
Lamar University

Phillip M. Drayer Department of Electrical Engineering

4+1

Accelerated ME/MES Enrollment Form

(Completed by the student petitioning to the program)

Name (Last, First): _____

L#: _____ Current GPA: _____

Current Semester: _____ Classification: Junior _____ Senior _____

BSEE Program Graduating Semester: _____

Why are you interested in the 4+1 Accelerated ME/MES Program?

Specify the Graduate Major: _____

Senior Elective Courses petitioned for double count (BSEE and ME/MES)

Course # _____ Title: _____ Semester: _____

Course # _____ Title: _____ Semester: _____

Signature: _____ Date: _____

(Completed by EE Department)

Department Chair's Signature: _____ Date: _____

Accepted to the 4+1 program: _____

Application to Graduate (ME/MES) Program must be submitted by student in final/graduating BSEE semester: _____

Lamar University

Department of Electrical Engineering

Accelerated BS-ME/MES Program in Electrical Engineering

Program Goals

The Accelerated BS-ME/MES program is designed for talented undergraduate Electrical Engineering majors who would benefit from having the Masters of Engineering or Master of Engineering Science degree in Electrical Engineering when they enter the job market, graduate school, or professional school. Successful students will be able to earn the ME/MES degree in a fifth year in two long semesters and up to two summer semesters beyond the completion of the B.S. degree. This program allows undergraduates simultaneously to receive up to 6 credits toward their undergraduate and graduate degrees by taking cross-listed courses that are offered at both the undergraduate and graduate levels. Cross-listed courses taken at the graduate level have additional learning requirements over and above those at the undergraduate level. Students who successfully complete the graduate version of cross-listed courses during their senior year may receive both graduate and institutionally awarded undergraduate credits for the course.

Credits

120 credits for the BS Electrical Engineering degree

30 Credits for the ME/MES Electrical Engineering degree

6 dual listed credits for cross-listed courses

Program Requirements and Restrictions

1. Candidates should apply for admission to the Accelerated Program during their junior year by informing their department advisors and chair regarding their interest in the program. The admission decision will be based on the student's credentials, while the minimum eligibility requirements are:
 - minimum GPA of 3.0, while at LU;
 - completion of approved graduate-level senior elective course(s);
 - commitment to graduate studies at Lamar University.
2. A student admitted into the program will maintain an undergraduate classification until he or she completes all BSEE requirements. During the last semester of the student's undergraduate degree, the Graduate Admissions office will create a degree-seeking Master's record to run concurrently with the student's undergraduate record. For the switch in status to occur, the student must maintain a 3.0 GPA in all EE courses and satisfy all departmental and university requirements for the Master of Engineering (non-thesis option) or Master of Engineering Science (thesis option) as dictated by the catalog.
3. Students entering the program are required to:
 - complete all BSEE coursework.
 - complete at least six hours of graduate courses in the Senior year.
 - be University core complete by the end of their Senior year.
 - complete at least 30 hours of graduate credit.
 - satisfactory completion of a final comprehensive examination or thesis defense.
4. The graduate (dual credit) courses must be selected from the 5000-level offerings approved by the EE Department graduate adviser/coordinator or Department chair for both the undergraduate and the graduate degree. A student may not receive credit for both the undergraduate and the graduate version of a cross-listed dual course(s). Students must perform the graduate level assignments for all dual credit courses. Only a grade of 'A' or 'B' will be accepted for graduate credit on a dual credit course.
5. Further requirements for the BS in Electrical Engineering are listed in the EE Catalog under the Bachelor of Science – Electrical Engineering subheading and under the Graduate Program subheadings.
6. A student participating in the accelerated ME/MES program may seek approval from the graduate faculty to enter the Thesis (MES) program. Once accepted, the requirements for graduation will be:
 - a minimum of 24 semester hours (eight courses) of EE ME/MES electives. Other courses approved by student's Academic Advisor may satisfy part of this requirement.
 - satisfactory completion and defense of a Master's thesis (a minimum of 6 semester hours of ENGR 5390 and ENGR 5391).

Lamar University

Bachelor of Science Electrical Engineering with ME/MES Dual Credit Degree Plan

✦ Minimum 144 semester hours ✦ 3.0 cumulative GPA

Core Curriculum (43 hrs)

Communication - 6 Hours:

- ENGL 1301 - Composition I

Choose 1 from:

- COMM 1315, COMM 1321, DSDE 1371, FREN 1311, SPAN 1311

Mathematics - 4 Hours:

- MATH 2413 - Calculus and Analytical Geometry I

Life and Physical Sciences - 8 Hours:

- PHYS 2425 - University Physics I
- PHYS 2426 - University Physics II

Language, Philosophy and Culture - 3 Hours From:

- PHIL 1370 - Philosophy of Knowledge or PHIL 2306 - Ethics

Creative Arts - 3 Hours From:

- ARTS 1301, ARTS 1303, DANC 2304, MUSI 1306, MUSI 1309, MUSI 1310, COMM 1375, PHIL 1330, THEA 1310

American History - 6 Hours From:

- HIST 1301, HIST 1302, HIST 2301

Government/Political Science - 6 Hours:

- POLS 2301 - Introduction to American Government I
- POLS 2302 - Introduction to American Government II

Social and Behavioral Sciences - 3 Hours From:

- ANTH 2346, ANTH 2351, BULW 1370, CRIJ 1301, ECON 1301, ECON 2301, ECON 2302, INEN 2373, POLS 1301, PSYC 2301, SOCI 1301, SOWK 2361,

Component Area Option - 4 Hours:

- MATH 2414 - Calculus and Analytical Geometry II

Required Courses for Major (68 hrs)

- CHEM 1111 - General Chemistry I Laboratory
- CHEM 1311 - General Chemistry I
- ELEN 1100 - Introduction to ECE (may be substituted by ELEN 3101 for transferring students)
- ELEN 2411 - Circuits Analysis I
- ELEN 3312 - Circuits Analysis II
- ELEN 3313 - Signals, Systems & Transforms
- ELEN 3322 - Electronics II
- ELEN 3371 - Electromagnetics
- ELEN 3381 - Electrical Analysis
- ELEN 3421 - Electronics I

- ELEN 3431 - Digital Systems Design I
- ELEN 3441 - Fundamentals of Power Engineering
- ELEN 4306 - Senior Projects Design I
- ELEN 4307 - Senior Projects Design II
- ELEN 4351 - Control Engineering
- ELEN 4361 - Communication Systems
- ELEN 4486 - Embedded Micropro Systems
- ELEN 4387 - Computer Organization & Arch
- MATH 3301 - Ordinary Differential Equation
- MATH 3318 - Linear Algebra I
- MATH 3370 - Introduction to the Theory of Statistical Inference or INEN 3320 Prob&Stat Eng
- MATH 2415 - Calculus III

BSEE Elective Courses (9 hrs)

- ELEN Electives - 9 Hours*; Non-ELEN courses may be substituted with departmental approval.
* - up to 6 hours may be counted as dual-credit

EE Dual Credit Electives (6 hrs)

EE ME/MES Electives (24 hrs)

A minimum of 24 semester hours of EE elective courses. Other courses approved by department graduate advisor may satisfy part of this requirement. Up to two courses can be substituted by ENGR 5390 and ENGR 5391, Thesis.