Mechanical and Aerospace Engineering
THE UNIVERSITY OF TEXAS AT ARLINGTON

2019 UTA ME/AE Graduate Students Orientation

12-1:00pm

Room 100 GH

August 13, 2019

http://mae.uta.edu/orientation

Agenda

- Welcome remark: Dr. Erian Armanios, Chair

- Staff member introduction

Wendy (206), Lanie (204), Kathy (211)



- Faculty research presentation:
  - Dr. Dereje Agonafer (Uschas et al.)
  - Dr. Stefan Dancila
  - Dr. Ankur Jain (Hardik)
  - Dr. Hyejin Moon


- Graduate program overview:
  - Dr. Kamesh Subbarao (AE)
  - Dr. Ratan Kumar, Dr. Seiichi Nomura (ME)

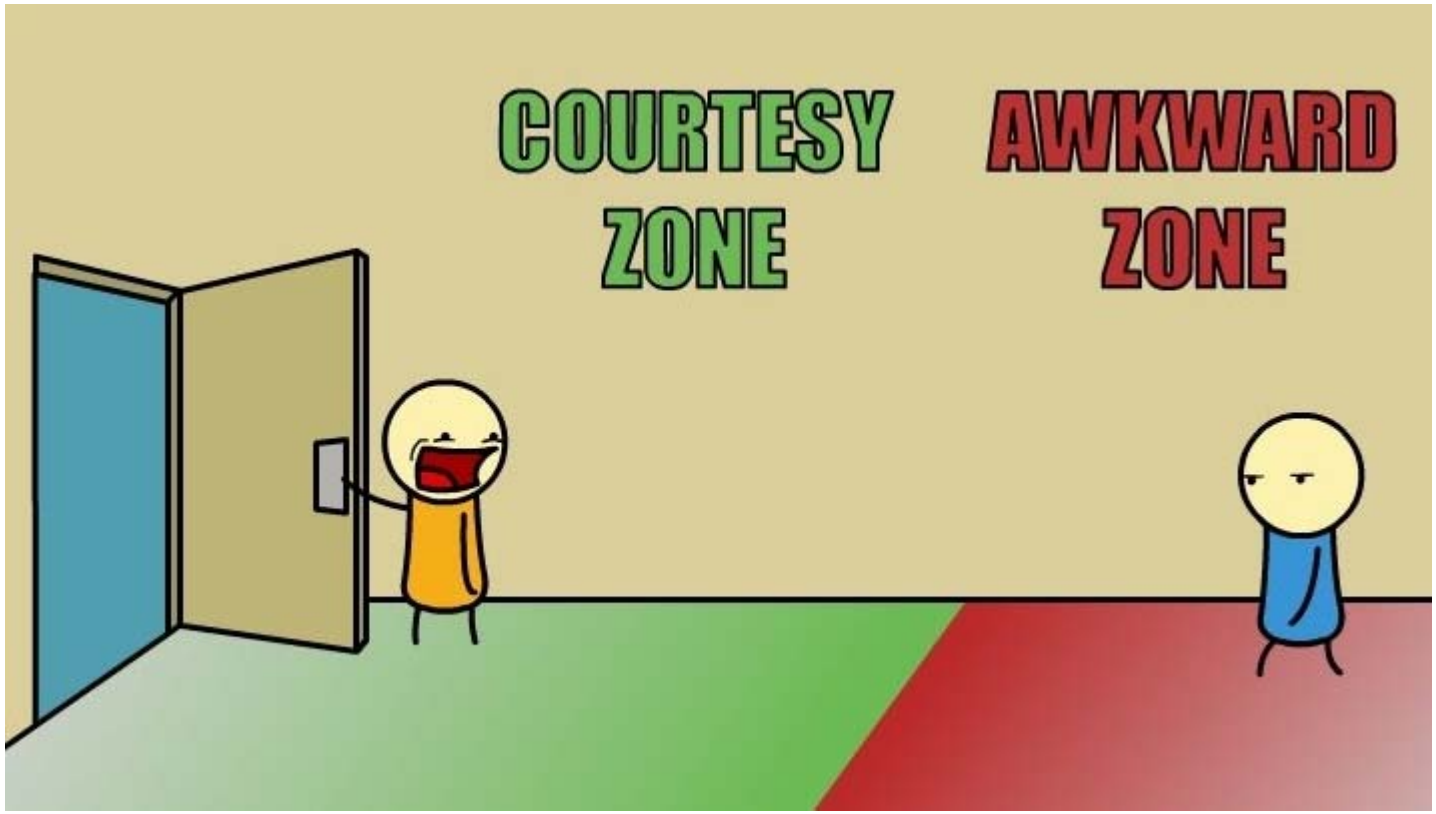


- Lab tours (Optional:Agonafer, Jain)

