagnostician Certification**

1. **Professional Development Area.** Nine semester hours required
   PEDG 5310 Research for Teachers (Req)
   PEDG 5340 Normal Human Growth and Development (Req)
   PEDG 5350 The Learning Process
   PEDG 5370 Public School Curriculum
2. **Resource Area.** (12 hours)
   PEDG 5334 Interpretation and Analysis of Tests and Measurements (required)
   Select two courses from those listed below:
   - PEDG 5341 Microcomputers for Educators
   - PEDG 5351 Advanced Study in Early Childhood Curriculum
   - PEDG 5367 Psycho-Social Foundations of Educating the Culturally Different
   * Other selections must be approved by the chairperson of the student's committee and by the Director of Admissions and Advisement

3. **Specialization Area** (15 hours)
   - PEDG 5362 Psychoeducational Evaluation of Exceptional Children
   - PEDG 5363 Practicum in Psychoeducational Procedures
   - PEDG 5364 Behavior Modification and Contingency Management of Disabled Learners
   - PEDG 5365 Instructional Processes with Exceptional Children
   - PEDG 5366 Modification of Curriculum and Instruction for the Atypical Learner

**Professional Certification in Special Education**

- Educational Diagnostician
- Mental Retardation
- Special Education Supervisor
- Special Education Counselor

   Specific information concerning these certificates may be obtained from the Director of Professional Services and Admissions.

**Provisional Certificates in Special Education**

- Special Education
- Generic

   Students may obtain the provisional certificate in the above listed areas. A combination of graduate and undergraduate courses leading to the certificate is possible. Specific information concerning the certificate may be obtained from the Director of Professional Services and Admissions.

**General Information Concerning Professional Certificates**

The Professional Certificate is valid for life unless cancelled by lawful authority, and gives the holder legal authority to perform duties in the public schools of Texas in the specialized areas designated on the face of the certificate. It is the responsibility of the student to initiate the process of applying for certification by contacting the College Director of Professional Services and Admissions.

**Requirements**

1. Have completed the requirements for a Provisional Certificate.
2. Have at least three years of teaching experience.
3. Have completed an approved teacher education program.
4. Be of good moral character.
5. Be a citizen, or in the process of becoming a naturalized citizen of the United States.
7. Have completed, in a Texas institution of higher learning, a course or courses in which the Constitutions of the United States and the State of Texas have been given special emphasis.
8. Have completed at least six semester hours of American history or three semester hours in American history plus three semester hours in Texas history.

Graduate Faculty

Professor Charles M. Burke,  
School curriculum, mathematics education
Associate Professor Mark J. Cooper  
Early childhood
Assistant Professor Fara M. Goulas  
Reading, special education
Professor W. Richard Hargrove  
Educational psychology
Associate Professor Lula J. Henry  
Reading

Professor Andrea Karlin  
Reading
Associate Professor Ed McCaskill  
Science education
Associate Professor Desmond V. Rice  
Reading, educational technology
Professor Doyle Watts  
Educational Psychology

Professional Pedagogy Courses (PEDG)

5310 Research for Teachers  
3:3:0
Introduction to skills and techniques necessary for descriptive research as applied to teacher education, with an emphasis on planning, designing and methodology. Research proposal required.

5320 Current Issues in Education  
3:3:0
Current controversies and trends in public education.

5340 Normal Human Growth and Development  
3:3:0
A study of development and nature of the human personality. Emphasis on recent psychological and biological experiments.

5350 The Learning Process  
3:3:0
History and systems of learning which have application to the classroom. Current theories and research in pedagogy.

5360 Problems in Teaching Science and Social Studies in the Elementary School  
3:3:0
A study of current developments, recent trends and innovative methods of teaching science and social studies in the elementary school, with emphasis upon individual teaching problems and research.

5370 The Public School Curriculum  
3:3:0
Analysis of the objectives, organization and content of the different areas of the public school curriculum in grades K-12. Emphasis is given to models of curriculum development and to techniques for curriculum improvement.

5380 Modern Mathematics in the Elementary School  
3:3:0
Problems, research and innovative methods in elementary mathematics. This course is designed for elementary teachers who wish to pursue individual problems. Research and recent methods and trends of teaching elementary mathematics.

5387 Teaching of Reading in the Elementary School  
3:3:0
Overview of reading: techniques, methods, approaches, materials, classroom management and organization.
5388, 5490 Selected Instructional Topics 3: 4: 3: 4: 0
Significant topics in Elementary, Secondary, Special Education, Supervision, Counseling, and Educational Administration. The description of the particular area of study will appear on the printed schedules of Lamar University each semester. Contact hours must be the same as those required by a formal instructional course. With permission of advisor in the student's major field, course may be repeated when topic varies.

5311 Individual Study in Education 3: 4: 0
Supervised investigation into special areas of education under the direction of a graduate faculty member. May be repeated for credit when topic of investigation differs.
Prerequisite: Consent of department head.

5320 Adolescent Development 3: 3: 0
Physical, mental, social and emotional characteristics of the adolescent; interests and problems; family and community relationships.

5334 Tests, Measurement and Evaluation 3: 3: 0
Analysis and evaluation types of tests and measurement devices will be conducted. Methods of determining the reliability and validity of tests are investigated. Designs for testing programs and selection of appropriate test will be included. Evaluation systems of individuals and programs will be discussed.

5341 Microcomputers for Educators 3: 3: 0
Designed to give teachers an awareness level of computer literacy and allow them to use the computer as an additional tool in the classroom.

5351 Advanced Study in Early Childhood Curriculum 3: 3: 0
A comprehensive study of the organization, methods and materials used for instruction in Kindergarten and other programs for young children.

5352 Creative Activities in Early Childhood Education 3: 3: 0
Teaching methods and materials for releasing creative expression with music, art and literature. Workshop approach with demonstration of art and music processes.

5355 Analysis of Program Implementation in Early Education 3: 3: 0
The inductive analysis and application of specific program and program implementation strategies to the development of cognitive, psychomotor and affective behaviors among young children.

5356 The Gifted Learner 3: 3: 0
In-depth study of the characteristics and unique needs of gifted/talented students as they relate to both school and family settings. Understanding of the educational and psychological demands of giftedness and the role of counseling and counselors.

5357 Creativity and the Gifted Learner 3: 3: 0
Introduction to theoretical constructs related to creative behavior. Emphasis on the development of competence in identifying the student's creative potential through the administration and interpretation of tests of creative behaviors and on strategies for enhancing the learner's creative behavior.

5358 Identification and Assessment of Gifted/Talented Students 3: 3: 0
Theoretical and practical study emphasizing the selection, administration, and interpretation of tests related to identification and curricular planning for gifted and talented students. Attention to state/federal identification mandates and the design of an identification matrix and guidelines for its use in specific educational settings.

5359 Gifted and Talented: Curriculum 3: 3: 0
Survey of models of gifted/talented education with attention to the development of appropriate goals and objectives for curriculum differentiation. Understanding of appropriate evaluation criteria at state/district/classroom levels.

5360 Practicum in Gifted Education 3: 3: 0
Supervised internship in gifted/talented education providing the intern with an opportunity to demonstrate competence in program planning and instructional delivery in classroom/district settings. May not be taken until all four courses (12 semester hours) are completed.

5361 Survey of Learning Potentials of Exceptional Children 3: 3: 0
General survey of the learning potentials of those children deficient in basic integrities which can be categorized into central peripheral nervous system dysfunction and/or behavioral disorder.

5362 Psychoeducational Evaluation of Exceptional Children 3: 3: 0
Simulated experiences in the use of formal and informal methods of appraising and communicating pupils' educational status and progress.

5363 Practicum in Psychoeducational Procedures 3: 3: 0
Practicum experience in the use of formal and informal instruments in the evaluation of the psychoeducational and social development of children and the utilization of education and clinical data in individual teaching plans.
Prerequisite: PEDG 5362.
Graduate Resource Courses

These courses are not offered by the College of Education and Human Development but are required or suggested for certain degree plans.

Department of Health and Kinesiology

The Department of Health and Kinesiology offers a program of study leading to the Master of Science degree in Kinesiology. It is designed to prepare professional personnel for employment in school and community settings and to prepare students for further graduate study at the doctoral level. Candidates seeking admission to the program must meet the general catalog requirements for admission to the College of Graduate Studies. They must also have a 2.5/4.0 overall undergraduate grade point average or, 2.75 grade point average on the last 60 hours of undergraduate course work). They must also satisfy the necessary undergraduate prerequisites as prescribed for a particular area of specialization.

A teaching and research specialization is offered for those graduate students who are interested in advanced preparation for teaching in school and university settings, research opportunities, doctoral-level work and administrative responsibilities.

Degree Requirements

The candidates for the Master of Science degree in Kinesiology must meet all of the College of Graduate Studies general degree requirements as listed in the Graduate catalog. To be sure that requirements are met, students are encouraged to contact the graduate coordinator. Additional specific degree requirements are as follows:

1. Nine semester hours to include Kin 534 (Scientific Basis of Exercise), Kin 536 (Research Methods), and Kin 538 (Motor Learning).
2. The thesis is optional for specialization areas of teaching and research.
Graduate Faculty

Professor Joel E. Barton III  
Health
Professor E. Harold Blackwell  
Kinesiology
Professor Douglas Boatwright  
Kinesiology
Assistant Professor William Johnson  
Kinesiology

Professor Sonny Jolly  
Kinesiology
Assistant Professor Carol Plugge  
Health
Assistant Professor Margie Randleman  
Kinesiology
Assistant Professor George Strickland  
Health

Kinesiology Courses (KINT)

5300 Problems  
Biological, physiological, social, psychological and other purposes and outcomes; selection and distribution of activities; facilities; teacher preparation; literature; research problems. 
Prerequisite: Permission must be obtained from an active teaching member of the graduate faculty.

5310 Sport in Society  
An analysis of sport in American society. The study of the sociological processes that affect the individual as an active participant in sport and physical activity.

5320 Seminar  
Designed to develop abilities in location and evaluating literature and research in Kinesiology and in allied fields. Course may be repeated for a maximum of six semester hours as the topic varies.

5330 Sport Administration  
Developing analytical skills and attitudes of top management in administering the organization as a whole and the interrelationships of all problems in the organization. Establishment of strategic objectives, analysis of changing environments, developing strategies, formulating policies, decision making and problem analysis, personnel resource management.

5340 Scientific Basis of Exercise  
A study of professional literature and laboratory experimentation on the role of physical activities and their effects on the human organism.

5350 Trends and Issues  
Designed to assist the student to become knowledgeable on current trends and issues in the area of Kinesiology. Study will include historical, analytical and projective approaches. Course may be repeated for a maximum of six semester hours as the topic varies.

5360 Research Methods  
Familiarity with types of research in Kinesiology with emphasis on tools and techniques of research and research design.

5370 Basis of Sports Medicine  
Human environmental factors and their interrelationship in sports injury and their control; accident prevention and injury control in sports activities; philosophy of sports safety; contributions of sports medicine to safety and current trends and issues in sports medicine.

5380 Motor Learning  
A formalized and scientific study of learning, performance and related factors as applied to gross motor skills.

5390 Curriculum Development  
Emphasis given to models of curriculum development and to techniques for curriculum improvement. Analysis of objectives, organization and content.

5312 Independent Study  
Intensive study in an area of special interest. Course may be repeated for a maximum of six semester hours as the topic varies. 
Prerequisite: Demonstrated competence for independent work and research methods, and consent of active teaching member of the graduate faculty.

5390-5391 Thesis  
Prerequisite: Approval of Graduate advisor. Must complete both for required 6 hours.

5390 6:A:0
Department of Family and Consumer Sciences

The Master of Science degree in Family and Consumer Sciences may be designed for professional advancement in nutrition/dietetics, family life education, vocational certification, apparel design/merchandising and other related fields. Workshops and travel/study tours along with regular daytime and evening classes are offered.

Persons seeking admission to this program must meet the general requirements for admission outlined elsewhere in this catalog. A student must show evidence of competence in the undergraduate family and consumer sciences curriculum: family life, consumer economics, and background of the profession. The requirement may be satisfied by completing undergraduate Family and Consumer Sciences courses or specifically designated graduate courses in areas of deficiency as approved by the department chair.

An approved preprofessional practice program in dietetics is available at the graduate level. Six semester hours of the required work may be applied to the master’s program.

Degree Requirements

The Master of Science degree in Family and Consumer Sciences requires the completion of 30 semester hours of graduate work; a minimum of 18 in Family and Consumer Sciences, six in thesis and six in an approved supporting field. With the approval of the student’s graduate committee, 12 semester hours of course work may be substituted for thesis.

The student’s graduate program must include FCSC 5300, Research Methods in Family and Consumer Sciences and FCSC 5314, Statistical Theory and Analysis.

Graduate Faculty in Family and Consumer Sciences

Professor LeBland McAdams, Associate Professor Amy Pemberton, R.D.
Clothing, fashion merchandising/ Foods, nutrition/dietetics
retailing, education
Associate Professor Connie Elliff, R.D.
Assistant Professor Paula Nichols Foods, nutrition/dietetics
Clothing, fashion merchandising/
retailing
Assistant Professor Kim Wallet
Family Studies

Family and Consumer Sciences Courses (FCSC)

5300 Research Methods in Family and Consumer Sciences 3:3:0
Introduction to skills and techniques necessary for conducting research in family and consumer sciences subject matter areas. Emphasis on research strategies, data preparation and analysis and research reporting. Research proposal required.

5310 Recent Advances in Foods and Nutrition 3:3:0
Readings in and discussion of selected studies and recent developments in the field of nutrition and foods. Implications for dietitians, nutritionists, teachers, extension workers and others. May be repeated for credit when topic varies.

5320 Clothing Design and Merchandising 3:2:3
An application of couture costume design principles and techniques related to construction and merchandising.

5330 Heritage of Dress 3:3:0
A survey of costume history and customs which have affected garment styles. An analysis of historic costume and its contribution of civilization.

5340 Problems in Clothing and Textiles 3:3:0
Individual and group investigations and discussions of special problems in the various phases of clothing and textiles.
5350 Cultural Foods
An overview of cultural influences on primitive and modern human dietary practices. Emphasis on how humans use culture to adapt to the physical, social and supernatural environments.

5370 Resource Management Across the Lifespan
Socio-economic changes, public policies and programs and management practices related to individual and family well-being through the various life cycle stages.

5380 Occupational Family and Consumer Sciences
Philosophy and development of vocational family and consumer sciences education for secondary schools, colleges or universities with emphasis on occupational family and consumer/sciences careers and jobs, curriculum trends and developments. Credit for course applied to six hours required for teaching in occupational family and consumer sciences programs.

Prerequisite: FCSC 5308.

5101, 5201, 5301 Workshop in Family and Consumer Sciences
Workshops designed to strengthen professional competence needed for addressing societal issues related to family and consumer sciences. May be repeated for credit when topic of interest varies. Credit: one to three hours.

5304 Dietetic Seminar I
Study of the delivery of nutritional services and consultation for individuals, families, and institutions. Students complete projects in menu analysis, client education, clinical nutrition, public health, food service management and related activities.

Prerequisite: Acceptance into Approved Preprofessional Practice Program in Dietetics.

5306 Dietetic Practicum
Supervised practice which includes an average of 32 hours per week field experience in the areas of clinical nutrition, community nutrition, and food service management. Rotations include hospitals and other health care facilities, community nutrition sites, and food service facilities. May not be applied toward a graduate degree.

Prerequisite: Acceptance into Approved Preprofessional Practice Program in Dietetics.

5308 World of Work in Family and Consumer Sciences
A study of occupational home economics education within the secondary curriculum focusing on development and supervision of occupational programs. (Credit for course applied to six hours required for teaching in occupational home economics programs.)

5311 Advanced Textiles
Analysis and comparison of recent scientific textile trends with reference to fiber content, yarn, fabrication, color and finish.

5312 Resources in Family and Consumer Sciences Education
Creative development, selection and evaluation of instructional materials including preparation, selection and use of visual materials.

5313 Current Topics in Family and Consumer Sciences
Intensive study of a current problem of professional interest in family and consumer sciences. The description of the particular area of study will appear on the printed semester schedule. May be repeated for credit when topic of investigation varies.

5314 Statistical Theory and Analysis
A study of statistical theory with application of quantitative techniques commonly used in family and consumer sciences research.

5315 Independent Study
Independent study in an area of interest; review of current literature and research related to individual problems; selection and/or design of instruments used in collecting data. May be repeated for credit when topic of investigation varies.

5316 Family Violence and Therapeutic Intervention
Exploration of interpersonal violence throughout the life cycle from immediate and extended family members. Topics will include physical abuse, sexual abuse, and neglect perpetrated against children, spouses, and the elderly. The perspectives of law enforcement and treatment strategies will be explored.

5317 Lifespan Human Development
Advanced study of human development across the lifespan from the prenatal period through senescence. Social, emotional, physical, and cognitive development are addressed.

