

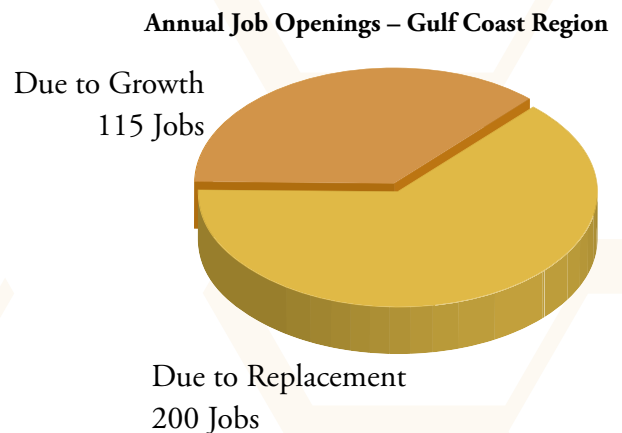
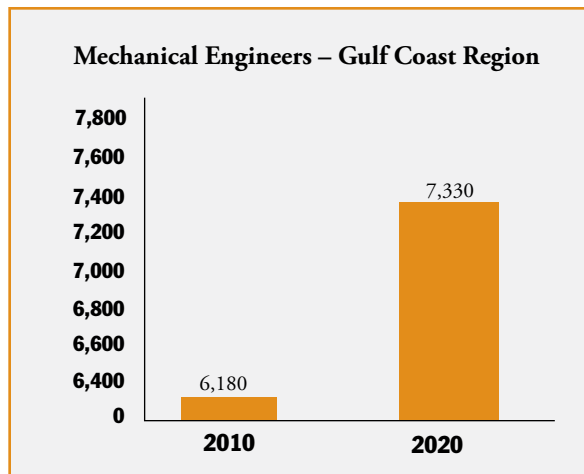
A CAREER TO BUILD UPON ...

Those with the right tools rule in the field of mechanical engineering. Mechanical engineers take on all sorts of responsibilities related to planning and designing tools, engines, machines and many other types of mechanical equipment.

Other mechanical engineering occupations may be involved in research, problem solving, development and testing. The Gulf Coast Region has a large number of organizations that currently face an increasing challenge to fill upcoming vacancies as many baby boomers retire and as others advance to managerial positions.



CONSERVATIVE ESTIMATES INDICATE THE NEED FOR OVER 300 NEW MECHANICAL ENGINEERS EACH YEAR IN THE GULF COAST REGION!



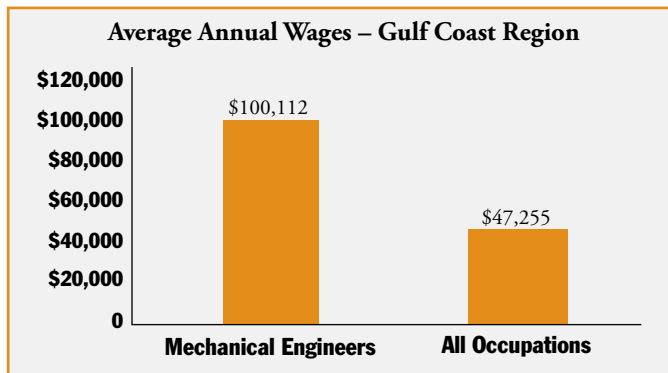
Brought to you by the Education Committee of The Gulf Coast Workforce Board.
For more information visit us on the web at www.wrksolutions.com
Latest data available. June 2013.

*Includes the following counties: Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton.