Proper Way to Address Faculty/Staff

- Dr. Last Name (for faculty)
- First Name (or Mr./Ms. family name) (for staff)
- Email salutation (in order of appropriateness)
    - Dr. Nomura (appropriate)
    - Prof. Nomura (formal)
    - Dear Sir/Madam (OK)
    - Respected Sir/Ma'am (too formal)
    - Nomura (OK in military)
    - Mr.Nomura (some are offended)
    - Hey dude(if you expect no reply)

Hold the door



Vacation Home

- Must return before school begins
- Employment rescinded if late return
- Must be approved by your professor

AE Master of Science (Thesis, 30 hours)

- 2 Core courses (6 hours)
- 2 Math courses (6 hours)
  - *Substitution of other MATHS courses needs approval from Supervising Professor and the Graduate Advisor*

- 4 AE elective courses (12 hours)
  - *Can use one non-AE course*.
- AE 5698 (Thesis - 6 hours) in the last semester

- Thesis advisor: Find professor by end of Fall 2019.
- Three committee members
- **Can switch to MEngr**, with appropriate course adjustments. If you have already been working on the thesis, then your supervising professor should confirm that he/she approves this change.

AE Master of Engineering (30 hours)

- 3 Core courses (9 hours)
- 2 Math courses (6 hours)
  - *Substitution of other MATHS courses needs approval from the Graduate Advisor*

- 5 AE elective courses (15 hours)
  - *Can use one non-AE course*.

- **Can switch to MS** only if all MS admission requirements are satisfied and if a supervising professor for thesis has been identified. Need an email confirmation for the same from the identified supervising professor.

AE Course requirements

- For both the M.S. and the M. Engr. degrees, the balance of the required coursework hours may be chosen in consultation with the Supervising Professor (MS) or Graduate Advisor (MEngr) to meet the student's needs and interests.

- Courses taken outside the Aerospace Engineering program require approval of the student's Supervising Professor as well as the Graduate Advisor.

- The elective courses cannot include special project courses (for example, AE 5391 / 5291 / 5191 Advanced Studies in Aerospace Engineering) or research courses (for example, AE 5397 / 5297 / 5197 Research in Aerospace Engineering).

- **Some courses such as AE 5397/6397 etc. are graded P/R/F**. An earned grade of P or R (can be taken for repeated credit) will not affect the GPA. However, earning an F will adversely affect the GPA.

CORE AREAS IN THE AEROSPACE ENGINEERING PROGRAM

The **four core areas** in the Aerospace Engineering program along with the recommended courses in each core area are listed below:

Fluid Mechanics, Aerodynamics and Propulsion		
AE 5313	FLUID DYNAMICS	3
AE 5326	AIR-BREATHING PROPULSION	3
AE 5342	GAS DYNAMICS	3
Solid Mechanics and Structures		
AE 5310	FINITE ELEMENT METHODS.	3
AE 5311	STRUCTURAL DYNAMICS	3
AE 5339	STRUCTURAL ASPECTS OF DESIGN	3
Flight Mechanics and Controls		
AE 5302	ADVANCED FLIGHT MECHANICS	3
AE 5362	GUIDANCE, NAVIGATION, AND CONTROL OF AEROSPACE VEHICLES	3
Flight Vehicle Design		
AE 5368	FLIGHT VEHICLE SYNTHESIS AND SYSTEMS ENGINEERING	3

ME Master of Engineering (Non-thesis, 30 hours)

- 3 Core courses (9 hours)
- 2 Math courses (6 hours)
- 5 ME Elective courses (15 hours)
- Can be switched to M.S.

ME Master of Science (Thesis, 30 hours)

- 3 Core courses (9 hours)
- 2 Math courses (6 hours)
- 3 ME elective courses (9 hours)
- ME5698 (Thesis) in the last semester
- Thesis advisor: Find Prof by Fall 2019.
- Three committee members
- Can be switched to M.Eng.