5318 Parenting
Contemporary issues facing both parents and professionals who work with them; specific study of parenting skills, parenting in families with special needs and parent-school relationships.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>5319</td>
<td>Single Parent Families</td>
<td>3:3:0</td>
</tr>
<tr>
<td></td>
<td>Exploration of the formation of single-parent families with their varied memberships. Topics will include divorce, widowhood, economics, and support resources. The perspectives of law enforcement, social service agencies, and financial experts will be invited.</td>
<td></td>
</tr>
<tr>
<td>5321</td>
<td>Family Resources</td>
<td>3:3:0</td>
</tr>
<tr>
<td></td>
<td>A survey of local and regional governmental and private agencies that serve children and families.</td>
<td></td>
</tr>
<tr>
<td>5325</td>
<td>Family Communication</td>
<td>3:3:0</td>
</tr>
<tr>
<td></td>
<td>A study of the interdisciplinary nature of family communication: theoretical approaches including systems, relational, and interaction theories; application of theoretical insight and strategies for working with individuals and groups.</td>
<td></td>
</tr>
<tr>
<td>5351</td>
<td>Weight Management</td>
<td>3:3:0</td>
</tr>
<tr>
<td></td>
<td>Diagnosis, etiology, classification, and treatment of weight problems.</td>
<td></td>
</tr>
<tr>
<td>5359</td>
<td>Sports Nutrition</td>
<td>3:3:0</td>
</tr>
<tr>
<td></td>
<td>The role of nutrition is discussed as it relates to athletic performance and physical activity.</td>
<td></td>
</tr>
<tr>
<td>5390-5391</td>
<td>Thesis</td>
<td>6:A:0</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.</td>
<td></td>
</tr>
</tbody>
</table>
College of Engineering

Graduate degree programs are offered as follows:

- Master of Engineering Management (M.E.M.)
- Master of Engineering Science (M.E.S.)
- Master of Engineering (M.E.)
- Doctor of Engineering (D.E.)
- Master of Science in Computer Science (M.S.)
- Master of Science in Environmental Engineering (M.S.)
- Master of Science in Environmental Studies (M.S.)
- Master of Science in Mathematics (M.S.)

**Master of Engineering Management (M.E.M.)**

The Master of Engineering Management is a non-thesis degree program with all courses offered after 4 p.m. Course work is designed to build onto the education received while completing an accredited bachelor's degree in engineering and the individual's professional experience. Hence, practicing engineers generally will not require undergraduate prerequisites.

A total of 36 credit hours are required at the graduate level. Included among these 36 credit hours are 15 hours of core courses required of all M.E.M. students. Course work in addition to the required core courses is tailored specifically to the needs of the student, but generally has approximately one-third of the courses in the general area of technical management, one-third in Business Administration, and one-third in the student's technical discipline such as Civil Engineering, Chemical Engineering, Electrical Engineering, Industrial Engineering or Mechanical Engineering.

**Admission Requirements**

Admission standards are designed to ensure that all enrolled students are qualified professionals serving in a leadership role in their engineering discipline. The four primary requirements are as follows:

1. A B.S. in Engineering or Equivalent.
2. Graduate Record Examination (GRE) Scores (Verbal + Quantitative) = 1000 or more.
3. Two-to-five years of engineering experience in a leadership role.
4. Letter of recommendation for the program from someone in direct supervision over the applicant in his/her primary employment.

**Degree Requirements**

1. All of the College of Graduate Studies general degree requirements.
2. Completion of a core program of 15 semester hours of specified courses.
3. Completion of a minimum of at least 36 semester from an approved list of courses. (See typical programs)

**Step by Step Procedure**

1. Obtain a Bachelor of Science Degree in Engineering.
2. Complete two-to-five years of professional practice in a position of leadership.
3. Apply for Admission to the Graduate College of Lamar University
   a. Complete Graduate application, obtainable by calling (409) 880-8356
b. Take GRE and have scores sent to: Graduate Admissions, Lamar University, P.O. Box 10078, Beaumont, Texas 77710.
c. Have all undergraduate transcripts sent to Graduate Admissions.
d. Have letter of recommendation from supervisor sent to: Coordinator of Engineering Graduate Programs, P.O. Box 10032, Beaumont, Texas 77710.

4. In consultation with Coordinator of Engineering Graduate Programs, select graduate committee.

5. Complete 12 hours of course work including at least three core courses and apply for admission to candidacy.

6. Complete remaining course work specified in candidacy application
   a. Apply for Graduation
   b. Obtain copy of Comprehensive Examination policy from Industrial Engineering Department.
   c. Request and schedule Comprehensive Examination.
   d. Pass Comprehensive Examination

7. Graduate

Core Courses

1. ENGR 5369 Engineering Management
2. INEN 5320 Statistical Decision-Making for Engineers
   or
   INEN 5370 Operations Research
3. INEN 5315 Engineering Organization and Management
   or
   ENGR 5321 Quality Control Systems
4. ENGR 5366 Advanced Engineering Economics
5. ECON 5300 Foundations of Economics

Typical Program Options

Each student in consultation with an advisor should design a program tailored to meet his or her own specific educational objectives. The following typical program options are suggested. Substitutions and/or modifications to these programs can be accomplished with the approval of the student's advisor.

I. Manufacturing Management Concentration

<table>
<thead>
<tr>
<th>Technical Discipline</th>
<th>Technical Management</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INEN 5370 Operations Research</td>
<td>ENGR 5369 Engineering Management</td>
<td></td>
</tr>
<tr>
<td>ENGR 6349 A/I Expert Systems</td>
<td>ENGR 5321 Quality Control Systems</td>
<td></td>
</tr>
<tr>
<td>Business Administration</td>
<td>Advanced Engineering Economics</td>
<td></td>
</tr>
<tr>
<td>Acc 537 Managerial Accounting</td>
<td>ENGR 5366</td>
<td></td>
</tr>
<tr>
<td>Eco 530 Foundations of Economics</td>
<td>for Engineers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INEN 5320 Statistical Decision Making for Engineers</td>
<td></td>
</tr>
</tbody>
</table>
## II. Quality Management

**Technical Discipline**
- ENGR 6359 Computer Methods in SQC
- ENGR 5303 Regression Analysis
- ENGR 5319 Design of Experiments
- INEN 5300 Statistical Quality Control

**Technical Management**
- Same as Option I

**Business Administration**
- Same as Option I

## III. Construction Project Management (CVEN)

**Technical Discipline**
- ENGR 6388 Project Management
- ENGR 5387 Systems Stress Analysis
- ENGR 5308 Cost and Optimization Engr.
- ENGR 5318 Stress Analysis

**Technical Management**
- Same as Option I

**Business Administration**
- Same as Option I

## IV. Construction Project Management (CHEN)

**Technical Discipline**
- ENGR 5348 Air Pollution Control
- ENGR 5341 Mass Transfer
- ENGR 5351 Unit Operations
- ENGR 5360 Thermodynamics

**Technical Management**
- Same as Option I

**Business Administration**
- Same as Option I

## V. Instrumentation and Control (ELEN)

**Technical Discipline**
- (Select 4)
  - ENGR 5352 Advanced Process Control
  - ENGR 5383 Instrumentation
  - ENGR 5380 Discrete Control Systems

**Technical Management**
- Same as Option I

**Business Administration**
- Same as Option I

## VI. Power and Energy (ELEN)

**Technical Discipline**
- (Select 4)
  - ENGR 5383 Instrumentation
  - ENGR 5344 Power Systems I

**Technical Management**
- Same as Option I

**Business Administration**
- Same as Option I

## VII. Construction Project Management (INEN)

**Technical Discipline**
- ENGR 5308 Cost and Optimization
- ENGR 5303 Regression Analysis
- ENGR 5389 CAD
- ENGR 5305 Reliability

**Technical Management**
- Same as Option I

**Business Administration**
- Same as Option I
VIII. Construction Project Management (MEEN)

Technical Discipline
(Select 4)
ENGR 5308 Cost and Optimization Engineering
ENGR 5318 Stress Analysis
ENGR 5311 Heat Transfer
ENGR 5370 Thermodynamics - Energy Conversion
ENGR 5313 Fluid Mechanics

Technical Management
Same as Option I
Business Administration
Same as Option I

Master of Engineering Science (M.E.S.), Master of Engineering (M.E.), and Doctor of Engineering (D.E.)

The Master of Engineering Science, Master of Engineering and Doctor of Engineering programs are administered by the Graduate Steering Committee. Students entering these programs are responsible to this committee until a permanent graduate committee including a chairman is selected and approved. The student should select an advisor and a permanent graduate committee must be formed before the student has completed 15 semester hours of graduate work. No credit toward a graduate degree will be granted unless approved by either the Graduate Steering Committee or the student’s permanent graduate committee.

Core Course Categories for the M.E.S., M.E. and D.E. Programs:

<table>
<thead>
<tr>
<th>Category</th>
<th>Course Number and Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>ENGR 6314 Computer Control and Instrumentation or ENGR 6359 Computer Methods in Statistical Quality Control</td>
</tr>
<tr>
<td>2.</td>
<td>ENGR 6349 Engineering Application or AI/Expert Systems or ENGR 6389 Computer-Aided Software Engineering</td>
</tr>
<tr>
<td>3.</td>
<td>ENGR 6388 Computer Methods for Engineering Project Management</td>
</tr>
<tr>
<td>4.</td>
<td>ENGR 6369 Computer Methods for Engineering Optimization</td>
</tr>
<tr>
<td>5.</td>
<td>ENGR 6339 Hazardous Waste Management</td>
</tr>
</tbody>
</table>

Master of Engineering Science (M.E.S.)

The Master of Engineering Science Degree requires the completion of 30 semester hours of graduate course work, including thesis.

Admission Requirements

For admission to the program, the student must meet the following requirements:

1. The general requirements for admission to the College of Graduate Studies.
2. Hold a bachelor’s degree in a field of engineering or related discipline with credit substantially equivalent to that required for bachelor’s degrees at Lamar University.
3. These are minimum admission requirements and may be more selective for individual departments.
Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. A minimum of 3 semester hours (one course) from those courses listed above as core courses.
3. A minimum of 21 semester hours (seven courses) of electives. Additional core courses may satisfy part of this requirement.
4. Satisfactory completion and defense of thesis (ENGR 5390 and ENGR 5391).

Master of Engineering (M.E.)

The Master of Engineering Degree is a non-thesis 36 semester hour* program designed to suit the needs of the practicing engineer.

Admission Requirements

For admission to the program, the student must meet the following requirements:
1. The general requirements for admission to the College of Graduate Studies.
2. Hold a bachelor's degree in a field of engineering or related discipline with credit substantially equivalent to that required for bachelor's degrees at Lamar University.
3. These are minimum admission requirements and may be more selective for individual departments.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. Completion of one course from three of the five categories of core courses for a total of 9 semester hours of core course work. The core course categories and core courses are listed above.
3. A minimum of 27 semester hours* (nine courses) of electives. Additional core courses may satisfy part of this requirement.
4. Satisfactory completion of a final comprehensive examination.

* A graduate student who has passed the Fundamentals of Engineering Examination or a graduate student who is a Professional Engineer registered in the State of Texas (or registered in another state where requirements do not conflict with the provisions of the Texas Engineering Practice Act and are of a standard not lower than those specified in Section 12 of that Act) may satisfy course requirements by completing 24 semester hours of electives toward a total of 33 semester hours provided ENGR 6310 (Design Project) is included.

Master of Science in Environmental Engineering

Until recently, environmental engineers were primarily concerned with municipal water systems and sewage treatment facilities. The bulk of the course work dealt with the application of engineering solutions to human health problems. Today, the field includes the study of water quality, air quality and methods for disposing of toxic/hazardous wastes. Overall, environmental engineers are engaged in solving the large and complex environmental problems threatening the natural ecosystem.

The Master of Science in Environmental Engineering program is designed to provide engineers with the highly specialized chemical/civil engineering background needed by industry and by regulatory agencies on the federal, state and municipal levels.
Admission Requirements

For admission to the program, the student must meet the following requirements:

1. The general requirements for admission to the College of Graduate Studies.
2. Hold a bachelor's degree in a field of engineering which is equivalent to a bachelor's degree at Lamar University.
3. Because of the diversity of the scientific disciplines which are admitted to the environmental studies program, some students may be lacking in certain fundamental subject areas, usually undergraduate level courses in engineering, microbiology, basic chemistry, geology, and/or mathematics. These courses must be taken in addition to the curriculum required for the master's degree program.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. A minimum of 21 semester hours (seven core courses) from those listed below
   - ENGR 5331 Biological Waste Water Treatment
   - ENGR 5329 Water Supply and Treatment
   - ENGR 5325 Fundamentals of Air Pollution
   - ENGR 5351 Unit Operations in Environmental Engineering
   - ENGR 6387 Hydraulics of Environmental Systems*
   - ENGR 5342 Reactor Design for Environmental Systems
   - POLS 5354 Seminar in Special Studies in Public Administration
   *with committee approval, Industrial Waste Treatment (ENGR 5343) may be substituted
3. A minimum of 6 semester hours (2 courses) of designated or other approved electives from the list below.
   - ENGR 5338 Solid Waste Management
   - ENGR 6339 Hazardous Waste Management
   - ENGR 5343 Industrial Waste Treatment
   - ENGR 5334 Waste Minimization
   - ENGR 5337 Incineration
   - ENGR 5348 Advanced Air Pollution Control
   - ENGR 6344 Multimedia Transport of Pollutants
   - BIOL 5301 Special Topics: Microbiology
   - CHEM 5411 Biochemistry I
   - BIOL 5430 Limnology
   - BIOL 5470 Ecology of Polluted Waters
   - GEOL 5301 Special Topics: Hydrogeology
   - CHEM 5341 Inorganic Chemistry
   - CHEM 5350 Advanced Organic Chemistry
   - ENGR 6110 Professional Seminar
   - ENGR 5301 Special Topics: Federal Programs for Environmental Management
4. Satisfactory completion and defense of thesis*

*with committee approval, 12 credit hours of Environmental Electives may be substituted.
Master of Science In Environmental Studies

The environmental studies program is designed for students who wish to continue to work in their scientific specialty but as it relates to environmental affairs. The degree is especially intended for individuals who wish to work in the evaluation, operations and/or regulatory aspects of the field as opposed to the design or engineering areas. Consequently, the program will provide an understanding of environmental problems and processes from the point of view of the chemist, biologist or geologist and provide the interdisciplinary perspective needed to cope with various environmental issues.

Admission Requirements

For admission to the program, the student must meet the following requirements:

1. The general requirements for admission to the College of Graduate Studies.
2. Hold a bachelor's degree in chemistry, biology, geology, the subdivisions of those fields e.g. microbiology, organic chemistry, hydrogeology, etc. or other closely related fields with credit substantially equivalent to that required for bachelors' degrees at Lamar University.
3. Some applicants to this program may be required to take undergraduate level courses in engineering, geology, microbiology, basic chemistry and/or mathematics. These courses must be taken in addition to those required for the masters program and will be selected in consultation with the advisor early in a student's graduate career.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. A minimum of 6 semester hours (2 graduate courses) in the student's mathematics or science specialty.
3. A minimum of 12 semester hours (four core courses) from those listed below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 5331</td>
<td>Biological Waste Water Treatment</td>
</tr>
<tr>
<td>ENGR 5329</td>
<td>Water Supply and Treatment</td>
</tr>
<tr>
<td>ENGR 5325</td>
<td>Fundamentals of Air Pollution</td>
</tr>
<tr>
<td>ENGR 5351</td>
<td>Unit Operations in Environmental Engineering</td>
</tr>
<tr>
<td>ENGR 6387</td>
<td>Hydraulics of Environmental Systems*</td>
</tr>
<tr>
<td>ENGR 5342</td>
<td>Reactor Design for Environmental Systems</td>
</tr>
<tr>
<td>POLS 5354</td>
<td>Seminar in Special Studies in Public Administration (required)</td>
</tr>
</tbody>
</table>

*with committee approval, Industrial Waste Treatment (ENGR 5343) may be substituted

4. A minimum of 9 semester hours (3 courses) of designated or other approved electives from the list below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 5338</td>
<td>Solid Waste Management</td>
</tr>
<tr>
<td>ENGR 6339</td>
<td>Hazardous Waste Management</td>
</tr>
<tr>
<td>ENGR 5343</td>
<td>Industrial Waste Treatment</td>
</tr>
<tr>
<td>ENGR 5334</td>
<td>Waste Minimization</td>
</tr>
<tr>
<td>ENGR 5337</td>
<td>Incineration</td>
</tr>
<tr>
<td>ENGR 5348</td>
<td>Advanced Air Pollution Control</td>
</tr>
<tr>
<td>ENGR 6344</td>
<td>Multimedia Transport of Pollutants</td>
</tr>
<tr>
<td>BIOL 5430</td>
<td>Limnology</td>
</tr>
<tr>
<td>BIOL 5470</td>
<td>Ecology of Polluted Waters</td>
</tr>
<tr>
<td>BIOL 5301</td>
<td>Special Topics: Microbiology</td>
</tr>
<tr>
<td>CHEM 5341</td>
<td>Inorganic Chemistry</td>
</tr>
</tbody>
</table>
CHEM 5411  Biochemistry I
CHEM 5350  Advanced Organic Chemistry
GEOL 5301  Special Topics: Hydrogeology
ENGR 6110  Professional Seminar
ENGR 5301  Special Topics: Federal Programs for Environmental Management

5. Satisfactory completion and defense of thesis*

*with committee approval, 12 credit hours of Environmental Electives may be substituted

Doctor of Engineering (D.E.)

The Doctor of Engineering Degree is designed to permit the practicing engineer to study practical engineering problems of a complex nature.

