

# **DEN@Viterbi ORIENTATION** Aerospace and Mechanical Engineering

*Chrissy Franks Director, AME Student Affairs* 

## Susan Sath Assistant Director, AME Student Affairs





## Agenda

- Welcome to DEN@Viterbi & USC
- Advisor/Student Expectations
- Degree Requirements
- Department Policies, Procedures & Important Deadlines
- Desire2Learn Login & Training
- Advisement: DEN D-clearance
- DEN Contact Information
- Q&A





# Welcome to DEN@Viterbi and USC!

## **AME Advising**

## **Chrissy Franks**

Director, AME Student Affairs Ph.D. Advising

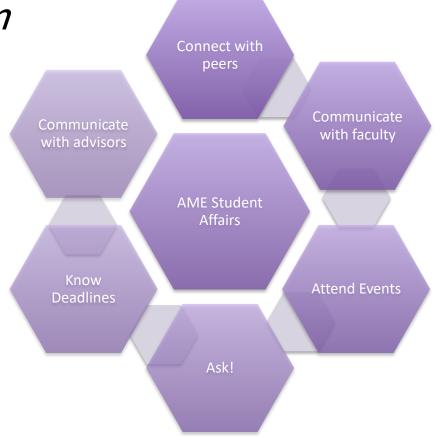
## Susan Sath

Assistant Director, AME Student Affairs M.S. advising Email <u>amegrad@usc.edu</u>



## Your USC Experience

# *"How do I succeed in the program?"*





# AME Student Affairs – What you can expect from us

We are here to guide and educate about university policies & degree requirements so you can make informed decisions.

- Common questions in an advisement appointment
  - Degree requirements & course selection
  - How to get involved in research
  - Student organizations
  - Academic adjustment and support (successes & challenges)
- Communication expectations
  - We reply within 24 business hours (48 during peak times)
  - You can sign up for an advisement appointment via myViterbi

Communicate with advisors



# AME Student Affairs – What we expect from you

## **Communication expectations**

- Please include your USC ID in all emails
- Email us from your official USC email address
- When our emails require a response, please reply within 24-48 business hours

Communicate with advisors







- MS in Aerospace Engineering
- MS in Mechanical Engineering <a>D</a>
- MS in Aerospace & Mechanical Engineering <a>[\_\_]</a>
   (Computational Fluid & Solid Mechanics)
- Degree Available online via
   DEN@Viterbi. Visit
   viterbigradadmission.usc.edu to confirm online course offerings.

- MS in Aerospace & Mechanical Engineering (Dynamics and Control)
- MS in Mechanical Engineering (Energy Conversion)
- MS in Product Development Engineering
- MS in Aerospace Engineering/Engineering Management (Dual degree)
- MS in Mechanical Engineering/Engineering Management (Dual degree)









MS in Aerospace Engineering – Program Details

Program Requirements: Minimum of 27 units

Required CoursesAME 525 | Engineering Analysis11 units of AME 500 level course workRemaining units can be selected from approved electives

#### **Optional Specializations -** A specialization can be selected from the following list

- Aerodynamics/Fluid Dynamics
- Aerospace Controls
- Aerospace Design

- Aerostructures
- Computational Fluid Dynamics
- Propulsion



Degree Available online via DEN@Viterbi. Visit viterbigradadmission.usc.edu to



Program Requirements: Minimum of 27 units

**Required Courses** 

AME 525 | Engineering Analysis

11 units of AME 500 level course work



Remaining units can be selected from approved electives

## **Optional Specializations -** A specialization can be selected from the following list

- Advanced Manufacturing
- Combustion
- Design
- Dynamics & Controls
- Energy Conversion

- Fluid Dynamics
- Heat Transfer
- Mechanics & Materials
- Solid & Structural Mechanics





## MS in Aerospace & Mechanical Engineering (Computational Fluid & Solid Mechanics) – Program Details



Program Requirements: Minimum of 27 units

#### **Required Core Courses (19 units)**

- AME 509 | Applied Elasticity OR CE 507
- AME 525 | Engineering Analysis
- AME 530a | Dynamics of Incompressible Fluids
- AME 535a | Introduction to Computational Fluid Mechanics
- CE 529 | Finite Element Analysis

#### Core Elective Fluid/Solid Dynamics (3-4 units) -

One course. Sample courses include:

- AME 511 | Compressible Gas Dynamics
- AME 506 | Continuum Mechanics
- AME 521 | Engineering Vibrations II

Degree Available online via DEN@Viterbi. Visit viterbigradadmission.usc.edu to confirm online course offerings.