CORE AREAS in ME

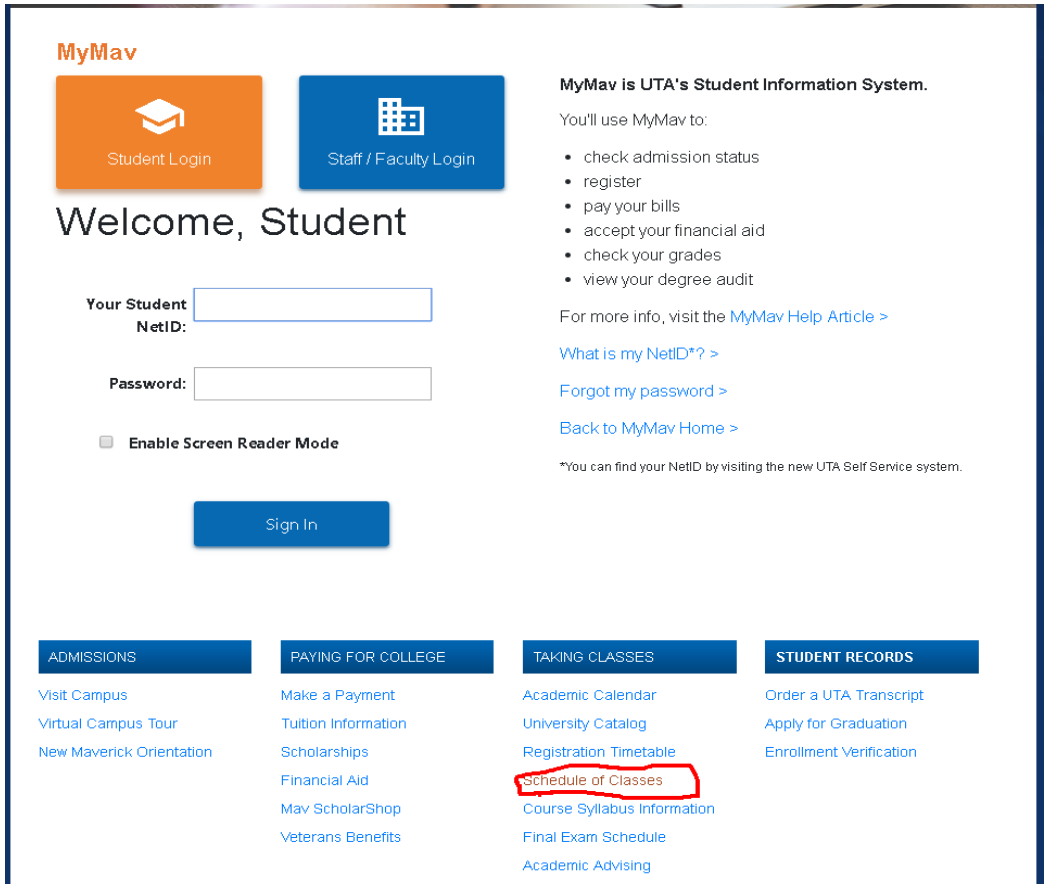
- Thermal Science
- Fluid Science
- Design, Mechanics and Manufacturing
- Controls and Systems

Available ME Core Courses (Fall, 2019)

- **THERMAL**: ME5316 Thermal Conduction, ME5321 Advanced Classical Thermodynamics
- **FLUID**: ME5313 Fluid Dynamics, ME5342 Gas Dynamics
- **DESIGN/MNFG/MECH**: ME5310 Finite Element Methods, ME5311 Structural Dynamics, ME5337 Intro Robotics
- **CONTROL**: ME5305 Dynamic System Modeling, ME5341 Control System Components

How to browse courses

- www.uta.edu/mymav



Search for Classes

Enter Search Criteria

Search for Classes

Institution: University of Texas, Arlington

Term: 2198

Select at least 2 search criteria. Select Search to view your search results.