Admission Requirements

For admission to the program, the following requirements must be met:

1. The general requirements of the College of Graduate Studies.
2. The applicant must hold a Bachelor of Science degree in a field of engineering. The applicant must have an overall GPA and quantitative section of the GRE score which meets the following criteria: (GPA + GRE) \geq 800. International students must have a minimum TOEFL score of 530.
3. The applicant must hold a Master's degree or have completed at least 30 semester hours of course work at the graduate level in a field of engineering or a closely related discipline.
4. These are minimum admission requirements and may be more selective for individual departments.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. The student shall complete a residency of one year.
3. The student shall register for ENGR 6110, Professional Seminar, each semester in which the student is registered for more than six hours or in which the student is registered for field study. A minimum of 4 hours is required.
4. Completion of one course from each of the five categories of core courses for a total of 15 semester hours of core course work. The core course categories and core courses are listed above. Exceptions to this rule must be approved by the Doctoral Committee.
5. Completion of the diagnostic examination. This examination has the objectives of determining the student's qualifications for a doctoral program and to provide guidance for the selection of a study program. This examination must be completed before the student has earned 15 semester hours of course credit after admission to the program.
6. Completion of a minimum of 15 credit hours of field study preparatory courses in a concentration designed to form a cohesive degree plan and must be approved by the student's advisory committee. The field study preparation includes completion of one semester of ENGR 6320, Justification of Engineering Project.
7. Completion of candidacy examination. The purposes of this examination are to test the ability of the student to comprehensively relate the subjects of the study program and to ascertain the student's qualifications to perform the field study.
8. Completion of the field study. After the student is admitted to candidacy a formal engineering proposal format must be presented to the doctoral committee. Upon committee approval of the proposed field study the work is initiated. Normally, 30 semester hours of field study is required.

9. Defense of field study. Upon completion of the field study a formal engineering report with a standard format shall be submitted to the committee and defended in an oral examination.

**Graduate Faculty**

Assistant Professor Valentin V. Andreev  
Complex analysis

Professor Wendell C. Bean  
Control systems, biomedical signal processing

Professor Daniel H. Chen  
Process control, numerical methods, air pollution control

Professor Hsing-wei Chu  
Operations research statistical decision analysis, networks

Professor Paul Chiu  
Statistics, reliability theory

Professor David L. Cocke  
Analytical and environmental chemistry, catalysis

Professor Paul Corder  
Mechanical systems design; stress analysis; finite element models

Assistant Professor Paul Dawkins  
Numerical Analysis, approximation theory

Research Professor Richard A. Dobos  
Biotechnologies, hazardous waste management

Assistant Professor Peggy Israel Doerschuk  
Neural networks, parallel processing, genetic algorithms, optimization

Assistant Professor Xing Fang  
Water quality management and modeling, environmental hydraulics, hydrodynamics, water resources engineering

Associate Professor John B. Harvill  
Computer architecture, microcomputer systems, database systems, programming languages, computer science education

Professor Tho-Ching Ho  
Fluidization, heat transfer, optimization

Professor Jack R. Hopper  
Reaction kinetics, catalysis, pollution prevention

Professor Enno Koehn  
Construction, planning, scheduling and productivity. Design and analysis

Professor Hikyoo Koh  
Artificial intelligence, software testing, language translation, computational complexity analysis

Professor Ku-Yen Li  
Mass transfer, gas-liquid reactions, biowaste treatment

Research Professor Peter A. Mantz  
Ocean engineering; coastal and wave process

Associate Professor Mohsen Maesumi  
Numerical analysis, applied mathematics

Professor Alec L. Matheson  
Spaces of analytic functions, functional analysis

Professor Bernard J. Maxum  
Electromagnetics, antennas and propagation, rf, microwave, mm waves, optics

Professor William E. Morgan  
Environmental engineering

Associate Professor Lawrence Osborne  
Parallel processing, operating systems, distributive systems, algorithms

Professor Branislava Peruničić-Draženović  
Power systems, variable structure systems, graph theory applications in electrical engineering
Assistant Professor Jay R. Porter
Biomedical imaging, applied electromagnetics, antenna design, communications and signal processing
Professor David Read
Computer networks, operating systems, natural language processing
Assistant Professor C.N. Reddy
VLSI Design, artificial neural networks, digital signal processing, Kalman filtering
Assistant Professor Malur Srinivasan
Advanced materials processing, modeling of microstructure evolution in manufactured products, development of new nondestructive evaluation techniques
Associate Professor James L. Thomas
Computer-aided manufacturing
Computer-aided design

Assistant Professor Christopher Winfield
Partial differential equations, scattering theory
Professor Carl L. Yaws
Physical and thermodynamic properties, distillation
Professor Fred M. Young
Fluid dynamics, heat transfer
Professor Victor Zaloom
Engineering economics, manufacturing productivity, computer applications, statistical quality control
Associate Professor Wen-Ran Zhang
Computer engineering, cooperative distributed artificial intelligence, software engineering database

Engineering Courses (ENGR)

5383 Instrumentation 3:3:0
Unified methods for the design of signal conditioning circuits between sensors and computers. Accepted practice for sensor-based microprocessor and microcomputer data acquisition and processing systems instrumentation amplifier circuits.

5330 Computer Methods in Engineering Analysis 3:3:0
Computer techniques will be introduced and employed. Numerical methods for solving transcendental equations, polynomials, simultaneous linear algebraic equations and partial differential equations. Monte Carlo method, random numbers and simulation of engineering systems will be introduced.
May be repeated one time for graduate credit with prior approval where course content varies.

5352 Advanced Process Control 3:3:0
Modern control theory concerning state-space formulation, multivariable control, optimal control, and discrete control for lumped/distributed parameter systems is addressed. Applications of control theory and the implementation of control strategies for the chemical processing industries are demonstrated.

5360 Thermodynamics-Process Industry 3:3:0
Thermodynamic laws are derived and applied to physical chemical phenomena. Ideal and non-ideal gas, liquid and solid solution behavior are developed for physical and chemical equilibria. Course credit in chemistry is optional.
May be repeated one time for graduate credit with prior approval, where course content varies.

5370 Thermodynamics-Energy Conversion 3:3:0
The basic laws of thermodynamics are derived and applied in the analysis of power cycles, energy conversion and specific processes. Basic principles of irreversible thermodynamics and phenomenological relations are presented. An elementary statistical approach is presented with simple examples of the calculation of the transport properties of gases, liquids and solids.
May be repeated one time for graduate credit, with prior approval, where course content varies.

5380 Discrete Control Systems 3:3:0
Prerequisite: EGR 5306.

5386 CAD 3:3:0
The analysis and the utilization of state of the art computer hardware and software to solve the problems associated, with the utilization of computers in both graphics and engineering design problems.
Prerequisite: Graduate standing in the College of Engineering and consent of the instructor.
5101, 5201, 5301 Special Topics
3:1-3:0
An investigation into specialized study in advanced areas of engineering under guidance of a faculty member. This course may be repeated for credit when topics of investigation differ.

5303 Regression Analysis
3:2:0
Review of regression analysis; theory of least squares; multivariate analysis; theory of the general linear hypothesis model.

5305 Reliability
3:3:0
Statistical theories pertinent to solution of engineering problems in reliability; distribution and failure theory including failure rate and mean time to failure for the exponential, log normal, gamma and Weibull distributions.

5373 Advanced Electromagnetics
3:3:0
Graduate-level topics in electromagnetic theory and applications. Assumes a grounding in electromagnetic fields and waves and methods for the solution of boundary value problems. 
Prerequisite: EE 337 or equivalent.

5308 Cost and Optimization Engineering
3:3:0
Includes the mathematics of cost comparisons, profitability, productivity, and optimization with emphasis on processing or construction cost estimation and control. May be repeated for credit when the subject matter varies.

5309 Problems in Design and Finite Analysis
3:3:0
Advanced techniques and analysis involving microcomputers, finite elements, finite differences. May be repeated for credit when the subject matter varies.

5310 Advanced Concrete Design
3:3:0
Analysis and design of concrete members based upon working stress and strength design methods. Consideration is given to pre-stressing or post-stressing of beams and structural components. May be repeated for credit when the subject matter varies.

5311 Heat Transfer Analysis
3:3:0
Fundamental principles of heat transfer by conduction, convection and radiation. Emphasis will be given to the analysis of problems combining the various heat transfer mechanisms.

5313 Fluid Mechanics
3:3:0
Fluid statics, fundamentals of fluid motion, systems and control volumes, basic laws, irrotational flow, similitude and dimensional analysis, incompressible viscous flow, boundary layer theory and an introduction to compressible flow. Vector methods will be employed.

5314 Hydraulic Engineering
3:3:0
Design considerations of hydraulic systems including closed and open channel flow together with related hydraulic accessories. May be repeated for credit when the subject matter varies.

5315 Theory of Elasticity
3:3:0
General analysis of stress and strain, equations of equilibrium and compatibility, stress and strain relations, two dimensional stress problems, elastic energy principles, thermoelastic problems. May be repeated for credit when the subject matter varies.

5318 Stress Analysis
3:3:0
Topics in advanced strength of materials including unsymmetrical loading of beams, shear center, curved beams, torsion of non-circular cross sections, strain energy, virtual work, plasticity, fatigue, and introduction to the theory of elasticity. May be repeated for credit when the subject matter varies.

5319 Design of Experiments
3:3:0
Experimental design and analysis of experiments are developed as tools of the manufacturing and process industries. Exploratory and evolutionary EVOP designs, analysis of variance ANOVA, error and regression are treated in some detail. 
Prerequisite: Course in statistics or equivalent.

5322 Fundamentals of Air Pollution
3:3:0
Pollutant sources, emissions and transport. Air pollution control methods. Particulate collection theory, gaseous pollutant removal theory. Atmospheric sampling and analysis methods. May be repeated for credit when the subject matter varies.

5321 Quality Control Systems
3:3:0
Application of statistical methods to industrial problems; regression and correlation theory; analysis of variance; use of control charts for control of manufacturing operations.

5323 Advanced Steel Design
3:3:0
Analysis and design of structural members using steel. Consideration is given to elastic and inelastic buckling in beams and columns due to local, flexural, torsional and torsional flexural action. May be repeated for credit when the subject matter varies.
5324 Wave Mechanics 3:3:0
Propagation of elastic waves in semi-infinite media. Surface waves and body waves. Behavior of particulate masses under the effect of dynamic loading, impact and transient phenomena. Effect on substructures of waves from industrial, seismic and nuclear sources. Mechanical and electronic recording. May be repeated for credit when the subject matter varies.

5326 Waves and Coastal Processes 3:3:0
Hydrodynamics of waves, wave generation, reflection, energy transmission and dissipation. Coastal phenomena, harbors and breakwaters, analysis of tides, and tidal currents. Salt water, fresh water interaction and diffusion in estuaries: erosion and shoaling in tidal waters. May be repeated for credit when the subject matter varies.

5327 Numerical Methods of Structural Analysis 3:3:0
Matrix methods applied to analysis of trusses, beams and frames. May be repeated for credit when the subject matter varies.

5328 Inelastic Theory of Structures 3:3:0
Investigation of structural behavior under conditions of overload. Design of structures using principles of ultimate strength and plastic design theories. Consideration of load and safety factors, stress redistribution and shakedown. May be repeated for credit when the subject matter varies.

5329 Water Supply and Treatment 2:3:0
An investigation of the chemistry of water treatment processes including the study of treatment process selection and associated design parameters.

5331 Biological Wastewater Treatment 3:3:0
Principles of treatment for domestic and industrial wastewaters with emphasis on process kinetics and biological action.

5332 Similitude and Model Design 3:3:0
Dimensional analysis, data processes, prediction equations and model design, including a study of distorted and dissimilar models. Models studied include structural fluid flow, thermal, electrical, magnetic, acoustical and illumination types. Various analogs from second-order ordinary and partial differential equations are also discussed. May be repeated for credit when the subject matter varies.

5333 Operations Research 3:3:0
Advanced topics in operations research—linear programming, non-linear programming, advanced topics in queuing and inventory theories, sensitivity analysis and dynamic programming.

5334 Waste Minimization 3:3:0
Waste minimization of hazardous waste includes any source reduction or recycling activity that results in volume reduction of hazardous waste or toxicity reduction. Waste minimization practices by major streams are reviewed. Technology and concepts that promote strategies by which waste minimization can be increased are identified.

5337 Incineration 3:3:0
An overall view of the incineration principles, equipment and facility design, basic concepts, stoichiometric and thermodynamic considerations for incinerators, air pollution control equipment and economic considerations.

5338 Solid Waste Management 3:3:0
A study of solid waste collection, transfer and disposal systems. Investigation of the reclamation of resources by multiple use, reuse and improvement of existing sources to meet quality requirements.

5341 Mass-Transfer Operations 3:3:0
The principles of diffusion and mass transfer are considered. The study of gas-liquid operations includes humidification and design of equipment. Solid-fluid studies include absorption, ion exchange, drying and leaching operations. Less conventional mass-transfer operations are also considered.

5342 Reactor Design for Environmental Systems 3:3:0
Development of the fundamentals for the rate of chemical reactions and biological reactions in homogeneous and heterogeneous systems. Analysis of ideal chemical reactors and their design with application to environmental reactions in the air, water and soil. An introduction to the basic concepts of mathematics modeling. The subject matter is directed toward chemical and petroleum engineering design and operation. Development of models which form the framework of a quantitative and scientific approach to technical problems will be followed by analytical and/or numerical solutions to optimize output and profitability.

5343 Industrial Waste Treatment 3:3:0
Procedures for analysis of the industrial waste problem, methods of collecting experimental data and process design for required treatment. Case studies and special laboratory problems for translating experimental data to prototype design. May be repeated for credit when the subject matter varies.
5348 Advanced Air Pollution Control
Air pollution control and design principles; VOC incineration; gas absorption; air pollution and atmospheric dispersion modeling; particulate matter; cyclones, electrostatic precipitators; fabric filters and scrubbers; control of nitrogen oxides and sulfur oxides.

5351 Unit Operations of Environmental Engineering
Theory of fluid and slurry movement under gravity and pressure systems, mixing processes, coagulation and flocculation of chemical treatment, separatory processes including flotation and sedimentation, and gas transfer and absorption of the biological systems. Selected laboratory assignments for model studies of these unit operations.

5344 Electric Power Systems Analysis I
A three-semester sequence, selected from: symmetrical components, impedance and fault-current calculations, load-flow studies, economic operation, stability and control, system modeling, non-fossil fuel energy conversion. Both analytical and digital-computer methods may be employed as appropriate.

5392 Introduction to VLSI Design
Study of the principles of basic microchip design. Use of several CAD tools, with hands-on experience in implementing Very Large Scale Integration (VLSI) circuits. Detailed study and computer simulation of MOS-capacitance models.

5395 Computer Hardware Design Languages
A CAD method of design of digital hardware using Computer Hardware Languages (CHDLs). Implementation of combinational logic units, microprocessors and microprogrammed processors.

5397 Fault Diagnosis & Fault Tolerant Design
Study of several test generation algorithms for combinational circuits such as Boolean Difference, D-PODEM, and FAN Algorithms. Test generation techniques for RAMS and microprocessors. Various methods for Design for testability and Fault Tolerant Design.

5366 Advanced Engineering Economy
Special economic analyses based on risk, uncertainty and other probabilistic considerations. Bayesian attacks, influence of perfect information, competitive decisions and decisions under pressure.

5399 Engineering Management
Transition from engineering to management, decision making responsibilities — a comparison; planning, organizing and staffing in a technical environment, technical project management, team leadership, appraising engineers.

5387 Special Topics
The course is designed to meet special needs of students. Each topic is offered on an irregular schedule as the demand requires. Sample topics include: (1) Kinetic theory of gases; (2) Transients in compressible flow; (3) Nonlinear vibrations; (4) Protective construction; (5) Transients in engineering systems; (6) Stagewise mass transfer; (7) Nuclear engineering; (8) Hybrid and analog computers; (9) Adaptive control; (10) Optimization techniques; (11) Sampling techniques.

5388 Special Topics
The course is designed to meet special needs of students. Each topic is offered on an irregular schedule as the demand requires. Sample topics include: (1) Kinetic theory of gases; (2) Transients in compressible flow; (3) Nonlinear vibrations; (4) Protective construction; (5) Transients in engineering systems; (6) Stagewise mass transfer; (7) Nuclear engineering; (8) Hybrid and analog computers; (9) Adaptive control; (10) Optimization techniques; (11) Sampling techniques.

6110 Professional Seminar
Advanced topics suitable for research along with research procedures will be discussed. Field study organization and content together with doctoral research problems and progress will be presented. Topics will vary each semester and course may be repeated for credit. Registration and completion for three semesters is required of all doctoral candidates.

6310 Design Projects
May be repeated for credit when the subject matter varies. Prequisite: Admission to candidacy.

6313 Digital Filters

6314 Computer Control and Instrumentation
Basic Instrumentation principles. Signal acquisition and conditioning. Computer control using digital signal processing techniques in time and frequency domains. Programming project assignments involving implementation of basic instrumentation and computer control methods.
Justification of Engineering Projects  3:3:0
The preparation of proposals for advanced engineering work. The student will be given individual assistance in
preparing a proposal for his field study.
Prerequisite: Approval of advisory committee.