FOCUS ON MECHANICAL ENGINEERING

2 OF 5

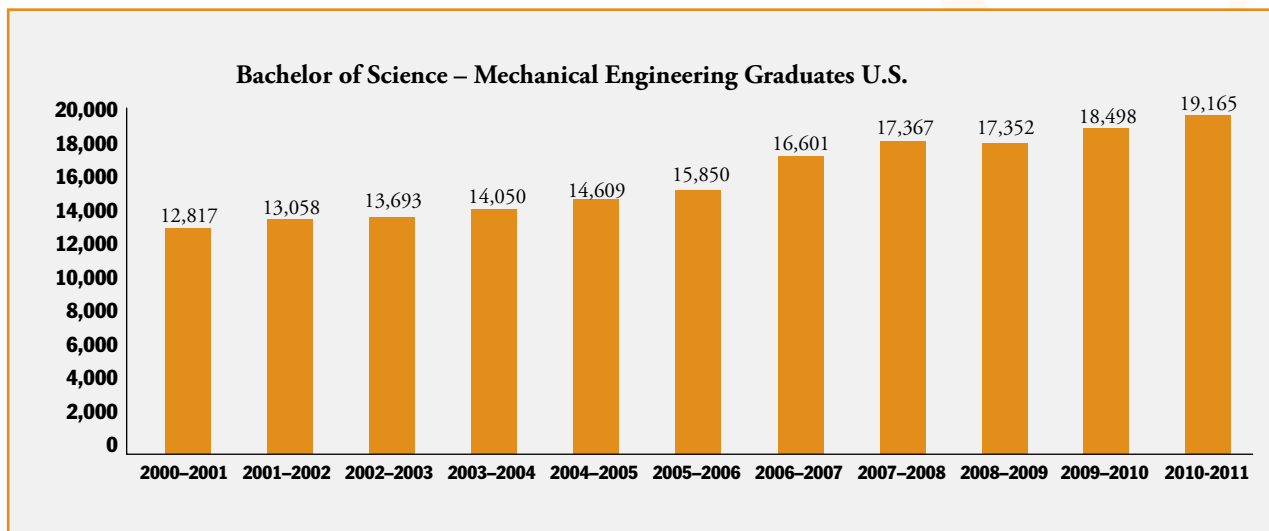
MECHANICAL ENGINEERS EARN MORE THAN TWICE THE REGION'S AVERAGE ANNUAL WAGE FOR ALL OCCUPATIONS



SHEER DEMAND LENDS A HAND TO JOB HUNTERS

Conservative estimates indicate the need for 315 new mechanical engineers each year in the Gulf Coast Region. Mechanical engineers earn more than twice the region's average annual wage for all occupations.

Mechanical engineering has been a popular choice of college students. With more than 249,000 mechanical engineers employed across the nation, demand remains strong for college graduates.



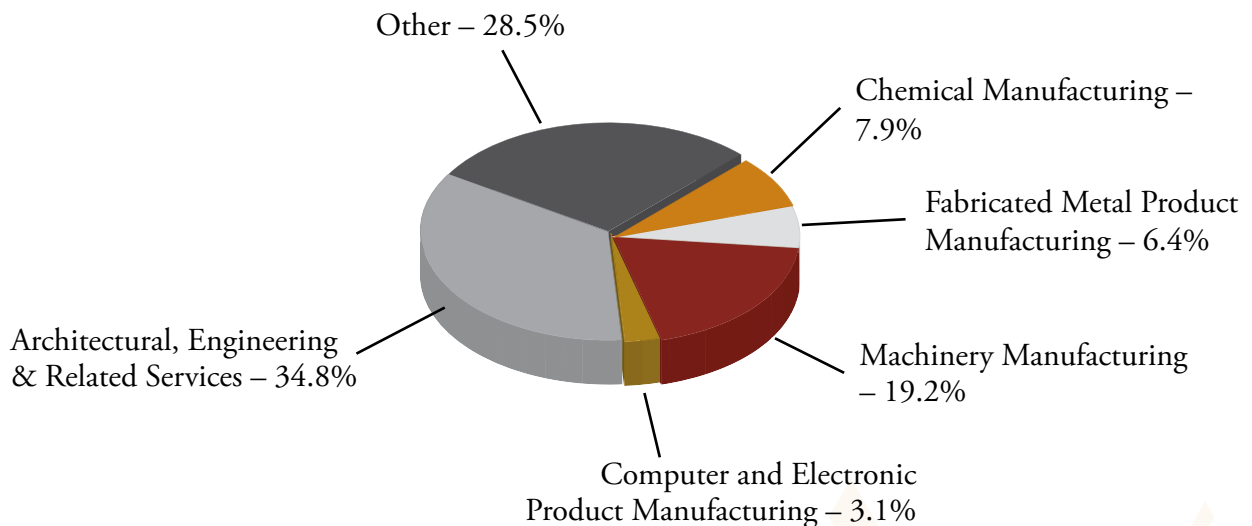
Source: National Center for Educational Statistics

FOCUS ON MECHANICAL ENGINEERING

3 OF 5

MECHANICAL ENGINEERS ARE IN DEMAND ACROSS MANY INDUSTRIES.