#### **Core Elective Numerical Methods (3-4**

units) - One course. Sample courses include:

- AME 535b | Introduction to Computational Fluid Mechanics II
- CE 529b | Finite Element Analysis
- MASC 575 | Basics of Atomistic Simulation of Materials
- MASC 576 | Molecular Dynamics Simulations of Materials and Processes





# MS in Aerospace & Mechanical Engineering (Dynamics & Control) – Program Details



#### Program Requirements: Minimum of 27 units

#### **Required Courses (24 units)**

- AME 521 | Engineering Vibrations II
- AME 522 | Nonlinear Vibrations
- AME 524 | Advanced Engineering Dynamics
- AME 525 | Engineering Analysis
- AME 541 | Linear Control Systems II
- AME 552 | Nonlinear Control Systems

#### **Core Elective Courses (3 units)**

Remaining units approved 400 or 500 level elective courses. Elective courses may be from AME or other Engineering Departments.



Degree Available online via DEN@Viterbi. Visit

viterbigradadmission.usc.edu to confirm online course offerings.





## MS in Mechanical Engineering (Energy Conversion) – Program Details



Program Requirements: Minimum of 27 units

#### **Required Core Courses (14 units)**

- AME 513a | Fundamentals and Applications of Combustion
- AME 525 | Engineering Analysis
- AME 577 | Survey of Energy and Power for a Sustainable Fut
- AME 578 | Modern Alternative Energy Conversion Devices

#### **Approved Elective Courses (7-8 units)**

- AME 436 | Energy and Propulsion
- AME 513b | Fundamentals and Applications of Combustion
- AME 515 | Advanced Heat and Mass Diffusion
- AME 516 | Convection Processes
- AME 530a | Dynamics of Incompressible Fields

Remaining Units Approved 400 or 500 level courses.

Degree Available online via DEN@Viterbi. Visit

- viterbigradadmission.usc.edu to
  - confirm online course offerings.





## MS in Product Development Engineering – Program Details



Program Requirements: Minimum of 27 units

### **Required Core Courses (6 units)**

- ISE 501 | Innovative Conceptual Design for New Product Development
- ISE 545 | Technology Development and Implementation

#### **Required Core Specialization Track**

#### Students will choose one area of specialization (track): Droduct Dovelopment Systems Dequired Courses (6 units

#### Product Development Systems Required Courses (6 units)

#### \*Advised by ISE Department

- ISE 515 | Engineering Project Management
- ISE 544 | Management of Engineering Teams

#### **Product Development Technology Required Courses (7 units)**

\*Advised by AME Department

- AME 503 | Advanced Mechanical Design
- AME 525 | Engineering Analysis

Degree Available online via DEN@Viterbi. Visit viterbigradadmission.usc.edu to confirm online course offerings.

#### Core Electives (6 units) Selected

from pre-approved list for each track.

Remaining Units Approved 400 or 500 level courses.





## **Dual Degree Program Offerings**

#### **Dual Degree Programs**

- MS in Aerospace Engineering/Engineering Management <a>\_\_\_</a>
- MS in Mechanical Engineering/Engineering Management
  - A minimum of 48 units is required
  - A minimum of 18 units must be graduate-level course work in Aerospace & Mechanical Engineering, approved by a graduate advisor
  - Remaining 30 units must be approved by the ISE advisor

Degree Available online via DEN@Viterbi. Visit viterbigradadmission.usc. edu to confirm online course offerings.







## **AME Department Policies Procedures & Tips**



- Degree Requirements (<u>ame.usc.edu</u>)
- Change of Majors
  - Within AME, students are eligible to change their major after completing their first semester with a 3.0 or higher
  - Outside of AME, admission is determined by the department who owns the program
- AME 525
  - Only required class for general MS in AE & MS in ME
  - Offered every semester
    - Summer offering is a fast-paced six-week session



## **AME Department Policies Procedures & Tips**



- Refer to the Schedule of Classes for planning purposes
  - <u>http://classes.usc.edu</u>
  - View archived schedules to identify which courses are typically offered in each semester
- Prerequisite Waivers
  - Email <u>amegrad@usc.edu</u> for AME courses

\*if you completed the equivalent during undergrad, include a transcript and course description for the course completed