Class Search

select subject

Subject: ME Mechanical Engineering

Course Number: is exactly

Course Career: Graduate

☐ Show Open Classes Only

☐ Open Entry/Exit Classes Only

Additional Search Criteria

Clear Search

1

2

3

4

Notes: This is a combined section class

ME 5305 - DYNAMIC SYSTEMS MODELING

Class	Section	Days & Times	Room	Instructor	Class Capacity	Seats Reserved	Available Seats	Meeting Dates	Status	E
82172	001-LEC Regular	TuTh 9:30AM - 10:50AM	TBA	David A Hullender	50	0	49	08/21/2019 - 12/04/2019		

Notes: This is a combined section class

Class	Section	Days & Times	Room	Instructor	Class Capacity	Seats Reserved	Available Seats	Meeting Dates	Status	E
83613	002-LEC Regular	TBA	OFF WEB	David A Hullender	10	0	7	08/21/2019 - 12/04/2019		

Notes: This is a combined section class

Class	Section	Days & Times	Room	Instructor	Class Capacity	Seats Reserved	Available Seats	Meeting Dates	Status	E
92374	003-LEC Regular	TBA	OFF WEB	David A Hullender	1	0	1	08/21/2019 - 12/04/2019		

Notes: This is a combined section class

ME 5310 - FINITE ELEMENT METHODS

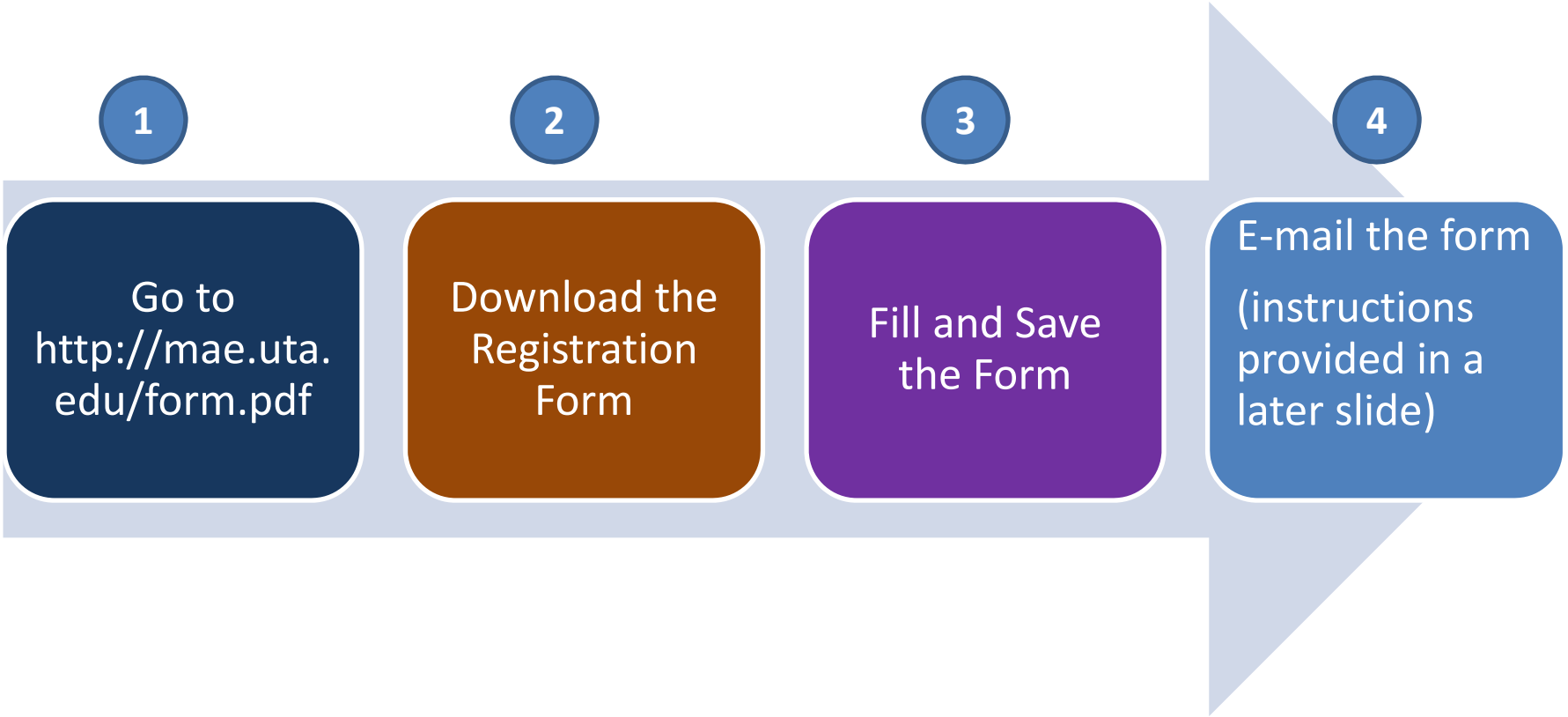
Class	Section	Days & Times	Room	Instructor	Class Capacity	Seats Reserved	Available Seats	Meeting Dates	Status	E
82173	001-LEC Regular	TuTh 9:30AM - 10:50AM	SEIR 194	Bo P Wang	50	0	44	08/21/2019 - 12/04/2019		

