

# J. MIKE WALKER '66

## DEPARTMENT OF

### MECHANICAL ENGINEERING

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<http://engineering.tamu.edu/mechanical> (<http://engineering.tamu.edu/mechanical/>)

**Head:** G. Aguilar

The graduate program in mechanical engineering is designed to offer a choice in curriculum depending upon career objectives. Students interested in leading cutting-edge research, teaching, creating new knowledge, or some combination of those activities may follow the Master of Science and Doctor of Philosophy route. Those interested in practicing engineering at an advanced level in government or industry may pursue the Master of Engineering in Mechanical Engineering. Students are able to tailor an individual program consistent with a degree choice and focus area of their interest.

Each mechanical engineering graduate course is designed to provide a clear presentation of the underlying principles and theories essential to an understanding of the subject. Analytical and experimental techniques are described when required to apply the subject material to modern problems facing the engineers of today. In many cases, the course material supplements active research in mechanical engineering areas currently conducted at Texas A&M and other prominent research centers around the world. Active research facilities are available for advanced manufacturing, biomechanics, design, plastics engineering, artificial intelligence, robotics, non-destructive testing, fracture testing, metallurgical studies, experimental stress analysis, vibrations and rotating machinery, turbomachinery, fluid dynamics, power generation, combustion, in situ lignite gasification, heat transfer, energy management, corrosion, solar energy and wind tunnel studies.

## Faculty

AbdelGawad, Marwa, Instructional Assistant Professor  
Mechanical Engineering-Qatar Campus  
PHD, Texas A&M University, 2022

Aguilar-Mendoza, Guillermo, Professor  
Mechanical Engineering  
PHD, University of California - Santa Barbara, 1999

Albakri, Mohammad, Engineering Assistant Professor  
Mechanical Engineering-Qatar Campus  
PHD, Virginia Polytechnic Institute and State University, 2016

Allaire, Douglas L, Associate Professor  
Mechanical Engineering  
PHD, Massachusetts Institute of Technology, 2009

Ambrose, Robert, Professor  
Mechanical Engineering  
PHD, University of Texas at Austin, 1991

Anand, Nagamangala, Regents Professor  
Mechanical Engineering  
PHD, Purdue University, 1983

Antao, Dion S, Assistant Professor  
Mechanical Engineering  
PHD, Drexel University, 2013

Balas, Mark, Professor  
Mechanical Engineering  
PHD, University of Denver, 1974

Balawi, Shadi Omar, Instructional Associate Professor  
Mechanical Engineering  
PHD, University of Cincinnati, 2007

Bandyopadhyay, Arkasama, Research Assistant Professor  
Mechanical Engineering  
PHD, University of Texas Austin, 2020

Banerjee, Debjyoti, Professor  
Mechanical Engineering  
PHD, University of California at Los Angeles, 1999

Benjamin, Chandler C, Assistant Professor  
Mechanical Engineering  
PHD, University of Wisconsin, Madison, 2017

Borazjani, Iman, Associate Professor  
Mechanical Engineering  
PHD, University of Minnesota, 2008

Charoenphol, Phapanin, Instructional Assistant Professor  
Mechanical Engineering  
DEN, University of Michigan, 2012

Chen, Wei, Assistant Professor  
Mechanical Engineering  
PHD, University of Maryland, 2019

Claridge, David E, Professor  
Mechanical Engineering  
PHD, Stanford University, 1976

Cooper, Marcia, Associate Professor  
Mechanical Engineering  
PHD, California Institute of Technology, 2004

Cope, Dale A, Professor of Practice  
Mechanical Engineering  
PHD, Wichita State University, 2002

Corleto, Carlos Roberto, Professor of the Practice  
Mechanical Engineering  
PHD, Texas A&M University, 1990

Darbha, Swaroop V, Professor  
Mechanical Engineering  
PHD, University of California at Berkeley, 1994

Delgado, Adolfo, Associate Professor  
Mechanical Engineering  
PHD, Texas A&M University, 2008

El Borgi, Sami, Professor  
Mechanical Engineering-Qatar Campus  
PHD, Cornell University, 1993

Elliott, Matthew, Instructional Associate Professor  
Mechanical Engineering  
PHD, Texas A&M, 2013

Erdemir, Ali, Professor  
Mechanical Engineering  
PHD, Georgia Institute of Technology, 1986