- Transfer Credit up to 6 units
  - Courses need to first be evaluated by the articulation office (submit your transcripts) <u>degree-progress/graduatetransfercredit.html</u>
  - Once the course is available for graduate credit on your Transfer Credit Report, you can submit the course description or syllabus to our department for review
- Linear Algebra Tutorial
  - <u>https://viterbigrad.usc.edu/workshops-tutorials/</u>



## UNIVERSITY CALENDAR – Spring 2021 (Grad. Level) Visit <u>viterbigrad.usc.edu</u>







## **DESIRE2LEARN LOGIN & TRAINING**

https://courses.uscden.net/d2l/login

USC Viterbi School of Engineering	
USC Viterbi School of Engineering – DEN@Viterbi	
Log in to view your courses offered through DEN@Viterbi, explore tools and features, and customize your eLearning experience for programs and courses supported by DEN@Viterbi. Students must be registered and approved to view select courses. If you are having problems logging on, please try the forgot password link.	C.
If you have problems logging on or seeing your courses, please contact DEN@Viterbi Technical Support Center office at dentsc@usc.edu or 213-740-9356	
DEN@Viterbi Students: First Time Logging in? You must <u>create a profile</u> first before you can log in. On-campus students don't need to create a profile as it is generated automatically. Note: DEN Blackboard users logging into DEN Desire2Learn for the first time should use the "forgot your password" link below to set your passw before trying to log-in.	word
Username * [ Password * USC Viterbi School of Engineering	
Log In Forgot your password?	

- 1. Bookmark <u>https://courses.uscden.net</u>
- 2. Your D2L username is your full USC Email Address
- 3. If you do not remember your D2L password, click "Forgot your password?"

Sign up for an exclusive one-on-one training session inside a virtual classroom to learn all about Desire2Learn:

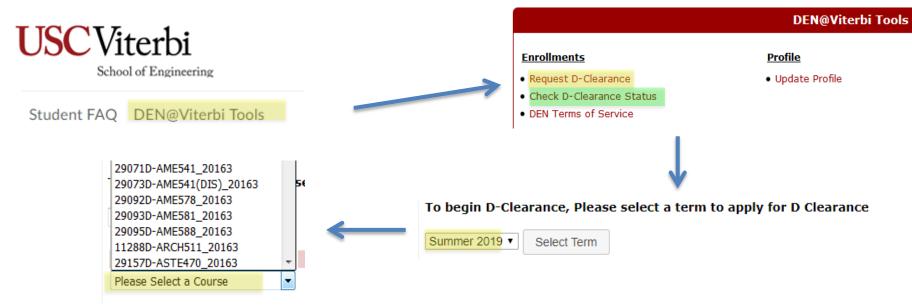
https://viterbigrad.usc.edu/technical-support/training-options/



# How To Request D-clearance From DEN



#### All DEN courses require D-clearance.



- 1. Login to DEN Desire2Learn: http://courses.uscden.net
- 2. Go to DEN@Viterbi Tools on the navigation bar
- 3. Select "Request D-clearance" link, select the term, and select a course
- 4. Approval process takes 1-2 business days. To view the status of a request, click on "Check D-Clearance Status"
- 5. You can register once your request has been processed. D-clearances expire 7 days from when it is issued so register as soon as you obtain it to secure a seat in a course.

For questions on D-Clearance status, contact den@vase.usc.edu



## **Contact Info**



#### VITERBI ADMISSION & STUDENT ENGAGEMENT (VASE)

Location: Olin Hall of Engineering (OHE), Rm. 106 Hours: Mon. - Fri. 8:30 am - 5 pm (Pacific Time) Phone: (213) 740-4488 | Fax: (213) 821-0851 https://viterbigrad.usc.edu/

DEN@Viterbi Support	<b>Contact Information</b>	Staff
Technical support,	<u>dentsc@usc.edu</u>	Bianca Richter
Desire2Learn training,	213-740-9356	
Homework		
<b>DEN d-clearance inquiries</b>	<u>den@vase.usc.edu</u>	
Exams	<u>denexam@usc.edu</u>	Shirley Schutt
	213-740-9356	
VASE Advisor	<u>ptrinida@usc.edu</u>	Patty Rinehart
General advisement	213-740-0116	
Policies & Procedures		





# **THANK YOU!**

## HAVE A GREAT SEMESTER! FIGHT ON!

## A recording of this online orientation and this presentation will be available for viewing and download on the VASE website.

https://viterbigrad.usc.edu/academic-services/new-student-information/

