

# BACHELORS MECHANICAL ENGINEERING

## TOP INDUSTRIES

1. Automobiles & Parts
2. Technology Hardware & Equipment
3. Aerospace & Defense
4. Industrial Engineering & Transportation
5. Healthcare

## SAMPLE JOB TITLES

- Applications Engineer
- Consultant
- Controls Engineer
- Design Engineer
- Manufacturing Engr.
- Mechanical Design Engineer
- Mechanical Engineer
- Process Engineer
- Product Development Engineer
- Project Manager
- Quality Engineer
- Systems Engineer

## TOP HIRING COMPANIES



## SAMPLE HIRING COMPANIES

- Amazon Web Services
- BAE Systems
- Boeing
- BP
- General Dynamics
- Electric Boat
- General Electric
- American Axle & Manufacturing
- Bosch
- Boston Consulting Group
- Collins Aerospace
- Daimler Truck
- Denso
- Epic
- Eli Lilly
- FANUC
- Goldman Sachs
- Guidehouse
- Honda
- INTERTEK
- Lear
- Medtronic
- Meta Orbital Effects
- Microsoft
- Multiply Labs
- NASA
- NextEra Energy
- Northrop Grumman
- Nostrum Energy
- Pratt & Whitney
- Roush
- Schlumberger
- Siemens
- Stellantis
- STEELCASE
- Subaru
- Texas Instruments
- ThermoLift
- Texas Instruments
- Textron
- Toyota
- University of Michigan
- Yanfeng

## FULL TIME ANNUAL SALARY

Average: \$79,114

**Min**  
\$46,000

**Median**  
\$77,000

**Max**  
\$116,000

## INTERN MONTHLY SALARY

Average: \$4,407

**Min**  
\$2,600

**Median**  
\$4,247

**Max**  
\$9,899

Industry, Company, and Salary Data are from 2021-2022. Job titles are from 2020-2022.  
Visit [career.engin.umich.edu/career/salary-info](https://career.engin.umich.edu/career/salary-info) for more comprehensive data.

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## SAMPLE ELEVATOR PITCH

*Hi, I'm NAME. I'm a junior studying Mechanical Engineering and I'm interested in your automotive internship.*

*I've spent the last two summers in an automotive powertrain lab researching technologies to increase engine efficiency. I have also served for two years as an officer in the Society of Women Engineers.*

*I'm hoping to apply my research and leadership skills in your automotive program, specifically on your new model vehicles. Can you tell me more about it?*

## SAMPLE IMPACT STATEMENT

**Before** – Designed CAD model of component

**After** – Designed CAD model of component and performed finite element analysis to verify it would withstand the loading conditions experienced during use despite revised geometry

## KEY COURSES

**ME 250** – Design & Manufacturing 1; design, manufacture, & assemble a robot; use manual controls to navigate the bot through an obstacle course; exposure to CAD & basic machine shop techniques

**ME 350** – Design & Manufacturing 2; mechatronics focused; design, manufacture, and assemble, as well as code an Arduino to remotely operate the system

**ME 395/495** – Lab 1/Lab2; required lab based courses; given task letters and must perform experiments to provide recommendations to theoretical companies

**ME 450** – Design & Manufacturing 3; student teams work on varying projects; must be able to articulate what the problem was and how their solution filled this need

## KEY SKILLS

**Solidworks** – CAD software that is utilized in at least 3 courses if not more courses and projects

**MATLAB** – used in Engr 101 and multiple mechanical engineering courses for mathematics and coding

**Arduino** – used during ME 350 to control the robotic system

**Simulink** – model & solve controls and dynamic systems during ME 360 & other dynamics/controls courses

**MSC Adams** – model and analyze the linkage mechanism designed in ME 350

**Labview** – collect and analyze data during experiments conducted in ME 395 & ME 495

**Equipment** – common pieces of equipment are: mill, lathe, drill press, laser cutter, 3D printer

## SAMPLE EXTRACURRICULARS

**American Society of Mechanical Engineers (ASME)**

**Pi Tau Sigma (PTS)** - Honors Society

**Student Teams** - MRacing Formula SAE, Solar Car, SAE Baja Racing, Supermileage, Bluelab