Where the Jobs Will Be in 2020 for Mechanical Engineers – Gulf Coast Region



LIKE SUNRISE ...

Bright job seekers start early. Most mechanical engineering jobs require people to have at least a bachelor's degree in mechanical engineering. With a master's degree, you will have additional opportunities for higher-level positions. Some employers require individuals to be certified through the American Society of Mechanical Engineers (ASME).

Employers also look for internship experience, volunteer experience, and teamwork skills. Students should strive for the highest GPA possible to provide them with the edge needed for acceptance into a mechanical engineering program. High school preparation should include a solid background in mathematics and science.

You can find additional information at:

American Society of Mechanical Engineers (ASME) <http://www.asme.org/>

Texas Society of Professional Engineers (TSPE) <http://www.tspe.org/>

FOCUS ON MECHANICAL ENGINEERING

4 OF 5

PREPARING FOR A MECHANICAL ENGINEERING CAREER*

9th Grade	Suggested Coursework		
	English I	World Geography	Career-Related Electives: Introduction to Engineering Design or Digital Electronics or Principles of Engineering
	Algebra I	Languages other than English I	
	Biology	Health/PE or Equivalent	
10th Grade	Suggested Coursework		
	English II	World History	Career-Related Electives: Introduction to Engineering Design or Digital Electronics or Principles of Engineering
	Geometry	Languages other than English II	
	Chemistry	Technology Applications	
11th Grade	Suggested Coursework		
	English III	United States History	Career-Related Electives: Principles of Engineering or Computer-Integrated-Manufacturing or Civil Engineering and Architecture or Biotechnical Engineering or Aerospace Engineering AND Languages other than English III
	Algebra II	Communication Applications	
	Physics	PE or Equivalent	
12th Grade	Suggested Coursework		
	English IV	Government/Economics	Career-Related Electives: Engineering Design and Development or Principles of Engineering or Computer Integrated Manufacturing or Civil Engineering and Architecture or Biotechnical Engineering or Aerospace Engineering AND Languages other than English IV
	Precalculus	Fine Arts	
	AP Physics		

*Source: AchieveTexas.org

FOCUS ON MECHANICAL ENGINEERING

5 OF 5

GULF COAST REGION MECHANICAL ENGINEERING PROGRAMS

UNIVERSITIES

- Prairie View A & M University
- Rice University
- University of Houston
- University of St Thomas



MAJOR EMPLOYERS IN THE GULF COAST REGION

- Air Liquide
- Air Products and Chemicals
- Akzo Nobel Polymer Chemicals
- Baker Hughes
- BASF Corporation
- Bayer Corporation
- Bechtel
- Bott & Associates
- BP Amoco Chemical Company
- Celanese
- Chevron Phillips Chemical Company
- ConocoPhillips
- Chevron Corporation
- Chicago Bridge and Iron (CB & I)
- The Dow Chemical Company
- Dresser-Rand
- El Paso Corporation
- ExxonMobil Chemical
- FMC Corporation
- Fluor Corporation
- GE Enterprise & Infrastructure
- Haag Engineering Company
- Halliburton
- J. Ray McDermott
- Johnson Controls
- Kellogg Brown and Root (KBR)
- Lockheed Martin
- Lyondellbasell Chemical Company
- M. Baker Corporation
- National Oilwell Varco
- Oceaneering International
- Reynolds, Smith and Hills (RS&H)
- Schlumberger
- Seimens Energy and Automation
- Shell Chemicals & Refining
- The Shaw Group
- Solutia
- Sunoco Chemicals
- Texas Petrochemicals, L.P.
- Valero Refining

Workforce Solutions is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities.

Relay Texas Numbers:

1-800-735-2989(TDD) • 1-800-735-2988(VOICE) • 711

www.wrksolutions.com


Workforce Solutions