

BS/MS Program in Mechanical Engineering



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Starting Salaries-UofU

Degree	Mean Starting salary	Median Starting Salary
BSME	\$64,084	\$65,000
MS	\$69,314	\$67,673
PhD	\$80,214	\$86,700

What is a BS/MS Degree?

- Accelerated program where students can potentially earn a Master's degree in one additional year after completing their Bachelor's degree requirements
- Both degrees are awarded at the same time
- Students save 6 credits by doing the combined degree (waived on Bachelor's degree, applied towards Master's degree)

Two Different Options

- Thesis Master's
 - Do research
 - Write and defend a thesis
 - Less coursework, plus research hours
- Non-Thesis Master's
 - Not required to do research
 - No thesis
 - Just an exit interview with the grad advisor, no formal comprehensive exam or thesis

Master of Science (MS)—Thesis Option

- 30 credit hours total (includes 6 credits taken as an undergrad)
 - Research oriented (write and defend a thesis)
 - Work directly with a faculty member (“advisor”)
 - Designed for students intending to advance to the PhD program or pursue research oriented positions in industry
 - Minimum of 21 credit hours in formal courses (~ 7 courses)
 - Minimum of 9 credit hours for thesis research

Master of Science (MS)—Non-Thesis Option

30 credit hours (including 6 credits taken as an undergrad)

- Designed to provide an in-depth educational experience in a specific area of interest
- Provide more breath at an advanced level in mechanical engineering through courses in complementary areas
- Minimum of 30 credit hours in formal courses (~ 10 courses)

Preferred Timeline (Thesis Master's Option)

Junior Year

Semester 1

(*On-Cycle - Fall/Winter, **Off-Cycle - Spring/Summer)

- Take GRE exam (optional due to COVID-19, may be required again in the future)
- Find Faculty Advisor

Semester 2

- [Fill out Pre-Screening Application for BS/MS Program](#)

- Meet with Joy Velarde or Mark Fehlberg to discuss program requirements and next steps

*On-Cycle deadline- March 15 (flexible)

**Off-Cycle deadline- October 15 (flexible)

Try to get involved with research during junior year or by the semester in between junior and senior year

*On-Cycle refers to students taking classes listed as Fall classes on the flowchart in the Fall and classes listed as Spring classes in the Spring, with a Spring graduation/BS completion date

*Off-Cycle refers to students taking classes listed in the opposite semester as the flowchart with a Fall graduation/BS completion date

Thesis Master's Timeline Continued

Senior Year

- Work in a lab on research for your thesis
- Take two technical electives at the graduate level

Semester 1

- take 1-2 graduate courses

Semester 2

-- [Apply to Graduate School](#) (Please visit the [Future Students page](#) for deadlines and requirements-This year is November 1 for Spring and April 1 for Fall-Domestic)

Non-Thesis Master's Timeline

- Fill out the pre-screening application for the department during junior year or no later than first semester of senior year
- Meet with Joy Velarde or Mark Fehlberg to discuss program requirements and next steps

Non-Thesis Timeline Continued

- Semesters 1-2
 - Take 2 of your tech electives at graduate level
- Semester 2 of Senior Year
 - [Apply to Graduate School](#) (Please visit the [Future Students page](#) for deadlines and requirements-This year is November 1 for Spring and April 1 for Fall-Domestic)

BS/MS Requirements

- BS/MS requirements
 - Fill out the Pre-Screening “application” on our website
 - Meet with Joy Velarde or Mark Fehlberg to discuss next steps
 - GPA > 3.0 (can consider transfer work or last 60 hours only)
 - GRE Quantitative > 80th percentile (waived for Fall 2021, check back)
 - No letters required until you apply to the Graduate School
 - For Thesis Master’s we’d like to know what faculty member(s) you hope to work with and the name of one faculty we can informally contact for a recommendation
 - Students meeting these requirements can proceed but their admission to the graduate school is not guaranteed until they apply and are admitted by their admissions office