Felts, Jonathan R, Associate Professor  
Mechanical Engineering  
DEN, University of Illinois Urbana Champaign, 2013

Fenton Friesen, Rebecca, Assistant Professor  
Mechanical Engineering  
PHD, Northwestern University, 2020

Gao, Wei, Associate Professor  
Mechanical Engineering  
PHD, University of Texas, 2014  
PHD, University of Texas at Austin, 2014

Gopalswamy, Swaminathan, Research Professor  
Mechanical Engineering  
PHD, University of California, 1991

Grunlan, Jaime C, Professor  
Mechanical Engineering  
PHD, University of Minnesota, 2001

Guo, Bing, Associate Professor  
Mechanical Engineering-Qatar Campus  
PHD, Tsinghua University, China, 1998

Haglund, John S, Instructional Associate Professor  
Mechanical Engineering  
PHD, Texas A&M University, 2003

Han, Je C, Distinguished Professor  
Mechanical Engineering  
PHD, Massachusetts Inst of Technology, 1977

Hasnain, Zohaib, Assistant Professor  
Mechanical Engineering  
PHD, University of Maryland, 2014

Hassan, Ibrahim, Professor  
Mechanical Engineering-Qatar Campus  
PHD, Manitoba University, 1995

Hassan, Yassin A, University Distinguished Professor and Regents  
Professor  
Mechanical Engineering  
PHD, University of Illinois, 1980

Hipwell, M Cynthia, Professor  
Mechanical Engineering  
PHD, University of California at Berkeley, 1996

Hogan, Harry A, Professor  
Mechanical Engineering  
PHD, Texas A&M University, 1984

Hossain, Zubaer, Instructional Associate Professor  
Mechanical Engineering  
PHD, University of Illinois at Urbana-Champaign, 2011

Hubbard Jr, James, University Distinguished Professor  
Mechanical Engineering  
PHD, Massachusetts Institute of Technology, 1982

Jacobs, Timothy J, Professor  
Mechanical Engineering  
PHD, University of Michigan, 2005

Jarrahbashi, Dorrin, Assistant Professor  
Mechanical Engineering  
PHD, University of California Irvine, 2014

Khraisheh, Marwan, Professor  
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PHD, Washington State University, 1996

Kim, Haejune, Instructional Assistant Professor  
Mechanical Engineering  
PHD, University of Wisconsin at Milwaukee, 2014

Kim, Won-Jong, Associate Professor  
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Kim, Yong-Joe, Associate Professor  
Mechanical Engineering  
PHD, Purdue University, 2003

Krishnamoorthy, Aravind, Assistant Professor  
Mechanical Engineering  
PHD, Massachusetts Institute of Technology, 2016

Krishnamurthy, Vinayak, Associate Professor  
Mechanical Engineering  
PHD, Purdue University, 2016

Kulatilaka, Waruna D, Professor  
Mechanical Engineering  
DEN, Purdue University, 2006

Lacy, Thomas E., Professor  
Mechanical Engineering  
PHD, Georgia Institute of Technology, 1998

Lan, Shoufeng, Assistant Professor  
Mechanical Engineering  
PHD, Georgia Institute of Technology, 2017

Langari, Reza, Regents Professor  
Mechanical Engineering  
PHD, University of California at Berkeley, 1991

Lavernia Borrego, Enrique, Professor  
Mechanical Engineering  
PHD, Massachusetts Institute of Technology, 1986

Layton, Astrid C, Assistant Professor  
Mechanical Engineering  
PHD, Georgia Institute of Technology, 2014

Lee, ChaBum, Associate Professor  
Mechanical Engineering  
PHD, Gwangju Institute of Science and Technology, 2012

Lee, Kiju, Associate Professor  
Mechanical Engineering  
PHD, Johns Hopkins University, 2009

Li, Ying, Professor  
Mechanical Engineering  
PHD, University of Florida, 2007

Liang, Hong, Professor  
Mechanical Engineering  
PHD, Stevens Institute of Technology, 1992

Malak Jr, Richard J, Associate Professor  
Mechanical Engineering  
PHD, Georgia Institute of Technology, 2008

Mansoor, Bilal, Associate Professor  
Mechanical Engineering-Qatar Campus  
PHD, University of Michigan, 2010