Hazardous Waste Management  3:3:0
The design, operation and applicability of standard destruction and detoxification technologies will be
presented. The various types of incineration, thermal, biological, physical and chemical treatment methods will
be included, as well as the technologies now in the later stages of research and development. Emphasis will be
on applicability and functional design as opposed to detailed design.

Distillation  3:3:0
Material and energy-balance relationships are reviewed for multicomponent fractionation equipment and for
batch stills. Various plate designs are presented from the standpoint of two-phase hydraulics and mass-transfer
efficiency.

Reactor Design  3:3:0
Emphasis is placed on complex reactor design. Attention is devoted to chemical kinetics and catalysis as well
as to the engineering aspects of both homogeneous and heterogeneous reactors. Mixing problems are discussed
in terms of residence time distribution. The importance of temperature effects is stressed.

Multimedia Transport of Pollutants  3:3:0
Chemical transfer rates between air and water, water and soil/sediment, as well as air and soil. Intraphase
pollutant processes in atmosphere, surface water, and ground water. Description of the dispersion model and the
meteorological effects on pollutant transport. Discussion of partition to biomass and exposure pathways.

Engineering Applications of AI/Expert Systems  3:3:0
An in-depth study of the effective utilization of Artificial Intelligence/Expert Systems as applied to engineering
problems. Projects assigned will involve the design and development of software systems to solve discipline-
specific problems using available IE languages and expert system shells.
Prerequisite: Egr 5347.

Computer Methods in Statistical Quality Control  3:3:0
Methods of dealing with Statistical Quality Control problems such as control charts, test, tests of hypothesis,
analysis of variance, regression analysis and design of experiments will be employed using one or more software
packages. Emphasis will be placed on problem definition, model selection and interpretation of output for
decision making and process improvements.
Prerequisite: A course in probability and statistics

CAD Tools for VLSI Design  3:3:0
Study of the principles involved in the development of a variety of Computer Aided Tools used in the design of
Very Large Scale Integrated circuits. Implementation of the tools with programming assignments.

Artificial Neural Networks & Fuzzy Logic  3:3:0
Study of various Artificial Neural Network architectures for real-world applications. Massive parallel computa-
tion, fault tolerance and adaptation characteristics. Emphasis on computer simulation of ANN-architectures
and their applications.

Computer Methods of Engineering Optimization  3:3:0
Formulation, solution and implementation of optimization models such as linear programming, dynamic
programming, integer programming, quadratic programming, convex programming, geometric programming and
unconstrained optimization for analyzing complex systems problems in industry. One or more software packages
will be used to execute the algorithms presented throughout the course.
Prerequisite: A graduate course in operations research.

Hydraulics of Environmental Systems  3:3:0
Hydraulic design of municipal utilities including storm water and waste water collections systems, water
distribution networks and treatment plant facilities.

Computer Methods of Engineering Project Management  3:3:0
Principles governing the effective and efficient management of engineering projects including the application
of comprehensive planning, scheduling and cost estimation procedures. Utilization of various computer
methods and systems will be emphasized.

Computer-Aided Software Engineering  3:3:0
Analysis and utilization of computer software to solve engineering design problems. Applications on the CAD/
CAG and various other systems will be emphasized.
Department of Computer Science

The Department of Computer Science offers a program of study leading to the Master of Science degree in Computer Science. Both thesis and non-thesis options are available.

The objective of the master's degree is to produce professional computer scientists capable of contributing technically to the basic core areas of computer science as well as to application areas. A mixture of courses, laboratory, and research work in the program is designed to place graduates at the forefront of technical excellence.

Research

The department has a broad-based research program. Current faculty research interests include parallel and distributed processing, artificial intelligence, data and knowledge bases, computational complexity, image processing, operating systems and graphics.

The Department has four laboratories as well as two rooms of terminals remotely attached to the campus mainframe computers (2 DEC Alpha machines running OPENVMS and UNIX) housed in the Cherry Building. The labs operate on Ethernet networks, and the equipment is available to all students on campus. Included in the equipment are 60 Pentiums, 4 multimedia Pentium Pros, X-Terminals, a network of Sun workstations, and 2 Silicon Graphics Indy workstations. The Pentiums are attached to an NT server, and two switches provide 10 Megabit/second transmissions to each desktop and to the server from a 100 Megabit/second FDDI campus backbone. Direct access to the Internet and the World Wide Web is available from nearly all of the machines. Equipment and facilities offer students experience using OPENVMS, UNIX and Windows 95 as well as several programming languages. A rich variety of application software packages such as Maple and Matlab are located on our servers for student use in classes and research. The national high performance computing centers at Cornell University and the University of Pittsburgh provide access to supercomputers such as the CRAY, CM2 and clusters of workstations.

The department enjoys a friendly working relationship with local and national companies. The department's Industrial Advisory Council is composed of representatives from regional/state industries and high-tech firms.
Admission to the Graduate Program

Students seeking admission to this program must meet all general requirements of the College of Graduate Studies as listed in the Bulletin of the College. Additional requirements are as follows:

1. In most cases, a student must have a minimum combined score of 1000 on the Verbal and Quantitative sections of the GRE and a minimum grade point average of 3.0 on the last 60 hours of undergraduate course work.
2. A ranking in the 34th percentile of the verbal portion of the GRE; for applicants whose native language is not English, a TOEFL score of at least 550 also is required;
3. Completion of a sufficient amount of prior work in the field of computer science including courses such as COSC 2372, COSC 2371, COSC 3306, ELEN 3331, COSC 4302, CPSC 4340, COSC 4307 or COSC 3302 or equivalents; undergraduate and graduate leveling sequences are available (COSC 5341 and COSC 5342 have been designed for students who satisfy conditions 1 and 2 but are deficient in computer science course background);
4. Students with minor deficiencies may be admitted to the program if these deficiencies can be removed within approximately one long semester. However, major deficiencies must be removed before a student is admitted to the degree program; and
5. At least 15 hours of mathematics including differential and integral calculus, discrete mathematics and two other courses selected from statistics, linear algebra, abstract algebra, numerical analysis and differential equations.

Students not satisfying both conditions 1 and 2 will not be admitted to the computer science program. Those students who satisfy both conditions 1 and 2 but who are deficient in other areas may be provisionally admitted to the program and may enroll in graduate-level courses.

Admission to Candidacy

After removal of all deficiencies and upon completion of an additional 12 hours of graduate credit, the student is required to submit a formal degree plan to the Computer Science Graduate Adviser and the Dean of the Graduate School. Failure to fulfill this requirement may prevent the student from enrolling the following semester.

Admission to candidacy is granted by the Dean of the Graduate School after the degree plan has been approved.

Degree Requirements

A. Core Course Requirement (6 courses; 16 semester hours).

Students in the master’s program in Computer Science are required to establish competence in several areas considered basic to the field of Computer Science. At least 28 hours of graduate work in computer science, and the thesis or project, are required for a master’s degree in Computer Science. The degree includes two specialization areas in computing (6 to 9 hours per specialization) chosen by the student together with the academic adviser. (Specialization Areas are listed below). One of these areas of specialization may be an area of computer applications outside of the department. In order to qualify for the master’s degree, the student must earn a grade of B or better in each of the core courses. The Core Requirement consists of the indicated number of courses in each field listed below.
<table>
<thead>
<tr>
<th>Number of Courses</th>
<th>Area of Computer Science</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Graduate Seminar</td>
<td>COSC 5100</td>
</tr>
<tr>
<td>1</td>
<td>Analysis of Algorithms</td>
<td>COSC 5313</td>
</tr>
<tr>
<td>1</td>
<td>Advanced Operating Systems</td>
<td>COSC 5302</td>
</tr>
<tr>
<td>1</td>
<td>Computer Networks</td>
<td>COSC 5328</td>
</tr>
<tr>
<td>2</td>
<td>Languages &amp; Computation Theory</td>
<td>COSC 5319 or</td>
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<td></td>
<td></td>
<td>COSC 5320 or</td>
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<td></td>
<td></td>
<td>COSC 5330</td>
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</tbody>
</table>

B. Option I (Thesis)
1. Completion of the core requirements.
2. Completion of two areas of computer specialization. Specializations outside of the area of computer science are chosen by the student under the guidance of the student adviser from the restricted list of courses at the end of the computer science course listings in the catalog. At least a “B” (3.0) average must be maintained in the specialization areas. One “C” is permitted in these areas combined if it is balanced by an “A” in one other graduate level course.
3. Completion of COSC 5390 and 5391 and submission of an acceptable thesis.
4. Completion of a total of 34 graduate semester hours.
5. Successful oral defense of the thesis. If failure occurs, the defense may be repeated. A second failure will cause the student to be dropped from the degree program in Computer Science.

C. Option II (Non-thesis)
1. Completion of the core requirement.
2. Completion of two areas of computer specialization. Specializations outside of the area of computer science are chosen by the student under the guidance of the student adviser from the restricted list of courses at the end of the course listings in the catalog. At least a “B” (3.0) average must be maintained in the specialization areas. One “C” is permitted in these areas combined if it is balanced by an “A” in one other graduate level course.
3. All non-thesis students must take and satisfactorily complete COSC 5369. This course consists primarily of a significant research project and the submission of a written professional report.
4. Completion of a total of 37 hours in graduate level courses.
5. Successful completion of an eight hour comprehensive examination, which may be written, oral, or a combination of both upon determination of the Computer Science faculty. This comprehensive exam will cover the four core areas and may also include a programming component. Materials to help the student prepare for the comprehensive examination will be posted in the departmental office at least one month prior to the scheduled testing time. Failure to pass this examination in two attempts will result in the student being dropped from the degree program in Computer Science.
COMPUTER SCIENCE SPECIALIZATION AREAS:

<table>
<thead>
<tr>
<th>Area</th>
<th>Courses</th>
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<tbody>
<tr>
<td>Artificial Intelligence</td>
<td>CIS 437G, CS 5312, CS 5318, CPSC 5370,</td>
</tr>
<tr>
<td></td>
<td>COSC 5312, COSC 5318</td>
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<tr>
<td>Graphics</td>
<td>CIS 433G, CS 4319G, CS 5335, CS 5339,</td>
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<td></td>
<td>CPSC 4330*, COSC 5321, COSC 5335,</td>
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<td></td>
<td>COSC 5339</td>
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<tr>
<td>Simulation/Modeling</td>
<td>CS 4309G, CS 5336, CS 5402, COSC 5309,</td>
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<td></td>
<td>COSC 5336, COSC 5402</td>
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<tr>
<td>Software Engineering</td>
<td>CIS 436G, CS 5331, CPSC 4360*</td>
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<td></td>
<td>COSC 5331</td>
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<tr>
<td>Database</td>
<td>CIS 434G, CS 5311, CS 5332; CS 5333;</td>
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<tr>
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<td>CPSC 5340, COSC 5311, COSC 5332,</td>
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<td>COSC 5333</td>
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<tr>
<td>Architecture/Algorithms</td>
<td>CS 4310G, CS 5310, CS 5350, CS 5313,</td>
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<td>COSC 5308, COSC 5310, COSC 5350,</td>
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<td>COSC 5313</td>
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*Course numbers beginning with 4 are not graduate courses.

Graduate Record Exam (GRE) – Advanced Computer Science Section:

Students are expected to submit scores from the advanced Computer Science section of the Graduate Record Examination during their last semester of course work toward the degree.

Academic Standards

If a student’s GPA on all graduate and/or deficiency courses falls below 3.0, the student will be placed on probation the following semester. Students who cannot raise their GPA above 3.0 during that semester will be dropped from the program.

Computer Science Courses (COSC)

5100 Graduate Seminar

1:1:0
Topics include the scientific method and research process, library utilization and components and organization of various types of research papers. Writing exercises on the latter topics. Preparation, formal written report and presentation on a research topic.
Prerequisite: Admission to the M.S. program in Computer Science.

5302 Advanced Topics in Operating System

3:3:0
Current research issues and advanced topics involving both the principles and pragmatics of operating systems specification, design and implementation. Study of concurrent processes, support structures for modular programming, resource allocation and protection, telecommunications, networks and distributed processing.
Prerequisite: CS 4302 or equivalent.

5310 Advanced Topics in Computer Architecture

3:3:0
Advanced topics in computer architecture such as RISC vs CISC, pipelined processors, vector processors, HDLs, language directed architectures and neural nets.
Prerequisite: CS 4310 or equivalent.

5311 Advanced Topics in Database Design

3:3:0
Data models, distributed databases, special databases, statistical databases, database machines, knowledge bases, database design theory and self-documenting databases.
Prerequisite: CS 4304G or equivalent.

5312 Advanced Topics in Artificial Intelligence

3:3:0
Topics include, but are not limited to, knowledge representation, distributed cooperative AI, intelligent tutoring systems and semantic representation in natural language processing.
Prerequisite: CPSC 5370 or equivalent.
5313 Analysis of Algorithms
Topics on what can and cannot be proven about computational complexity including algorithm design methodologies.

Prerequisite: COSC 3302 or COSC 4307 or equivalent.

5318 Design and Implementation of Expert Systems
Problems in knowledge acquisition, knowledge representation issues, representation of meta-knowledge, use of statistical measures to limit search of the knowledge base, and knowledge verification.

Prerequisite: CPSC 5370 or equivalent.

5319 Advanced Topics in Compiler Construction
An introduction to the major methods used in compiler implementation. The parsing methods of LL(k) and LR(k) are covered as well as finite state methods for lexical analysis, symbol table construction, internal forms for a program, run time storage management for block structured languages and an introduction to code optimization.

Prerequisite: COSC 4307 or COSC 3302 or equivalent.

5320 Formal Methods in Programming Languages
Data and control abstractions are considered. Advanced control constructs including backtracking and nondeterminism are covered. The affects of formal methods for program description are explained. The major methods for proving programs correct are described.

Prerequisite: COSC 4307 or COSC 3302 or equivalent.

5328 Computer Networks
A study of networks of interacting computers. The problems, rationales and possible solutions for distributed databases will be examined. Major national and international protocols including SNA, S.21 and X.25 will be presented.

Prerequisite: (CPSC 3310 or ELEN 3331), COSC 3306, and COSC 4302 or equivalent.

5330 Advanced Topics in the Theory of Computation
A survey of formal models for computation. Includes Turing Machines, partial recursive functions, recursive and recursively enumerable sets, and the recursive theorem, abstract complexity theory, program schemes and concrete complexity.

Prerequisite: COSC 3302 or COSC 4307 or equivalent.

5331 Advanced Software Engineering
Topics not limited to software development methodology, verification and reliability, software quality assurance and productivity, software engineering economics, models and metrics for software management and engineering, human performance engineering and software configuration management and control.

Prerequisite: Advisor approval.

5332 Object Oriented Database Management Systems
Introduction to object oriented databases. Topics including introduction to object oriented programming via SMALLTALK, the object-oriented data model, interface for defining and manipulating object oriented databases and other databases. Semantics and changes to the schema, query model, authorization model, architecture and implementation issues. Survey of current object oriented database systems: Versant, ORION, Gemstone, ONTOS, POSTGRES, etc.

Prerequisite: CPSC 5340 or equivalent.

5333 Distributed Computer Systems
The study of the characteristics of a collection of autonomous computers linked by a network, with software designed to produce an integrated computing facility that intends to present a transparent virtual machine to application programmers.

Prerequisite: COSC 5328 and CPSC 5340 or equivalent.

5335 Advanced Topics in Computer Graphics
The course focuses on topics current to the field and includes, but is not limited to, areas such as design and construction of computer graphics systems both software and hardware, the theory and use of color and shading and algorithms for solid object modeling.

Prerequisite: COSC 5321 or equivalent.

5336 Advanced Simulation and Modeling
Current topics in both simulation methodology and applications. Distributed simulation, simulation support tools, object oriented simulation and artificial intelligence and simulation.

Prerequisite: COSC 5309, MATH 1342 or MATH 3370, and MATH 2414 or equivalent.

5339 Visual Languages
Languages for indexing and retrieving images such as motion pictures, satellites, video images, etc., iconic representation, pattern matching algorithms, visualization of images, object oriented databases, semantic data modeling, icon systems query processing, image compression and architecture for query processing.

