

General Requirements for Graduation Without Thesis – 27 units total with 3.0 GPA overall:
(All classes must be passed with a grade of C or higher)

- **4 units** AME 525 *Engineering Analysis*
- **20 units** Required coursework (See below)
- **Remaining units** Approved 400 or 500 level elective courses
 - Elective courses may be from AME, Math, Physics, or other Engineering Departments (ASTE, BME, CE, CHE, CS, EE, ENE, ENGR, INF, ISE, ITP, MASC, PTE, SAE)
- Only 3 units of AME 590 *Directed Research* can be taken as elective credit
- For official approvals of waivers, substitutions, etc., please amegrad@usc.edu

Notes: Term course typically offered is (F)=Fall (Sp)= Spring (Su)=Summer + Not Regularly Offered

Ex: AME 436 Energy and Propulsion (Sp) is typically offered in the Spring.

Dynamics and Control Track

Required Dynamics and Control Core Courses:

AME 521 *Engineering Vibrations II* * (F) AME 522 *Nonlinear Vibrations* (F) AME 524 *Advanced Engineering Dynamics* (F)
 AME 541 *Linear Control Systems II* ^ (F) AME 552 *Nonlinear Control Systems* • (Sp) †

Recommended Electives: These are not required, but are also in the Dynamics/Controls area

AME 420 *Engineering Vibrations I* (Sp) □ AME 451 *Linear Control Systems I* (F) □ AME 539 *Multi-body Dynamics* (Sp) +◇
 AME 544 *Computer Control of Mechanical Systems* (Sp) EE 543a *Digital Control Systems* (Sp) EE 553 *Computational Solution of Optimization Problems* (Sp) †

EE 587 *Nonlinear and Adaptive Control* + †

* AME 420 is a pre-req for AME 521. ^ AME 451 is a pre-req for AME 541. • AME 541 is a pre-req for AME 552.

□ AME 420 & AME 451 are only recommended electives if equivalents not taken during undergrad.

† EE 553 or EE 587 are approved substitutes for AME 552.

◇ AME 539 is an approved substitute for AME 522.

Program of Study Worksheet

Course	Semester	Notes
AME 525		
AME 521		
AME 522		
AME 524		
AME 541		
AME 552		
Elective		

*To be approved to pursue the MSAMDC with Thesis, you must first discuss with an AME Academic Advisor during your first semester in program. An AME faculty thesis advisor must be secured by student and special planning of coursework and units must be discussed with AME Academic Advisor.