Admission to the Graduate School

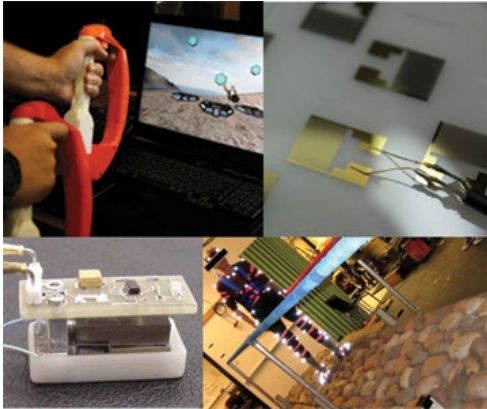
Apply to Graduate School during 2nd semester of senior year

- Official GRE scores (optional for 2021-2022 due to COVID, may be required again in the future-80% quantitative score)
- 3 letters of recommendation (enter their emails on application)
- Personal statement
- Resume
- Writing sample (optional)
- Deadline November 1 for Spring, April 1 for Fall (January 1 for international students and M.S.-thesis students hoping to get funding)
 - Apply for semester you will become a graduate student (i.e. all your B.S. requirements will have been completed the semester prior)

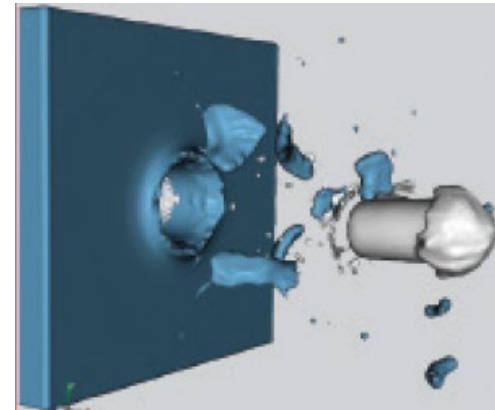
Detailed timeline: www.mech.utah.edu

Half of your credits should be ME EN courses focused on one of these areas (can have a more narrow focus, if desired; see focus area page for options)

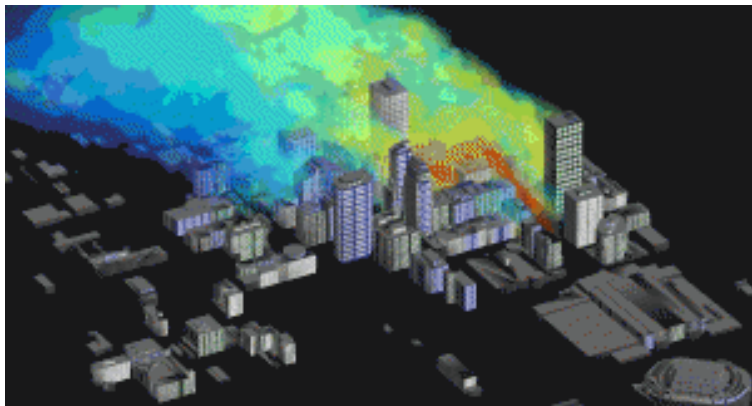
Design, Ergonomics, and Manufacturing (DEMS)



Solid Mechanics



Thermal, Fluids, and Energy Systems (TFES)



Robotics



Financial Support

- Get involved in research as an undergraduate student (UROP financially support undergraduate students doing research: <https://our.utah.edu/urop/>)
- Faculty may have paid research opportunities
- Might find an hourly salary grader position
- Research-active **graduate students** typically receive financial support
 - Research Assistantship (RA)
 - Teaching Assistantship (TA)
- Tuition Benefit Program for **graduate students**
 - Full time TAs and RAs get 100% tuition benefit

Other Notes

- Your two undergraduate technical electives will be waived by Joy Velarde or your undergraduate advisor in your last semester of your M.S. program
- If you have space your senior year, you can take an additional two graduate-level courses for a total of 4 completed before officially beginning your Master's degree

Tips to Prepare for Grad School

- Get to know faculty so you can ask for letters of recommendation
 - Attend office hours
 - Ask questions
 - Make an appointment to discuss research
 - Get involved in research

Tips, continued...

- Spend time on your resume and personal statement and have someone review it (Career and Professional Dev Center is available, or writing center)

- Any Questions?