Prerequisite: COSC 5321 or CPSC 4330.
5340 **Special Topics**
3:3:0
Special topics in all areas of Computer Science with emphasis on topics not covered in other courses. May be repeated for credit when topics vary.
*Prerequisite: consent of department chair.*

5341 **Problem Solving in High-Level Language**
3:3:0
Algorithms, pseudocode, structured techniques of problem solving and program design using high-level programming languages. Data sorting and searching techniques. Object-oriented design.
*Prerequisite: A first programming language, MTH 1345, and MTH 234 or MTH 3370. Leveling course not for graduate credit in MSCS degree.*

5342 **System Design and Programming**
3:3:0
Principles of computer systems analysis and design, system hardware and software characteristics. Data representation and programming in assembly language. Computer storage structures, storage allocation and management. Design of typical system programs such as assemblers, compilers and operating systems, addressing techniques and core management, file system design and management.
*Prerequisite: COSC 5341. Leveling course not for graduate credit in MSCS degree.*

5350 **Parallel Programming and Algorithms**
3:3:0
Taxonomy of parallel computers, shared-memory vs. message-passing architectures, theoretical models, parallel algorithm design strategies, parallel data structures, automatic parallelization of sequential programs, communication, synchronization and granularity.
*Prerequisite: COSC 5313 or equivalent.*

5389 **Graduate Project**
3:3:0
Independent study and research of a specific problem in a field of computer science or its application. A report is required defining the problem and developing a solution. The work may be supervised by any member of the graduate faculty.
*Prerequisite: 10 hours of graduate computer science credit including COSC 5100 with grades of A or B; prior approval of written plan by the faculty supervisor and by the computer science department chair. May not be repeated for credit.*

5402 **Pattern Recognition and Image Processing**
4:3:3
Principles and pragmatics of pattern recognition, digital image processing and analysis. Statistical pattern recognition: complete vs. incomplete approach (via supervised vs. unsupervised learning). Structural pattern recognition. Image processing: image acquisition and digitisation, making decisions based upon the available features. Image segmentation (by clustering, textured images, range images and multispectral images) and registration.
*Prerequisite: COSC 5309 and MATH 1342 or equivalent.*

5390-5391 **Thesis**
3:3:0
Independent research of a specific problem in a field of computer science. The work will be supervised by a member of the graduate faculty of the Computer Science Department. To be scheduled only with the consent of the department. Six hours credit required. No credit assigned until thesis has been completed and filed with the graduate dean. Continuous enrollment required once work on thesis has begun.
*Prerequisite: Consent of Department Chair.*

### Computer Information Sciences (CPSC)

5320 **Communication and Computer Networks**
3:3:0

5330 **Advanced Topics in Multimedia Processing**
3:3:0
*Prerequisite: A high level programming language.*

5350 **Advanced Topics in Applications of Expert**
3:3:0
Theory and programming of expert systems. Introduction to expert systems. Introduction to a particular expert system, pattern matching, control techniques, efficiency in rule-based language, and expert system examples. A student term project is assigned.
*Prerequisite: A high level programming language.*
5360 Advanced Topics in Software Engineering 3:3:0
Systems analysis, software requirements analysis and definition, specification techniques, software design methodologies, performance measurement, validation and verification and quality assurance techniques. Programming in ADA.
Prerequisite: A high level programming language.

5370 Introduction to Artificial Intelligence 3:3:0
Introduction to concepts and ideas in artificial intelligence. Topics include search techniques, knowledge representation, control strategies and advanced problem-solving architecture. Programming in LISP and PROLOG.
Prerequisite: A high level programming language.

OTHER ACCEPTED GRADUATE COURSES

The following list of graduate level engineering, business, psychology and English courses may be taken for graduate credit, for satisfying the specialization area requirements, subject to the approval by the graduate advisor. Course descriptions may be found in the Catalog of Lamar University, or in this Catalog.

MATH 5311 Numerical Analysis
ENGR 5303 Regression Analysis
ENGR 5305 Reliability
ENGR 5319 Design of Experiments
ENGR 5321 Quality Control Systems
ENGR 5333 Operations Research
ENGR 5389 CAD
MGMT 5320 Operations Management and Information Systems
OAS 530 Administrative Communications
FINC 5300 Foundations of Finance
BUAL 5301 Advanced Statistical Theory and Analysis for Business
ECON 5300 Foundations of Economics
MGMT 5310 Foundations of Organization Behavior
MKTG 5300 Marketing Concepts
PSYC 5321 Advanced Industrial Psychology I
PSYC 5322 Advanced Industrial Psychology II

Department of Mathematics

The Department of Mathematics offers a program of study leading to the Master of Science degree in Mathematics. It is designed to train students either for a professionally oriented career in industry or in government, for further graduate work in mathematics or to provide depth and breadth in Mathematics Education.

Opportunities in the areas listed above, for students with a Master of Science in Mathematics, are numerous. Such opportunities exist in all areas of applied mathematics including computer science, statistics, operations research, numerical analysis, mathematical physics, administration/management science, engineering, secondary and elementary school teaching. These supporting areas are just a sample of excellent job opportunities for the graduate.

The department spends considerable time advising students in the Master's program. Once a student is admitted, the student’s advisor will individually tailor the student’s program to meet the needs of the supporting areas mentioned above or other areas of interest to the student. Consequently, students with a Bachelor's degree in Mathematics, Computer Science, Engineering, any of the sciences or Secondary Education will find appropriate opportunities in this M.S. program. Students will find a wide variety of courses listed in the program to make the above supporting areas available to them.
Those seeking admission to this program must satisfy the requirements as indicated below:

**Admission to the Program**

In order to be admitted to the Graduate Degree Program, a student must

1. Meet the general requirements as set forth in this catalog for admission to the College of Graduate Studies.
2. Successfully complete 27 semester hours of undergraduate mathematics including courses equivalent or comparable to the following: linear algebra, differential equations, advanced calculus, modern algebra and statistics.

Final approval as to what course work is acceptable toward admission to the graduate degree program lies with the graduate advisor and the department head. A student may be admitted conditionally to the graduate degree program, but is required to remove any deficiencies in undergraduate mathematics.

**Admission to Candidacy**

In order to be admitted to candidacy a student must

1. Successfully complete 12 semester hours of approved graduate work in mathematics.
2. Remove all deficiencies in mathematics designated by the Graduate Advisor and the Department Chair.
3. Satisfy the general Admission to Candidacy requirements as set forth in this catalog.

**Completion of the Program**

In order to complete the M.S. program a student must

1. Take the Advanced Mathematics section of the Graduate Record Examination and have the score reported to the Graduate Advisor.
2. Complete one of the two following programs:
   a. Complete at least 24 hours of graduate course work, write a thesis acceptable to the student’s graduate committee, and satisfactorily defend the thesis orally before the graduate committee.
   b. Complete at least 36 hours of graduate course work and satisfactorily complete an examination over the course work before the student’s graduate committee.
3. Include at least three courses from among the following:
   MATH 5310 Theory of Functions of Real Variables
   MATH 5320 Modern Algebra
   MATH 5340 Topology
   MATH 5312 Complex Variables or 5350 Complex Variables

**Mathematics Courses (MATH)**

5310 Theory of Functions of Real Variables 3:3:0
Analytical functions, pathological functions, set functions, Riemann integral, measure theory, Lebesgue integral, Riemann-Stieltjes and Lebesgue-Stieltjes integral.
Prerequisite: Graduate standing and Mathematics 3380.

5320 Modern Algebra 3:3:0
Groups, rings and the theory of fields. The theory of fields includes the study of subfields, prime fields, algebraic fields extensions and Galois fields.
Prerequisite: Graduate standing and Mathematics 3350 or its equivalent.
5340 Topology
Topological spaces, metric spaces, compact spaces, embedding, Urysohn's lemma and homotopy.
Prerequisite: Graduate standing and Mathematics 3380.

5370 Methods of Applied Mathematics
The Dirichlet problem, solution of boundary value problems, the Bergman Kernel function, method of the minimum integral, applications of conformal mapping.
Prerequisite: Graduate standing and Mathematics 4310 or 5350.

5303 Modeling Theory
Study of techniques of building and applying mathematical models. Applications in biology, ecology, economics and sociology.
Prerequisite: Graduate standing and Mathematics 331 or 3301.

5304 Functional Analysis
Prerequisite: Graduate standing and Mathematics 338.

5308 Fourier Analysis
Expansion of functions in Fourier series, orthogonal sets of functions, orthonormality. Fourier integrals.

5311 Numerical Analysis
Solutions of ordinary and partial differential equations, approximation of functions, quadrature, and splines.
Prerequisite: Graduate standing, Mathematics 4315 or its equivalent, and some knowledge of computer programming.

5312 Complex Variables
Conformal mapping and analytic continuation, calculus or residues, and applications.
Prerequisite: Graduate standing and Mathematics 431 or its equivalent.

5331 Special Topics
Advanced topics in mathematics to suit the needs of individual students. Course may be repeated for a maximum of six semester hours credit when the topic varies.
Prerequisite: Graduate standing and consent of instructor.

5335 Topics in Mathematics
Topics include Mathematical Logic, Group Theory, Field Theory, Approximation and Interpolation, Game Theory and Calculus of Variations.
Prerequisite: Graduate standing and consent of instructor.

5390-5391 Thesis
Prerequisite: Approval of graduate advisor. Must complete both for required 6 credits.

The following 500 level engineering courses are also applicable to the Master of Science degree in Mathematics when approved by the departmental graduate advisor.
ENGR 5303 Regression Analysis
ENGR 5305 Reliability
ENGR 5319 Design of Experiments
College of Fine Arts and Communication

The College of Fine Arts and Communication offers programs of study leading to the Master of Arts degree in Visual Art, with an Art History emphasis; a Master of Science Degree in Audiology and in Speech-Language Pathology; a Master of Science Degree in Deaf Studies/Habilitation; a Master of Music Degree; a Master of Music Education Degree; and a Doctor of Education Degree in Deaf Education. The college also supports some Master of Education degrees with courses from the Department of Art. Persons seeking admissions to these programs must meet the requirements specified by the College of Graduate Studies and the individual department. Admission to a degree program is not an admission to candidacy. Each master's degree program is designed to help students deepen and expand their knowledge and provide them with the opportunity to develop skills and concepts which may be applied to the professional objectives associated with their fields of study. The Doctor of Education in Deaf Education degree program is designed to prepare professionals to serve in leadership positions in the administration of schools and service programs for the deaf/hearing impaired and/or as faculty for universities with Deaf Education training programs.

Department of Art

The Department of Art offers a Master of Arts in Visual Art with an emphasis in Art History. Graduate studios are available. Of particular note, the Art History emphasis offers hands-on research opportunities working with the 19th-century academic paintings housed in the Eisenstadt collection. Part of the permanent holdings of the Dishman Art Gallery, the Eisenstadt collection features works by the American landscapist Thomas Moran and the English portraitist Sir Thomas Lawrence. This program provides students with the opportunity to focus and develop skills and abilities.

Students seeking admission to the degree program must meet the general requirements for admission outlined in this bulletin.

Degree Requirements

Art History Emphasis

The Master of Arts degree in Visual Art with an art history emphasis requires 36 semester hours of graduate study including 15 hours in art history, 9 hours of core courses, 6 hours of electives, and 6 hours for writing and defending a thesis. All graduate study must be within the areas of specialization offered by the program. The core program for art history includes 3 hours of Current Issues and Trends (ARTS 5301), 3 hours of Seminar in Art History, Art Criticism, and Aesthetics (ARTS 5318), and 3 hours of Methodology in Art History (ARTS 5308). Reading competency in an approved foreign language to be determined by examination or course work will be required. Graduate courses in the literature of a foreign language, history, or English can be taken as electives and may be required.

Applicants to the degree program with an art history emphasis must submit undergraduate transcripts, a term paper indicating research and writing skills, and three letters of recommendation from undergraduate professors. A graduate faculty committee will review applications and may require undergraduate foundation courses in art history or research methods before admitting the applicant.
Graduate Faculty

Associate Professor Lynne Lokensgard
Art History
Associate Professor Phil Fitzpatrick
Visual Media
Associate Professor Donna M. Meeks
Studio
Assistant Professor Steve Hodges
Studio
Professor Jerry Newman
Studio
Associate Professor Meredith Jack
Studio
Associate Professor Keith Carter
Walles Chair, Visual and Performing Arts
Photography
Assistant Professor OSAMU
James Nakagawa
Visual Media/Photography

Art Courses (ARTS)

The following graduate courses may also be taken to satisfy the specialization area requirements of some Master of Education degree programs.

5301 Issues and Trends in Contemporary Art 3:3:0
A paradigm study of current values, practices and beliefs of the art profession. Exploration of the origins and directions of artistic thought in the 20th century with emphasis on the interaction between the artist and society, the effects of that contact on artistic expression and the nature of the imagery that results from that contact.

5305 Problems in Photography 3:3:3
Advanced research in photographic technique and photography as an art medium. May be repeated for credit.

5308 Methodology in Art History 3:3:0
Introduction to methods of art historical research. Special research projects will be required.

5318 Seminar in Art History, Art Criticism, and Aesthetics 3:3:0
An historical survey of significant written works in the areas of aesthetics and art criticism that have reflected and/or shaped artistic practice of a given period.

5323 Problems in Visual Media 3:3:3
Experimental research in the uses of computers as image making tools. Development of personal imagery through electronic media. May be repeated for credit.

5325 Problems in Drawing 3:3:3
Independent directed study in drawing. May be repeated for credit.

5326 Problems in Painting 3:3:3
Directed independent research leading to the development of a personal direction and statement within painting. May be repeated for credit.

5328 Late 19th Century Art in France 3:3:0
A study of the Symbolist Movement in European art from 1885-1910. A graduate research project or paper will be required.

5335 Problems in Crafts 3:3:0
Directed independent research and experiment in the area of fine crafts. Topics vary by semester. May be repeated for credit.

5338 Research in Art History 3:3:0
A study of Renaissance art in Europe from the 14th through the 16th centuries. A graduate research project or paper will be required.

5348 Nineteenth and Twentieth Century Art 3:3:0
A study of the foundations of abstractionism from Neo-Classicism through Post-Impressionism. A graduate research project or paper will be required.

5365 Problems in Printmaking 3:3:3
Directed independent research and experiment in methods of printmaking. May be repeated for credit.

5368 Contemporary Art 3:3:0
A critical and historical analysis of painting from 1900 to the present. A graduate research project or paper will be required.

5378 Primitive Art 3:3:0
A study of pre-historic and contemporary tribal art. A graduate research project or paper will be required.

5385 Problems in Sculpture 3:3:3
Directed independent research and experimentation towards the development of a personal direction and statement in sculpture. May be repeated for credit.
5386 Problems in Ceramics
Directed independent research and experimentation with technical and aesthetic issues in ceramics. May be repeated for credit.

5388 Modern Architecture and Sculpture
A study of the development of modern architecture and sculpture from the late nineteenth century to the present. A graduate research project or paper will be required.

5395 Directed Individual Study in Studio Art
Individual study at the graduate level of a specific area within the visual arts field. May be repeated for credit when the subject varies. 
Prerequisite: Permission of instructor.

5398 History of Photography
A study of the development and evolution of photography from its invention in 1839 to the present. A graduate research project or paper will be required.

5390-5391 Thesis
Course requirements listed under Thesis Requirements in this catalog. Must complete both for required 6 credits.

Department of Communication Disorders

The Department of Communication Disorders offers training and Master of Science degrees in three disciplines: audiology, deaf education, and speech-language pathology. In addition, a Doctor of Education Degree is offered in deaf studies/education.

Master of Science Degree in Audiology/Speech-Language Pathology

Lamar University programs in audiology and in speech-language pathology hold national certification by the American Speech-Language-Hearing Association (ASHA). Students completing master's degrees in audiology or speech-language pathology typically meet the national certification standards of ASHA as well as requirements for state license. Speech-language pathology graduates who meet ASHA and state certification standards are also considered eligible for employment as speech-language pathologists in public schools. Depending on the student's undergraduate program of study, the typical 36 semester hour master's degree may need to be expanded to accommodate ASHA certification and state licensing requirements. Audiology and speech-language pathology students must complete a minimum of 375 hours of supervised clinical practicum, part of which may be accumulated at the undergraduate level.

Graduates may apply to ASHA for the Certificate of Clinical Competence (CCC) in speech-language pathology or in audiology. These national certifications require the completion of specified course work and clinical practice. Students seeking ASHA certification should obtain a copy of ASHA regulations from a faculty advisor early in their training program.

ASHA standards mandate the passing of national qualifying boards examinations for prospective audiologists and speech-language pathologists. Master's students typically take these examinations during their final semester. With the approval of their graduate committee, students who pass the ASHA national boards may be exempt from master's oral and/or written comprehensive examinations.

Master of Science Degree in Deaf Studies/Habilitation

Our deaf education program is certified by the national Council on Education of the Deaf (CED) and our graduates are eligible for professional certification through that accrediting agency. In addition, graduates may apply for state certification as a teacher of deaf children. The program welcomes deaf graduate students and many of our faculty are themselves deaf. Program graduates are expected to be skilled in sign language and to have completed a minimum of 300 hours of supervised practicum with deaf children.
Doctor of Education Degree in Deaf Education

Lamar University is one of only nine universities in the U.S. offering a doctoral degree in deaf education and addresses a critical national and international shortage of doctoral-trained educators of the deaf. Graduates of the doctoral program will take leadership positions in schools for deaf children or become teacher trainers in university settings. Both deaf and hearing applicants are accepted.

Admission

Except for prospective students who are deaf, applicants for admission to master's degree programs in the Department of Communication Disorders (CMDS) must obtain a GRE minimum score of 950 (verbal + quantitative) with neither of the two segments of the test being less than 425. Other factors considered for admission include undergraduate GPA, relevance of undergraduate training, and letters of support. Particularly in audiology and speech-language pathology, the number of graduate students admitted each semester may be constrained by national certification standards which mandate a low faculty-to-student ratio.

Applicants for the doctoral program in deaf studies/education must have a master's degree in deaf education or a related field and have completed three years of professional experience with deaf or hearing-impaired children and/or adults. Hearing applicants must have a GRE minimum combined (verbal + quantitative) score of 1100 with a 500 minimum score for each section (verbal + quantitative). Applicants must submit an essay including their philosophy of education and professional goals. The essay will be used to identify writing ability required for successful completion of the doctoral program.