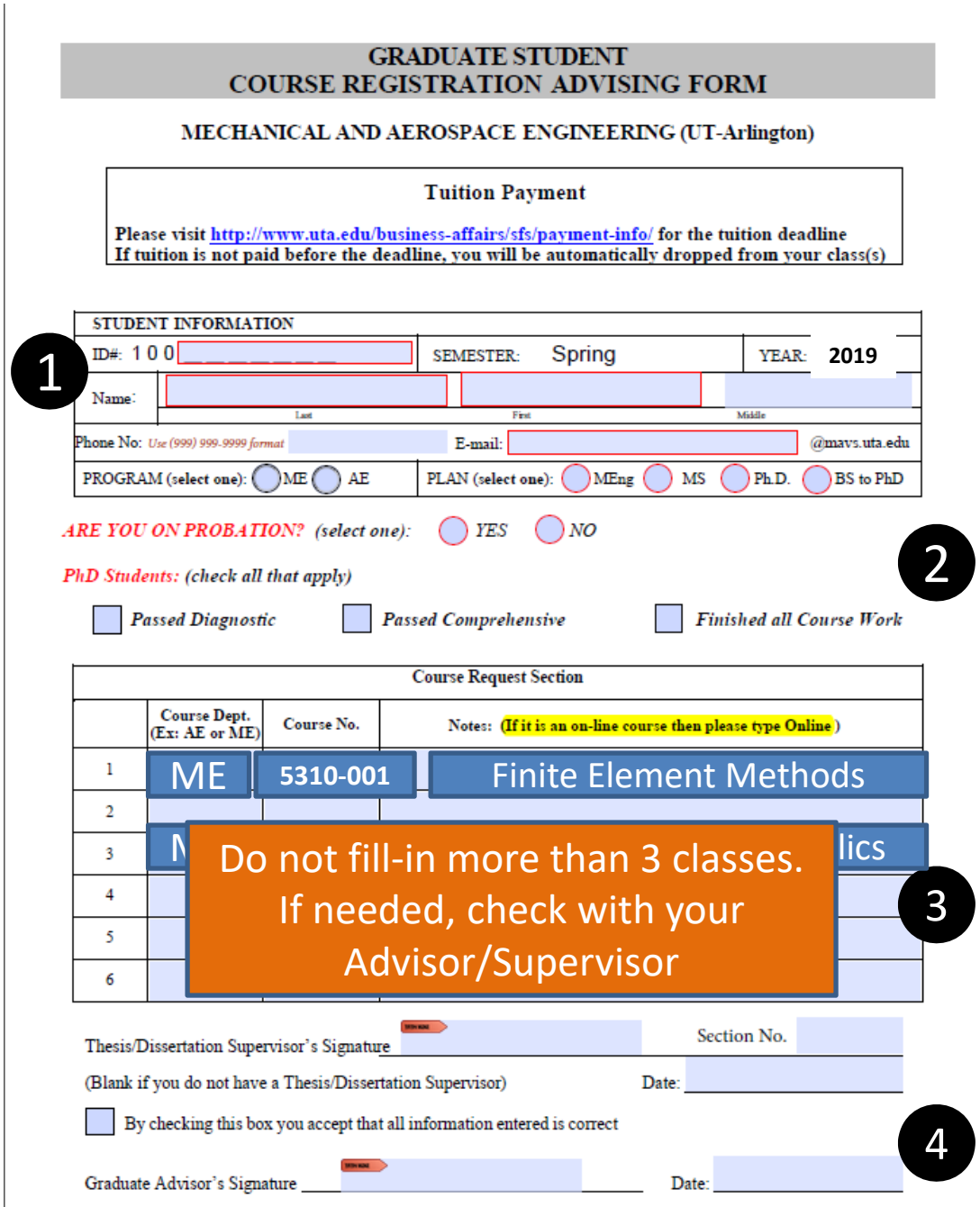
Notes: This is a combined section class

How to choose courses

- AE students take AEXXXX courses. ME students take MEXXXX courses.
- There is no specific course sequence.
- Take courses in your area for the first semester.
- If lost, start taking two core courses and one math (AE5331 or ME5331).
- It is important to maintain good grades.