Deaf applicants for the master's and doctoral degrees in deaf studies/education who have a severe to profound hearing loss acquired congenitally or prelingually will be considered on an individual basis and need not submit GRE scores. In lieu of the GRE score these deaf applicants must submit above-average performance intelligence scores (preferably the performance scale of the WAIS-R) and university grades, pass an interview with our deaf education faculty, and demonstrate adequate literacy and communication skills for graduate training. Literacy in this case includes both the reading and writing of English, but not necessarily equivalent to hearing norms. Communication skill may be demonstrated in sign and/or speech.

Graduate Faculty

Professor Jean Andrews
Deaf Education
Assistant Professor Michael Bienenstock
Deaf Education
Associate Professor Randolph Deal
Speech Language Pathology
Instructor Mary Dobson
Speech Language Pathology
Assistant Professor Thomas C. Franklin
Audiology
Instructor Daryl Blackwell
Audiology

Instructor Lynn Norwood-Chapman
Audiology
Associate Professor Gabriel A. Martin
Deaf Education
Professor Robert D. Moulton
Deaf Education, Speech Pathology
Assistant Professor Annette Carter
Speech Language Pathology
Instructor Annette Powell
Speech Language Pathology
Assistant Professor Marshall Smith
Audiology
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>5301</td>
<td>Aphasia and Neurogenic Disorders</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Theory and treatment for organic speech disorders of neurologic origin.</td>
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<tr>
<td>5302</td>
<td>Stuttering</td>
<td>3:3:0</td>
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<td></td>
<td>Nature, evaluation and treatment of fluency disorders.</td>
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<tr>
<td>5304</td>
<td>Language Disorders of Adolescents</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Assessment and intervention procedures for pre-adolescents and adolescents with language disorders.</td>
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<tr>
<td>5305</td>
<td>Diagnostics and Counseling</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Evaluation and counseling procedures in communication disorders.</td>
<td></td>
</tr>
<tr>
<td>5306</td>
<td>Language Disorders of Children</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Assessment and intervention procedures for preschool and school age children with language disorders.</td>
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<tr>
<td>5307</td>
<td>Articulation Disorders</td>
<td>3:3:0</td>
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<tr>
<td>5308</td>
<td>Neuropathologies II</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>The diagnosis and treatment of disarthria, apraxia, and dysphagia.</td>
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<tr>
<td>5309</td>
<td>Advanced Clinical Practicum</td>
<td>3:3:10</td>
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<tr>
<td></td>
<td>Advanced classroom practicum, diagnostics and therapy. May be repeated and must be taken each semester.</td>
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<tr>
<td>5310</td>
<td>Multicultural Issues and Deafness</td>
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<tr>
<td></td>
<td>To provide theory and practical techniques for identifying and teaching minority-deaf children and their parents.</td>
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<tr>
<td>5312</td>
<td>American Sign Language IV</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Advanced linguistical studies of American Sign Language.</td>
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<tr>
<td>5313</td>
<td>Speech Development in the Hearing Impaired</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Speech for the young hearing impaired child, home training and therapy. Development of communication skills.</td>
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<tr>
<td>5316</td>
<td>Language for the Deaf</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Language development theories applied to deaf children.</td>
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<tr>
<td>5317</td>
<td>Modern Math and Science Instruction for the Deaf</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Provide current theory and practical techniques for teaching math and science to deaf children.</td>
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<tr>
<td>5318</td>
<td>Special Audiometric Tests</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Test batteries fog peripheral vs. central site of lesion, non-organicity, electrophysiological assessment.</td>
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<tr>
<td>5320</td>
<td>Pediatric Audiology</td>
<td>3:3:0</td>
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<td></td>
<td>Hearing evaluation in the young patient, method and theory.</td>
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<tr>
<td>5321</td>
<td>Research in Communication Disorders</td>
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<td></td>
<td>Research design data analysis, and report writing pertinent to basic science and behaviors in communication disorders.</td>
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<tr>
<td>5322</td>
<td>Medical Audiology</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Study of otologic pathology and influence upon auditory/vestibular systems.</td>
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<tr>
<td>5323</td>
<td>Electrophysiology I</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Current electrophysiological auditory assessment: includes theory, instrument, techniques and procedures.</td>
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<tr>
<td>5324</td>
<td>Advanced Hearing Aids</td>
<td>3:3:0</td>
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<tr>
<td></td>
<td>Pros and cons of amplification theory and practicum.</td>
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<tr>
<td>5325</td>
<td>Audiology and Deafness</td>
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<td></td>
<td>Provides development in anatomy or the ear, sound and its measurement, testing and listening devices for teachers of the deaf in classroom settings.</td>
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<tr>
<td>5326</td>
<td>Psychology of Deafness</td>
<td>3:3:0</td>
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<td></td>
<td>Psychological, emotional, and social impact of deafness.</td>
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<tr>
<td>5327</td>
<td>Advanced Auditory Rehabilitation</td>
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<td></td>
<td>Speechreading, auditory training, amplification and counseling for the aurally impaired.</td>
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<tr>
<td>5328</td>
<td>The Multidisabled with Hearing Disorders</td>
<td>3:3:0</td>
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<td></td>
<td>Prevalence, demographics and etiologies of hearing disorders with other disabilities (blindness, motor, emotional, mental, or orthopedic). Includes methods, curricula, and material assistance.</td>
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<tr>
<td>5329</td>
<td>Law and Deafness</td>
<td>3:3:0</td>
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<td></td>
<td>Legislative and judicial decisions that influence educational programs for the hearing impaired/deaf.</td>
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<tr>
<td>5332</td>
<td>Industrial Audiology</td>
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<td></td>
<td>Interpretation and role of the audiologist in the OSHA Hearing Conservation Act with emphasis on noise level assessment and abatement.</td>
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<tr>
<td>5334</td>
<td>Clinical Instrumentation</td>
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</tbody>
</table>
5336 Electrophysiology II
Clinical assessment and rehabilitation of vestibular disorders including but limited to ENG, rotary chair, dynamic posturography.

5337 Special Audiology Tests II
Techniques in assessment procedures and data interpretation in the diagnosis of central auditory processing disorders and associated areas to include theory and practice.

5338 Hearing Aids II
Operation and selection criteria for programmable and digital amplification will be addressed. Practicum in real ear measurements and assistive listening devices and cochlear implants is provided.

5350 Individual Study
Independent study of special problems in speech and hearing disorders under faculty guidance.

5351 Individual Study
Independent study of special problems communication disorders.

5390-3391 Thesis
Prerequisite: Approval of Graduate Advisor. Must complete both for required 6 credits.

5403 Voice Disorders and Cleft Palate
Nature, etiology and treatment of disordered phonation and resonance imbalance secondary to laryngeal malfunction and craniofacial anomaly.

Doctoral Core Courses

6301 History & Sociology of Deaf Culture
3:3:0
Life/culture of deaf people via history, art, literature, mythology, and performance. Using an anthropological definition of "culture", the course examines the linguistic variations and modes of cultural transmission across generations and the demographics and characteristics of the community.

6302 Law and Deafness
3:3:0
Legislative and judicial decisions that influence educational programs for the hearing-impaired/deaf.

6303 Vocational Rehabilitation and Deafness
3:3:0
The vocational & rehabilitative needs of deaf/hard-of-hearing persons and successful programming models with emphasis on federal & state laws for rights & services for deaf/hard-of-hearing individuals.

6304 Curriculum, Pedagogy, and Computers used with Deafness
3:3:0
Comparative analysis, design, and implementation of educational curricula for deaf/hard-of-hearing students, the curricular relation to current pedagogical theories, and the utilization of computer technologies for the deaf education classroom.

6305 Psycholinguistics/Linguistics and Deafness
3:3:0
The psycholinguistics and linguistic development of deaf children of various linguistic and cultural backgrounds and the effects of communication modality differences upon development. Emphasis upon the bilingual/bicultural nature of these acquisition patterns will be included.

6307 Field Studies/Deaf Education Administration
3:3:0
Professional placement of the doctoral candidate in educational/administrative locations for field experience and a seminar including problem-project discussion on issues of deaf education program management.

6308 Cognition, Intelligence, Psychosocial Development and Deafness
3:3:0
Historical review of the way intellectual abilities of the deaf were viewed, current data on cognitive and intellectual abilities, psycho-social development of deaf persons and appropriate assessment tools will be covered.

6309 Contemporary Aural Rehabilitation & The Deaf/Hard-of-Hearing
3:3:0
Amplification, acoustics; and habilitative techniques and procedures applicable to deaf educational settings and the deaf/hard-of-hearing.

6350 Seminar
Special study of a contemporary issue. Complement to Doctoral course requirements.

6351 Individual Study
Independent study of special problems in Deaf Studies/education.

6390 Doctoral Dissertation – Deaf Education
Prerequisite: Approval of doctoral advisor.

6391 Doctoral Dissertation – Deaf Education
Prerequisite: Approval of doctoral advisor.

Additional hours are required in Statistics/Research as well as Cognate areas and Electives to meet full doctoral hour requirements (60 hours total).
Department of Music, Theatre and Dance

The Department of Music offers the following graduate degrees: the Master of Music in Performance, the Master of Music Education, and the Master of Science in Theatre. The Music degrees are designed to help performers and music educators improve skills and develop new concepts which may be applied to their particular fields of endeavor. Persons seeking admission to these degree programs must meet the general requirements for admission which are outlined elsewhere in this catalog. Generally, an applicant must also hold a bachelor's degree in music.

Students who did not graduate from Lamar University must take a music theory placement examination. Applicants for the graduate degree in performance must audition for the major professor.

The Master of Science in Theatre is designed to help performers and technicians increase their skills and study new concepts in their perspective specialization. Persons seeking admission to this degree must meet the general admission requirements as outlined elsewhere in this catalog. It is necessary for an applicant to hold a bachelor's degree in theatre or a compatible field.

Music Degree Requirements

Candidates for master's degrees in music must meet all general degree requirements of the College of Graduate Studies as listed elsewhere in this catalog. The Master of Music in Performance requires 30 semester hours, including 12 hours in the applied major, six in music literature, six in music theory, and six in music education. In addition, a public recital and research paper or lecture recital are required. Voice majors must show proficiency (to be determined by the Department of Music) in German, French and Italian diction prior to entering this degree program.

The Master of Music Education degree requires 36 semester hours, including 18 in music education, six in music literature, six in music theory, and six in thesis. Two additional courses in music education may be substituted for the thesis, and six hours of applied music may replace two music education courses.

All degree candidates must take MUED 5320 (Seminar in Special Problems) and pass a final oral examination before a degree can be granted. The director of graduate music studies will serve as the general advisor of all graduate students in music. A committee of three graduate faculty members will also serve in an advisory capacity and administer the final oral examination.

Theatre Degree Requirements

The Master of Science degree in Theatre is a highly individualized program. Candidates for the degree must meet all general degree requirements in the College of Graduate Studies as listed elsewhere in this catalog. The student must complete a course load of 36 semester hours including 18 hours in a specialized area, 12 hours in practical individual studies, and 6 hours in a related elective (music, dance, art or philosophy). Six hours of thesis or a two-semester major project may be substituted for the 6 semester hours of fine arts or philosophy electives.

The student will choose from the following areas of specialization: technical production (set, costume or lighting design), acting/directing, or theatre management. Courses are selected from a variety of graduate and senior level offerings. Senior level courses used for graduate credit are enhanced with additional research and application work. Matching the student's needs with a practical and viable degree plan is an excellent format for the student seeking a practical or education-oriented degree in theatre.
Graduate Faculty

Professor L. Randolph Babin  
Choral music education

Associate Professor Robert Culbertson  
Brass and music education

Associate Professor Wayne Dyess  
Brass and music education

Associate Professor Kim Ellis  
Woodwinds

Assistant Professor Frank Felice  
Music Theory and Composition

Associate Professor Kurt Gilman  
Graduate Advisor and Strings

Professor Barry W. Johnson  
Brass and music education

Professor Barbara Mathis  
Voice

Professor Raul S. Ornelas  
Brass and music education

Associate Professor Adonia Placette  
Theatre

Professor James M. Simmons  
Woodwinds and music education

Applied Music (AM)

521, 522, 523 Graduate Applied Music  
For music education majors only. Graduate applied music in any instrument category, including composition. No more than six hours may be applied toward graduation in the music education degree.

541, 542, 543 Graduate Applied Music  
Graduate applied music in any instrument category, including composition. No more than 12 hours may be applied toward graduation in the Master of Music degree.

Music Education (MUED)

5310 Microcomputer Applications in Music  
A study of microcomputers and music-related software, especially in the area of computer-assisted marching band charting and administrative duties.

5320 Seminar in Special Problems  
Research problems of special interest to students whose major emphasis is on the graduate field of music. Research paper required.

5330 Basic Concepts in Music Education  
The historical, philosophical and psychological bases of music education.

5340 Supervision of Music  
Supervision of public school music programs, with emphasis on leadership, instruction, public relations and problems in scheduling and finance.

5370 Advanced Instrumental Conducting  
Advanced interpretive problems and rehearsal techniques related to the conducting of various types of band and orchestral music.

5390 Advanced Vocal Methods  
The principles and techniques of teaching vocal music.
**Music Literature (MLt)**

531  **Instrumental Literature**  
Survey of music for large instrumental ensembles, chamber music and music for solo instruments. Emphasis on the concerto and symphony, the string quartet and sonata literature, with special attention to the needs and interests of students enrolled.

532  **Keyboard Literature**  
Survey of keyboard literature from the pre-piano period to the present, including study of the piano sonata and other characteristic forms. Emphasis on performing, listening and analysis.

536  **Survey of the Baroque Era**  
Comprehensive study of the period, beginning with the transition to Baroque, c. 1580, and ending c. 1750. Emphasis on advances in musical form, stylistic developments and performance practices.

537  **Survey of the Classic Era**  
Comprehensive study of the period, beginning with the transition to classicism, c. 1730, and ending c. 1827. Emphasis on advances in the musical form, stylistic developments and performance practices.

538  **Survey of the Romantic Era**  
Comprehensive study of the period, beginning with the transition to Romanticism, c. 1815, and ending c. 1910. Emphasis on advances in musical form, stylistic developments and performance practices.

539  **Twentieth Century Music**  
A survey of major composers and schools of composition from Debussy to the present.

**Music Theory (MTy)**

532  **Advanced Band Arranging**  
Advanced techniques in arranging music for various types of bands, and study of models by masters of band arranging.

533  **Advanced Counterpoint**  
Application, through analysis and creative writing, of contrapuntal techniques in larger forms such as canon and fugue.

534  **Advanced Orchestration**  
Techniques of scoring for various types of orchestras, and study of models by masters of orchestration.

535  **Twentieth Century Harmony**  
The analysis and writing of music based on twentieth century harmonic techniques and devices.

536  **Pedagogy of Theory**  
The principles and techniques of teaching the various branches of music theory, including principles of learning, history of theory, critical study of appropriate texts and supervised teaching of music theory classes.

537  **Analytical Techniques**  
Traditional and contemporary approaches to the visual and aural analyses of music from all periods.

**Music (Mus)**

530  **Special Projects in Music Education**  
Individual projects for students with specialized needs in the music education area.  
Prerequisite: Consent of Department Chair.

531  **Special Projects in Music Literature**  
Individual projects for students with specialized needs in the music literature area.  
Prerequisite: Consent of Department Chair.

532  **Special Projects in Music Theory**  
Individual projects for students with specialized needs in the music theory area.  
Prerequisite: Consent of Department Chair.

6390-6391 Thesis  
Prerequisite: Approval of graduate advisor.
Theatre Courses (The)

533  Theatre Studies and Application
This graduate course allows the student the opportunity to work within any area of design or construction in the technical field of theatre. It is project-oriented, and permission for enrollment must be received from the instructing supervisor. May be repeated twice for credit.