Course Registration Process





GRADUATE STUDENT
COURSE REGISTRATION ADVISING FORM

MECHANICAL AND AEROSPACE ENGINEERING (UT-Arlington)

Tuition Payment

Please visit http://www.uta.edu/business-affairs/sfs/payment-info/ for the tuition deadline
If tuition is not paid before the deadline, you will be automatically dropped from your class(s)

STUDENT INFORMATION

ID#: 1 0 0 _____ SEMESTER: Spring YEAR: 2019

Name: Last First Middle

Phone No: Use (999) 999-9999 format E-mail: @mavs.uta.edu

PROGRAM (select one): ME AE PLAN (select one): MEng MS Ph.D. BS to PhD

1

ARE YOU ON PROBATION? (select one): YES NO

2

PhD Students: (check all that apply)

Passed Diagnostic *Passed Comprehensive* *Finished all Course Work*

Course Request Section

	Course Dept. (Ex: AE or ME)	Course No.	Notes: (If it is an on-line course then please type Online)
1	ME	5310-001	Finite Element Methods
2			
3			lics
4			
5			
6			

Do not fill-in more than 3 classes.
If needed, check with your Advisor/Supervisor

3

Thesis/Dissertation Supervisor's Signature Section No.

(Blank if you do not have a Thesis/Dissertation Supervisor) Date:

By checking this box you accept that all information entered is correct

4

Graduate Advisor's Signature Date:

Download the File → Fill → Save it.
(This is preferred)

1. Student ID # (Will start with 1001).
2. If you have been admitted under Probation, please indicate
3. Please provide the correct *Course and Section number* eg: 5310-001
4. Supervisor's Name (Leave *Blank* if none).

Check the Accept Button.

Provide the date of submission.

Steps 3 & 4: Form Submission

1. Save the filled form
   The saved '*file name*' should be your UTA-ID #. ***eg: 1001456789.pdf***

2. Use your myMav account to send e-mail
   eg. firstname.lastname@mavs.uta.edu (**NO** gmail, hotmail etc)

3. The Subject Line of your e-mail should contain the following:
   UTA-ID LastName FirstName eg: 1001456789 Smith John

4. E-mail the saved file to:

   A) To your Supervisor (In case you have your supervisor)

   B) Else

	Last Name	Send E-mail to
ME students:	A through M	me1@mae.uta.edu
	N through Z	me2@mae.uta.edu
AE students:	A through Z	ae@mae.uta.edu

Checklist

1. Carefully review your filled form.

2. Send it to the correct e-mail else it ***will not*** be processed.

3. Give us ***2 business days*** to process the form.

4. In case you are not able to register beyond 2 days after submission, then bring a copy of your *saved form* and meet

   Ms. Wendy Ryan (WH 206).

5. DO NOT SEND YOUR FORM MULTIPLE TIMES.

Academic Integrity

- Cheat
  - Copying another's test
  - Communicating with each other during exams
  - Contacting the internet during exams
  - Giving/seeking aids during exams
  - Using unauthorized materials during exams
  - Buying a test/report from the internet
- Plagiarize
  - Using someone else' work without acknowledgment
  - Making slight modification without acknowledgment

Internship Opportunities

- Eligible after 2 semesters
- Must be in good standing
- Maximum: 2 semesters
- Local/Out of state companies
- Send 500 resumes.
- Can take distance courses while away
- Can lead to permanent employment

MAE Computer Lab

- Room 320, Woolf Hall
- 24/7 Open
- Account automatically activated upon enrollment
- Office/Matlab/Mathematica/Ansys/Pro-E

MISC. and some life hacks

- Choose a research professor ASAP or by the end of the second semester **at the latest**.
- There is **NO GRADE REPLACEMENT** policy.
- Attend campus seminars. Many come with snack/lunch. You learn something new.
- Use VIA within Arlington. $3 a ride.
- Library resources: Lynda.com

Tips for Success

- Be punctual.
- Be sure to include your UTA ID.
- Never miss an appointment.
- Ask questions. That makes difference.
- Your grade follows you until you die !

Question ?