5350  Theatre Individual Study
Individual study of special problems in theatre under faculty guidance.

6390-6391 Thesis
Prerequisite: Approval of graduate advisor.
<p>| ACC 231 ACCT2301 | AM 3253 MUAP3257 | ART 235 ARTS1303 |
| ACC 232 ACCT2302 | AM 3261 MUAP3245 | ART 236 ARTS1304 |
| ACC 331 ACCT3310 | AM 3262 MUAP3249 | ART 237 ARTS2331 |
| ACC 332 ACCT3320 | AM 3263 MUAP3253 | ART 238 ARTS2316 |
| ACC 333 ACCT3330 | AM 3271 MUAP3205 | ART 239 ARTS2379 |
| ACC 334 ACCT3340 | AM 3273 MUAP3201 | ART 3199 ARTS3199 |
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| ACC 430 ACCT4300 | AM 3415 MUAP3429 | ART 3315 ARTS3315 |
| ACC 431 ACCT4310 | AM 3417 MUAP3438 | ART 3316 ARTS3316 |
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| AM 3215 MUAP3229 | ART 134 ARTS1312 | ART 4348 ARTS4348 |
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| CIS 535 | CPSC5350 | COM 334 | COMM3340 | CS 4309 | COSC4309 |
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| DAN 231 | DANC2370 | EE 336 | ELEN3341 | EGR 5311 | ENGR5311 |
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| DAN 235 | DANC1301 | EE 337 | ELEN3371 | EGR 5314 | ENGR5314 |
| DAN 3301 | DANC3301 | EE 3301 | ELEN3381 | EGR 5315 | ENGR5315 |
| DAN 331 | DANC3310 | EE 411 | ELEN4101 | EGR 5318 | ENGR5318 |
| DAN 335 | DANC3350 | EE 412 | ELEN4102 | EGR 5319 | ENGR5319 |
| DAN 336 | DANC3360 | EE 426 | ELEN4206 | EGR 532 | ENGR5383 |
| DAN 438 | DANC4380 | EE 427 | ELEN4207 | EGR 5320 | ENGR5325 |
| DMTH 101 | DMTH0071 | EE 4302 | ELEN4361 | EGR 5321 | ENGR5321 |
| DMTH 1301 | DMTH0371 | EE 4304 | ELEN4304 | EGR 5323 | ENGR5323 |
| DMTH 1302 | DMTH0372 | EE 4306 | ELEN4386 | EGR 5324 | ENGR5324 |
| DRDG 101 | DRDG0071 | EE 4307 | ELEN4397 | EGR 5326 | ENGR5326 |
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| DWRT 101 | DWRT0071 | EE 431 | ELEN3322 | EGR 5328 | ENGR5328 |
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| ECO 334 | ECON3340 | EGR 114 | ENGR1174 | EGR 5338 | ENGR5338 |
| ECO 335 | ECON3350 | EGR 130 | ENGR1301 | EGR 5341 | ENGR5341 |
| ECO 336 | ECON3306 | EGR 223 | ENGR2273 | EGR 5342 | ENGR5342 |</p>
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- “ENGL” indicates English courses.
- “FBE” indicates courses in the Electrical Engineering department.
- The last two columns are not relevant to the main content.
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Graduate study opens intellectual doors for professional growth.

Board of Regents
(year term expires in parentheses)
The Texas State University System

Nash, Elizabeth T., Chairman, (1999) .......................................................... San Marcos
Vititoe, Craig H., Vice Chairman, (1999) ................................................. Harlingen
Hageman, John P., (2003) ......................................................................... Austin
Nickerson, Floyd, (2003) ................................................................. Abilene
Villarreal, Macedonio, (2001) ............................................................. Houston
Zapata, Ray, (1999) ........................................................................ Christoval

Urbanovsky, Lamar G., Chancellor

Administration
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Cale, William G. Jr., Ph.D., Executive Vice President for Academic Affairs
Tellier, Susan K., M.B.A., Vice President for Finance and Operations
Simmons, James, Ed.D., Interim Executive Director for Institutional Advancement
Smith, Kevin, Ph.D., Associate Vice President for Academic Affairs
Brentlinger, Brock W., Ph.D., Assistant to the President
Czupryn, Kurt, Ph.D., Athletic Director

Academic Council of Deans
Avery, Beth, Ph.D., Director of Library Services
McAdams, LeBland, Ph.D., Dean, College of Education and Human Development
Moore, Gary, Ph.D., Dean, College of Business
Moulton, Robert, Ph.D., Associate Vice President for Research and Dean of Graduate Studies
Shillingsburg, Miriam, Ph.D., Dean, College of Arts and Sciences
Simmons, James M., Ed.D., Dean, College of Fine Arts and Communication
Young, Fred M., Ph.D., Dean, College of Engineering

The Graduate Council
Andréws, Jean, Ph.D., Professor of Deaf Education
Draženović, Brana, Ph.D., Professor of Electrical Engineering
Esser, James, Ph.D., Professor of Psychology
Kelly, Greg, Ph.D., Assistant Professor of English
Moss, Jimmy, D.B.A., Professor of Finance
Moulton, Robert D., Regents' Professor of Communication Disorders, Associate Vice President for Research and Dean of Graduate Studies
Ringlaben, Ravic, Ed.D., Professor of Professional Pedagogy, Chair of the Department of Professional Pedagogy
The Graduate Faculty 1998-2000

The following list reflects the status of the graduate faculty of Lamar University as of Fall, 1997. The date following each name is the academic year of first service to the University and does not necessarily imply continuous service since that time.

Akers, Hugh A., 1977, Professor Chemistry.
B.S., University of California at Riverside; Ph.D., University of California at Berkeley

Alford, Madeline, 1990, Adjunct Professor of Educational Leadership.
B.S., M.Ed., Lamar University

Allin, Shawn, 1996, Assistant Professor of Chemistry.
B.S., University of Waterloo; Ph.D., University of Alabama System

B.A., Davidson College; M.Ed., Lamar University; M.A., Ph.D., Sam Houston State University; M.R.E., University of St. Thomas

Anderson, Adrian N., 1967, Professor of History.
B.S., M.A., Ph.D., Texas Tech University

Anderson, Ross S., 1995, Assistant Professor of Biology.
B.A., Austin College; M.B.S., University of Colorado-Boulder; Ph.D., Baylor College of Medicine

Andreev, Valentin V., 1990, Assistant Professor of Mathematics.
B.M., M.M., University of Sofia; Ph.D., University of Michigan

Andrews, Jean, 1988, Professor Deaf Education.
B.A., Catholic University; M.Ed., Western Maryland College; University of Illinois

Arterbury, Elvis A., 1990, Associate Professor of Educational Leadership.
B.A., Baylor University; M.Ed., Ph.D., East Texas State University

Babin, L. Randolph, 1968, Professor of Music.
B.M.Ed., Ph.D., Louisiana State University

Baker, Mary Alice, 1969, Associate Professor of Communication.
B.S., M.A., University of Oklahoma; Ph.D., Purdue University

Bandyopadhyay, Soumava, 1992, Associate Professor of Marketing.
B.S., Jadavpur University, Ph.D., University of Alabama

Barnes, Cynthia, 1982, Professor of Office Administration.
B.S., Howard Payne University; M.Ed., Texas Tech University; Ed.D., North Texas State University

Barton, Joel E. III, 1987, Professor of Health and Kinesiology.
B.S., M.Ed., Ph.D., Texas A&M University

Bean, Wendell C., 1968, Professor of Electrical Engineering.
B.A., B.S., Lamar University; M.S., Ph.D., University of Pittsburgh; Registered Professional Engineer

Bienenstock, Michael, 1994, Assistant Professor of Deaf Education.
B.S., Rochester Institute of Technology; M.A., Gallaudet University; Ph.D., University of Maryland at College Park

Blackwell, E. Harold, 1990, Professor of Kinesiology and Chair, Department of Health and Kinesiology.
B.S.E., Delta State University; M.Ed., Memphis State University; Ed.D., University of Southern Mississippi
Boatwright, Douglas, 1986, Professor of Health and Kinesiology and Director of Graduate Program in Health and Kinesiology.
B.S., University of Alabama at Birmingham; M.S., Ph.D., Louisiana State University

Brunnell, Mark, 1997, Assistant Professor of Biology.
B.A., M.A., California State University; Ph.D., University of California

Brust, Melvin V., 1978, Professor of Management and Finance.
B.S.E.E., M.S.E.E., University of Texas; Ph.D., North Texas State University; Registered Professional Engineer

Burke, Charles M., 1970, Professor of Professional Pedagogy; Director of Admissions and Advising, Department of Professional Pedagogy.
B.A., Southern Louisiana University; M.Ed., Louisiana State University; Ed.D., University of Southern Mississippi

Cale, William, 1995, Professor of Biology. Executive Vice President for Academic Affairs.
B.S., Pennsylvania State University; Ph.D., University of Georgia

Caroll, John M., 1972, Professor of History.
A.B., Brown University; M.A., Providence College; Ph.D., University of Kentucky

Carter, Annette, 1996, Assistant Professor of Speech-Language Pathology.
Ph.D. and M.S., Indiana University; M.E., University of Southern Mississippi; B.S., Jackson State University. Certified Speech-Language Pathologist

Carter, Keith D., 1989, Associate Professor of Art. Walles Chair of Art.
B.B.A., Lamar University

Castle, David S., 1985, Associate Professor of Political Science.
B.A., M.A., Marshall University; Ph.D., University of Rochester

Chen, Daniel H., 1982, Professor of Chemical Engineering.
B.S., National Chen-Kung University; M.S., National Taiwan University; Ph.D., Oklahoma State University; Registered Professional Engineer

Chiu, Paul, 1988 Professor of Mathematics.
B.S., National Chung Hsing University; M.A., Ph.D., University of Texas at Arlington

Cho, Jai-Young, 1982, Professor of Economics.
B.A., Yonsei University; M.A., University of Kansas; Ph.D., University of Oklahoma

Chu, Hsing-wei, 1979, Professor of Industrial Engineering.
B.S., Tunghai University; M.S., Asian Institute of Technology; Ph.D., University of Texas; Registered Professional Engineer

Cocke, David L., 1989, Jack M.Gill Professor of Chemistry.
B.S., University of Texas; M.S., Lamar University; Ph.D., Texas A&M University

Cooper, Mark J., 1984, Associate Professor of Professional Pedagogy.
B.S.E., M.S.E., Henderson State University; Ph.D., Georgia State University

Corder, Paul R., 1987, Professor of Mechanical Engineering.
B.B.S., M.S., Ph.D., Texas A&M University; Registered Professional Engineer

Crawford, Carolyn H., 1994, Associate Professor of Educational Leadership and Chair, Department of Educational Leadership.
B.A., M.Ed., Lamar University; Ph.D., Texas A&M University

Culbertson, Robert, 1974, Associate Professor of Music.
B.M., M.M., Northern Illinois University; D.M.A., University of Texas at Austin

Daigrepont, Lloyd M., 1981, Associate Professor of English.
B.A., M.A., Ph.D., Louisiana State University

Dawkins, Paul, 1997, Assistant Professor of Mathematics.
B.S., M.S., Ph.D., University of Nebraska
Deal, Randolph E., 1990, Associate Professor of Communication, Director of Speech and Hearing Center.
B.A., Oklahoma State University; M.C.D., Ph.D., University of Oklahoma; Certified Speech-Language Pathologist

Dobbs, Richard, 1994, Adjunct Professor of Chemical Engineering and Assistant Director of Research-GCHSRC.
B.A., M.A., Miami University - Ohio, Ph.D., University of Cincinnati

Dobson, Mary E., 1990, Assistant Professor of Speech-Language Pathology.
B.S., Northeastern State University; M.S., University of Oklahoma; Certified Speech-Language Pathologist

Doerschuk, Peggy Israel, 1993, Assistant Professor of Computer Science.
B.S., University of Southwestern Louisiana; Ph.D., Tulane University

Dorris, Kenneth, 1965, Associate Professor of Chemistry.
B.S.; Ph.D., University of Texas

Drapeau, Richard A., 1983, Professor of Business Statistics.
B.S., Arizona State University; M.B.A., Lamar University; Ph.D., Texas A&M University

Draženović (See Peruničić-Draženović)

Drury, Bruce R., 1971, Professor of Political Science.
B.A., M.A., University of Nebraska; Ph.D., University of Florida

Dyess, Wayne, 1977, Associate Professor of Music.
B.M., Stephen F. Austin University; M.M., Catholic University of America; Ed.D., University of Houston

Eliff, Connie, 1976, Associate Professor Family and Consumer Sciences.
B.S., Southwest Texas State University; M.S., Kansas State University; Ph.D., Texas A&M University; Registered Dietitian

Ellis, Kim, 1990, Assistant Professor of Music.
B.M.E., Illinois Wesleyan University; M.M., Bowling Green State University; D.M.A., Ohio State University

Esser, James K., 1976, Professor of Psychology.
B.S., University of Iowa; Ph.D., Indiana University

Fang, Xing, 1995, Assistant Professor of Civil Engineering.
B.S.C.E., Tsinghua University, M.S.C.E., Ph.D., University of Minnesota

Felice, Frank, 1996, Assistant Professor of Music.
B.A., Concordia College; M.A., University of Colorado; Ph.D., University of Minnesota

Fitzpatrick, Onye D. Jr., 1991, Associate Professor of Psychology.
B.A., College of Wooster; M.A., University of Dayton; Ph.D. University of Houston

Fitzpatrick, Philip, 1977, Associate Professor of Art.
B.F.A., M.F.A., Auburn University

Franklin, Thomas Claborn, 1992, Assistant Professor of Audiology.
B.A., Auburn University at Montgomery; M.C.D., Auburn University; Ph.D., Florida State University; Certified Audiologist

Frazier, Robert L., 1974, Professor of Criminal Justice.
B.S., M.A., and Ph.D., Sam Houston State University

Fritze, Ronald H., 1984, Professor of History.
B.A., Concordia College; M.A., M.L.S., Louisiana State University; Ph.D., University of Cambridge
Georgas, Marilyn D., 1962, Professor of English.
B.A., Sam Houston State University; M.A., Lamar University; Ph.D., University of Texas

Gilman, Kurt A., 1986, Assistant Professor of Music.
B.M., Eastman School of Music; M.M., Texas Tech University; D.M.A., University of Texas at Austin

Giordano, James, 1996, Assistant Professor of Nursing.
B.S., St. Peter's College; M.A., Norwich University; M.Phil., M.S., Ph.D., City University of New York

Godkin, Roy Lynn, 1981, Professor of Management. Chair, Department of Management and Marketing.
A.B., Bethany Nazarene College; M.R.B.E., Nazarene Theological Seminary; M.A., The University of Illinois at Springfield; Ph.D., University of North Texas

Gwin Howell H., Jr., 1962, Professor of History.
B.A., M.A., Ph.D., Mississippi State University

Gwynn, Robert S., 1976, Professor of English.
A.B., Davidson College; M.A., M.F.A., University of Kansas

Habets, Darren, 1994, Assistant Professor of Mechanical Engineering.
B.S., M.S., Ph.D., Texas A&M University

Haïduk, Michael W., 1983, Associate Professor of Biology.
B.S., M.S., Texas A&M University; Ph.D., Texas Tech University

Hansen, Keith C., 1967, Professor of Chemistry.
B.S., Lamar University; Ph.D., Tulane University

Hargrove, W. Richard, 1964, Professor of Educational Psychology.
B.S., M.Ed., North Texas State University; Ed.D., George Peabody College for Teachers

Harrel, Richard C., 1966, Professor of Biology.
B.S., East Central State College; M.S.Ed.; University of Georgia; Ph.D., Oklahoma State University

Hawkins, Charles, 1966, Regents' Professor of Economics; Chair, Department of Economics and Finance.
B.A., Lamar University; M.A., Ph.D., Louisiana State University

Henry, Lula J., 1987, Associate Professor of Reading.
B.S.Ed., Paul Quinn College; M.S.Ed., Arkansas State University; Ed.D., University of Missouri-Columbia

Ho, Tho-Ching, 1982, Associate Professor of Chemical Engineering.
B.S., National Taiwan University; M.S., Ph.D., Kansas State University; Registered Professional Engineer

Hodges, Steve, 1990, Associate Professor of Art.
M.F.A., University of Arkansas; B.S., Lamar University

Holmes, William R., 1990, Associate Professor of Educational Leadership.
B.A., Oklahoma Baptist University; Th.M., New Orleans Baptist Theological Seminary; M.S., Ph.D., University of Southern Mississippi

Hopper, Jack R., 1969, Professor of Chemical Engineering and Chair, Department of Chemical Engineering.
B.S., Texas A&M University; M.Ch.E., University of Delaware; Ph.D., Louisiana State University; Registered Professional Engineer

Hunt, Madelyn D., 1984, Associate Professor of Biology.
B.S., Lamar University; M.P.H., Dr.P.H., University of Texas School of Public Health; Registered Medical Technologist (A.S.C.P.)
Jack, Meredith M., 1977, Associate Professor of Art.
B.F.A., University of Kansas; M.F.S., Temple University

Johnson, Barry W., 1983, Professor of Music, interim Chair of the Department of Music, Theatre, and Dance.
C.B.M.E., M.A., Sam Houston State University; Ed.D., University of Houston

Johnson, Byron R., 1995, Professor of Criminal Justice. Director, Center for Justice Research and Education.
B.A., Minot State University; M.A., University of Tennessee; M.S., Middle Tennessee State University; Ph.D. Florida State University

Johnson, William, 1997, Assistant Professor of Kinesiology.
B.S., California Polytechnic State University; M.A., Stanford University; Ph.D., University of New Mexico

Jolly, Sonny, 1971, Professor of Health and Kinesiology.
B.S., M.S., Lamar University; M.Ed., Stephen F. Austin State University; Ed.D., North Texas State University

Jones, Richard W., 1975, Professor of Accounting and Chair, Department of Accounting.
B.S.C., Texas Christian University; M.A., University of Alabama; Ph.D., University of Arkansas; Certified Public Accountant

Jordan, Donald L., 1979, Professor of Management Information Systems.
B.S., East Texas Baptist College; B.S., Lamar University; M.S., Air Force Institute of Technology; Ph.D., University of Houston

Karlin, Andrea, 1981, Professor of Reading.
B.A., Hunter College; M.A., Ph.D., University of Mexico

Kelly, Gregory G., 1993, Assistant Professor of English.
B.A., Florida State University; M.A., Ph.D., Emory University

King, Larry J., 1991, Assistant Professor of Communication.
B.A., M.A., Bethany Nazarene College; Ph.D., University of Oklahoma

Koehn, Enno, 1984, Professor of Civil Engineering and Chair, Development of Civil Engineering.
B.C.E., City University of New York; M.S., Columbia University; Ph.D., Wayne State University; Registered Professional Engineer

Koh, Hikyoo, 1981, Professor of Computer Science.
B.A., Young-Nam; M.S., University of Hawaii; Ph.D., University of Pittsburgh

Lee, Huei, 1991, Associate Professor of Management.
B.A., in Law, Fu Jen Catholic University; M.B.A., Eastern New Mexico University; Ph.D., Georgia State University

Lewis, Marvin, 1997, Barlow Professor of Accounting.
B.S., Florida State University; M.S., University of St. Thomas

Li, Ku-Yen, 1978, Professor of Chemical Engineering.
B.S., M.S., Chen Kung University; Ph.D., Mississippi State University

Lindoefer, Joanne, 1980, Associate Professor of Psychology.
B.S., Loyola University, Chicago; M.S., Ph.D., University of Texas

Loges, Max, 1991, Assistant Professor of English.
B.A., Northwestern Oklahoma State University; M.Div., Southwestern Baptist Theological Seminary; M.A., Fort Hays State University; Ph.D., Oklahoma State University

Lokensgard, Lynne, 1973, Associate Professor of Art.
B.A., University of Minnesota; Ph.D., University of Kansas

Lowery, Scott, 1996, Assistant Professor of Speech-Language Pathology.
B.S. and M.A., Western Illinois University; Ph.D., University of Illinois. Certified Speech-Language Pathologist
Lynch, Howell, Jr., 1997, Associate Professor of Accounting.
B.B.A., Middle Tennessee State University; M.P.A., University of Texas; Ph.D., Texas A&M

Maesumi, Mohsen, 1991, Associate Professor of Mathematics.
B.A., Princeton University; M.S., Yale University; Ph.D., New York University

Mallett, Jerry, 1995, Adjunct Professor of Educational Leadership.
B.S., M.Ed., Baylor University; Ed.D., University of Houston

Mann, Judith R., 1997, Assistant Professor of Psychology.
B.S., Northeast Louisiana University, M.S., Ph.D., Texas A&M

Marriot, Richard G., 1976. Professor of Psychology and Chair, Department of Psychology.
B.S., Weber State College; M.A., Ph.D., University of New Mexico

Martin, Gabriel A., 1989, Associate Professor of Communication Disorders and Chair, Department of Communicative Disorders.
B.S., M.S., Lamar University; Ed.D., University of Southern Mississippi

Matheson, Alec L., 1983, Professor of Mathematics and Chair, Department of Mathematics.
B.S., University of Washington; Ph.D., University of Illinois

Mathis, Barbara Thomas, 1990, Professor of Music.
B.M., M.M., North Texas State University; Ph.D., University of North Texas

Maxum, Bernard J., 1992, Professor of Electrical Engineering and Chair, Department of Electrical Engineering.
B.S., University of Washington; M.S., University of Southern California; Ph.D., University of California, Berkeley; Registered Professional Engineer

Mayer, Bradley W., 1994, Assistant Professor of Management.
B.B.A., B.S.Ed., University of North Dakota; M.B.A., Mankato State University; Ph.D., University of North Texas

McAdams, LeBland, 1967, Professor of Family and Consumer Sciences and Dean, College of Education and Human Development.
B.S., Sam Houston State University; M.Ed., University of Houston; Ph.D., Texas Woman's University

McCaskill, Ed., 1987, Associate Professor Science Education.
B.S., M.Ed., Sam Houston State University; Ed.D., East Texas State University

McLaughlin, George, 1959, Professor of Educational Leadership.
B.S., Lamar University; Ed.D., University of North Texas

Meeks, Donna M., 1995, Associate Professor of Art and Chair, Department of Art.
B.A., M.A.T., University of Louisville; M.F.A., University of Wisconsin-Milwaukee

Moore, Dorman Wayne, 1997, Associate Professor of Educational Leadership.
B.S., M.A.Ed., Angelo State University; Ph.D., University of Texas

Montano, Carl B., 1981, Professor of Economics.
B.S., M.S., University of the Philippines; Ph.D., Michigan State University

Morgan, William E., 1972, Professor of Civil Engineering.
B.S., U.S. Naval Academy; B.S., U.S. Naval Post Graduate School; M.S., University of Alaska; Ph.D., University of Texas; Registered Professional Engineer, Diplomate of the American Academy of Environmental Engineers

Moss, Jimmy D., 1986, Professor of Finance.
B.S., M.B.A., D.B.A., Mississippi State University

Moulton, Robert D., 1974, Regents' Professor of Communications Disorders and Associate Vice President for Research and Dean of Graduate Studies.
B.S., M.S., University of Utah, Ph.D., Michigan State University; Certified Speech-Language Pathologist
Nakagama, Osamu, Assistant Professor of Art.
B.A., University of St. Thomas; M.A., University of Houston

Newman, Jerry A., 1962, Regents' Professor of Art.
B.F.A., University of Texas; M.F.A., University of Southern California

Nicks, Robert, 1988, Professor of Educational Leadership.
B.S., M.Ed., Lamar University; Ed.D., Texas A&M University

Nichols, Paula, 1988, Assistant Professor of Family and Consumer Sciences and Director, Spindletop Center for Excellence in Teaching and Technology.
B.S., Baylor University; M.Ed., Ed.D., University of Houston

Nicoletto, Paula F., 1995, Assistant Professor of Biology.
B.S., Appalachian State University; M.S., Virginia Polytechnic Institute and state University; Ph.D., University of New Mexico

Nordgren, Joseph E., 1990, Assistant Professor of English.
B.A., University of Minnesota; M.A., Ph.D., Florida State University

Norwood-Chapman, Lynn, 1998, Assistant Professor of Audiology.
B.S., Appalachian State University; M.A. and Ph.D., University of Tennessee. Certified Audiologist

Ornelas, Raul Sosas, 1972, Professor of Music.
B.M., University of Texas; M.M.Ed., McNeese State University; D.M.A., University of Southern Mississippi

Ortigo, James Dale, 1968, Regents' Professor of Chemistry.
B.S., University of Southwestern Louisiana; Ph.D., Louisiana State University

Osborne, Lawrence, 1990, Associate Professor of Computer Science and Chair, Department of Computer Science.
B.S., Southeast Missouri State University; M.A., M.S., Ph.D., University of Missouri-Rolla

Pemberton, Amy, 1984, Associate Professor of Family and Consumer Sciences.
B.S., M.S., Lamar University; Ph.D., University of Texas School of Public Health-Houston; Registered Dietitian

Perunić-Draženović, Branislava, 1993, Professor of Electrical Engineering.
Candidate of Technical Sciences, Institute of Automatics and Telemechanics of the USSR Academy of Sciences; Ph.D., Sarajevo University

Placette, Adonia D., 1985, Associate Professor of Theatre.
B.S., M.S., Lamar University; Ph.D., Texas Tech University

Plugge, Carol, 1993, Assistant Professor of Health and Kinesiology.
B.S., M.S., University of New Mexico; Ph.D., Texas A&M University

Porter, Jay, 1995, Assistant Professor of Electrical Engineering.
B.S., M.S., Ph.D., Texas A&M University

B.S. and M.S., Lamar University. Certified Speech-Language Pathologist

B.A., Hendrix College; M.A., Ph.D., University of Arkansas

Priest, Dale G., 1986, Assistant Professor of English and Modern Languages.
B.A., Lamar University; M.A., Ph.D., Rice University

Randleman, Margie, 1997, Assistant Professor of Kinesiology.
B.S., M.S., University of Southern Mississippi, Ed.D., Texas A&M University

Read, David R., 1965, Regents' Professor of Computer Science.
B.S., Lamar University; M.S., North Texas State University; Ph.D., University of Houston
Reddy, G.N., 1990; Assistant Professor of Electrical Engineering.
B.E., Nagarjunasugar Engr College; M.Sc. Engr., PSG College of Technology; M.S., Ph.D.,
Indian Institute of Technology

Rice, Desmond V., 1987, Associate Professor of Reading and Educational Technology.
B.A., Avondale College, N.S.W., Australia; M.A., San Francisco State University; Ed.D.,
University of Southern California

Ringlaben, Ravic, 1997, Professor of Professional Pedagogy. Chair, Department of Professional
Pedagogy.
B.S., Millersville University; M.Ed., Slippery Rock University; Ed.D., University of
Northern Colorado

Saleh, Jamal M., 1997, Adjunct Assistant Professor of Chemical Engineer.
B.S., M.S., University of Southern California

Sanderson, James, 1989, Associate Professor of English.
B.A., M.A., Southwest Texas State University; Ph.D., Oklahoma State University

Saur, Pamela S., 1988, Associate Professor of English
B.A., M.A., University of Iowa; M.Ed., University of Massachusetts; Ph.D., University of
Iowa

Sen, Kabir C., 1993, Assistant Professor of Marketing.
B. Tech., Indian Institute of Technology; M.B.A., Cranfield School of Management; M.S.,
Ph.D., Washington University

Sheppeard, Sallye J., 1980, Professor of English and Chair, Department of English.
B.A., M.A., Texas Christian University; M.R.E., Brite Divinity School; Ph.D., Texas
Woman's University

Shillingsburg, Miriam, 1997, Professor of English and Dean, College of Arts and Sciences.
B.A., Ph.D., Mars Hill College; M.A., University of South Carolina; B.G.S., Mississippi
State University

Shillingsburg, Peter, 1997, Associate Director of Graduate Studies and Research.
B.A., M.A., Ph.D., University of South Carolina

Shukla, Shyam S., 1985, Associate Professor of Chemistry.
M.S., University of Saskatchewan; Ph.D., Clarkson College of Technology

Sisk, Dorothy, 1990, Conn Professor of Gifted Education.
B.S., Mount Union College; M.A., California State University Long Beach; Ed.D.,
University of California at Los Angeles

Smith, Kevin B., 1981, Professor of Sociology and Associate Vice President of Academic
Affairs.
B.S., Texas A&M University; M.A., Ph.D., Louisiana State University

Smith, Marshall M., 1989, Associate Professor of Audiology.
B.S., Auburn University; M.S., Pennsylvania State University; Ph.D., Florida State
University; Certified Audiologist

Spradley, Larry W., 1972, Professor of Business Statistics.
B.A., Stephen F. Austin State University; M.Th., Southern Methodist University; M.S.,
Lamar University; Ph.D., Texas A&M University

Srinivasan, Malur, 1996, Assistant Professor of Mechanical Engineering.
B.S., University of Mysore; M.S., Ph.D., Indian Institute of Science

Storey, John W., 1968, Regents' Professor of History and Chair, Department of History.
B.A., Lamar University; M.A., Baylor University; Ph.D., University of Kentucky

Strickland, George, 1995, Assistant Professor of Health and Kinesiology.
B.S., University of Houston; M.S., Ph.D., Southern Illinois University
Sutton, Walter A., 1963, Professor of History. B.A., William Marsh Rice University; M.A., Ph.D., University of Texas

Swerdlow, Robert A., 1978, Professor of Marketing and Associate Dean, College of Business. B.B.A., M.B.A., Lamar University; Ph.D., University of Arkansas

Thomas, James L., 1983, Associate Professor of Industrial and Mechanical Engineering. B.S.I.E., Oklahoma State; M.S.I.E., Texas Technological College; Ph.D., Texas Tech University

Thompson, Bob, 1985, Professor of Educational Administration and Supervision. B.S., Abilene Christian University; M.Ed., Ph.D., East Texas State University

True, James, 1997, Jack Brooks Chair of Political Science. B.A., McMurry University; M.S., Southern Illinois University; Ph.D., Texas A&M University

Tucker, Jerry R., 1971, Associate Professor of Educational Administration and Supervision. B.S., University of Texas; M.E., Trinity University; Ph.D., Texas A&M University

Utter, Glenn H., 1972, Professor of Political Science and Chair, Department of Political Science. B.A., State University of New York at Binghamton; M.A., Ph.D., State University of New York at Buffalo

Vanderleenw, James M., 1988, Assistant Professor of Political Science. B.A., Ramapo College; M.A., University of Nevada-Reno; Ph.D., University of New Orleans

Varick, Celia B., 1995, Assistant Professor of Accounting. B.A., University of Southern Maine; M.A., University of Iowa; Ph.D., University of Arkansas

Wallet, Kimberly A., 1994, Assistant Professor of Family and Consumer Sciences. B.S., Central Michigan University; M.A., Michigan State University; Ph.D., Kansas State University

Warner, James B., 1993, Adjunct Professor of Educational Leadership. B.A., M.A., Lamar University; Ed.D., Texas A&M University

Watts, Doyle, 1985, Professor of Educational Psychology. B.S., Abilene Christian University; M.S., Ed.D., Texas Tech University

Westgate, James W., 1989, Assistant Professor of Geology. B.S., College of William and Mary; M.S., University of Nebraska-Lincoln; M.S., Southwest Missouri State University; Ph.D., University of Texas-Austin

Winfield, Christopher, 1997, Assistant Professor of Mathematics. B.S., M.S., University of West Madison; Ph.D., University of California

Wooster, Ralph A., 1955, Regents' Professor of History. B.A., M.A., University of Houston; Ph.D., University of Texas

Wright, Stuart A., 1985, Professor of Sociology. B.A., M.A., University of Houston; Ph.D., University of Connecticut

Yaws, Carl L., 1975, Professor of Chemical Engineering. B.S., Texas A&M University; M.S., Ph.D., University of Houston; Registered Professional Engineer

Yearwood, Stephanie, 1988, Assistant Professor of English. B.A., Tulane University; M.A., Ph.D., University of Texas

Young, Fred M., 1978, Professor of Mechanical Engineering and Dean, College of Engineering. B.S.M.E., M.S.M.E., Ph.D., Southern Methodist University; Registered Professional Engineer
Zaloom, Victor A., 1981, Professor of Industrial Engineering and Chair, Department of Industrial Engineering.
B.S.I.E., M.S.E., University of Florida; Ph.D., University of Houston; Registered Professional Engineer

Zhang, Wen-Ran, 1990, Associate Professor of Computer Science.
B.S., Shanxi Mining Institute; M.S., Ph.D., University of South Carolina
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Correspondence Directory

Frequently Called Numbers

All correspondence should be directed to Lamar University, Beaumont, Texas 77710. Telephone numbers for all campus stations may be obtained through the central switchboard, 409/880-7011.

Academic Programs .................................................. Kevin Smith, Associate Vice President, P.O. Box 10002, 409/880-8400

Academic Affairs ....................................................... William G. Calé, Jr., Executive Vice President, P.O. Box 10002, 409/880-8398

Admissions ............................................................... James Rush, Director, Academic Services, P.O. Box 10007, 409/880-8398

Applications/Information ............................................. Admissions Services, P.O. Box 10009, 409/880-8888

Athletics ................................................................. W. Dean Billick, P.O. Box 10066, 409/880-8323

College of Arts & Sciences ......................................... Miriam Shillingsburg, Dean, P.O. Box 10058, 409/880-8508

College of Business .................................................. Sue Bailey, Dean, P.O. Box 10059, 409/880-8804

College of Education and Human Development ........... LeBland McCadam, Dean, P.O. Box 10034, 409/880-8661

College of Engineering ............................................. Fred M. Young, Dean, P.O. Box 10057, 409/880-8741

College of Fine Arts & Communication ....................... James M. Simmons, Dean, P.O. Box 10077, 409/880-8377

College of Graduate Studies ...................................... Robert D. Moulton, Associate Vice President for Research and Dean of Graduate Studies, P.O. Box 10004, 409/880-8229

Computer Services .................................................. Robert Bell, Director, P.O. Box 1020, 409/880-8489

Counseling/Testing ................................................... Coordinator, P.O. Box 10040, 409/880-8444

Finance ................................................................. JoAnn Tellier, Vice President, P.O. Box 10003, 409/880-8395

Financial Aid .......................................................... Robert Bell, Director, P.O. Box 10042, 409/880-8450

Graduate Admissions ................................................ Alicia Sare, Coordinator/Recruiters, P.O. Box 10078, 409/880-8350

Institutional Advancement .......................................... James M. Simmons, Interim Executive Director, P.O. Box 10011, 409/880-8209

International Students .............................................. Sandy Drane, Advisor, P.O. Box 10074, 409/880-8349

Library ................................................................. Beth Fusiler, Director, P.O. Box 10021, 409/880-8118

Placement ............................................................. Gerry Juhon, Director, P.O. Box 10012, 409/880-8178

President .............................................................. Rex Cottle, President, P.O. Box 10001, 409/880-8405

Public Services and Continuing Education .................... Janice Trammell, Director, P.O. Box 10008, 409/880-8209

Records & Registration ............................................ Registrar, P.O. Box 10010, 409/880-1718

Student Affairs ...................................................... Kurt Czupryn, Vice President, P.O. Box 11550, 409/880-8458

Student Health ....................................................... Delores Jones, Director, P.O. Box 10015, 409/880-8466

Student Housing ..................................................... Director, P.O. Box 10041, 409/880-8111

Teacher Certification ............................................... Charles Burke, Director, P.O. Box 10034, 409/880-8690

Tuition/Fees/Expenses ................................................ O. Cliff Clay, Bursar, P.O. Box 10183, 409/880-8898

Veterans Affairs .................................................... Darrell L. Fendren, Director, P.O. Box 10017, 409/880-8437