Masad, Eyad A, Professor  
Mechanical Engineering-Qatar Campus  
PHD, Washington State University, 1998

Mathieu, Olivier E, Research Associate Professor  
Mechanical Engineering  
PHD, University of Orleans, 2006

McAdams II, Daniel A, Professor  
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PHD, The University of Texas at Austin, 1999

McFarland, Jacob, Associate Professor  
Mechanical Engineering  
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Mechanical Engineering  
PHD, Texas A&M University, 1996

Mohiuddin, Mohammad W, Instructional Assistant Professor  
Mechanical Engineering  
PHD, Texas A&M University, 2008

Moreno, Michael R, Associate Professor  
Mechanical Engineering  
PHD, Texas A&M University, 2009

Muliana, Hanifah, Professor  
Mechanical Engineering  
PHD, Georgia Institute of Technology, 2004

Needleman, Alan, University Distinguished Professor  
Mechanical Engineering  
PHD, Harvard University, 1971

O'Neill, Zheng, Associate Professor  
Mechanical Engineering  
PHD, Oklahoma State University, 2004

Pagilla, Prabhakar R, Professor  
Mechanical Engineering  
PHD, University of California at Berkeley, 1996

Palazzolo, Alan B, Professor  
Mechanical Engineering  
PHD, University of Virginia, 1981

Pan, Heng, Associate Professor  
Mechanical Engineering  
PHD, University of California-Berkeley, 2009

Pate, Michael B, Professor  
Mechanical Engineering  
PHD, Purdue University, 1982

Petersen, Eric L, Professor  
Mechanical Engineering  
PHD, Stanford University, 1998

Pharr, George, Associate Professor  
Mechanical Engineering  
PHD, Harvard University, 2014

Powell-Palm, Matthew, Assistant Professor  
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PHD, University of California, Berkeley, 2020

Qiu, Jingjing, Associate Professor  
Mechanical Engineering  
PHD, Florida State University, 2008

Rajagopal, Kumbakonam, Distinguished Professor  
Mechanical Engineering  
PHD, University of Minnesota, 1978

Rasmussen, Bryan P, Professor  
Mechanical Engineering  
PHD, University of Illinois, 2005

Rathinam, Sivakumar, Professor  
Mechanical Engineering  
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Reddy, Junuthula N, Distinguished Professor and Regents Professor  
Mechanical Engineering  
PHD, University of Alabama at Huntsville, 1974

Restrepo Perez, Vanessa, Assistant Professor  
Mechanical Engineering  
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Robbins, Andrew B, Research Assistant Professor  
Mechanical Engineering  
PHD, Texas A&M University, 2018

Sadr, Reza, Professor  
Mechanical Engineering-Qatar Campus  
PHD, University of Utah, 2002

Saripalli, Srikanth, Professor  
Mechanical Engineering  
PHD, University of Southern California, 2007

Schoenung, Julie, Professor  
Mechanical Engineering  
PHD, Massachusetts Institute of Technology, 1987

Seets, David, Professor Of The Practice  
Mechanical Engineering  
PHD, The University of Texas at Austin, 1997

Srinivasa, Arun R, Professor  
Mechanical Engineering  
PHD, University of California at Berkeley, 1991

Staack, David A, Associate Professor  
Mechanical Engineering  
PHD, Drexel University, 2008

Subramanian, Velumani, Instructional Associate Professor  
Mechanical Engineering  
PHD, Bharathiar University, 1998

Suh, Chii-Der, Associate Professor  
Mechanical Engineering  
PHD, Texas A&M University, 1997

Tafreshi, Reza, Professor  
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PHD, University of British Columbia, Canada, 2005

Taheri Andani, Mohsen, Assistant Professor  
Mechanical Engineering  
PHD, University of Michigan, 2022

Tai, Li-Jung, Associate Professor  
Mechanical Engineering  
PHD, University of Michigan Ann Arbor, 2011

Tarazaga, Pablo, Professor  
Mechanical Engineering  
PHD, Virginia Polytechnic Institute & State University, 2009  
PHD, Virginia Polytechnic Institute and State University, 2009

Thomas, Gray, Assistant Professor  
Mechanical Engineering  
PHD, University of Texas at Austin, 2019

Thomas, James, Research Assistant Professor  
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Thomas, Naveen, Instructional Assistant Professor  
Mechanical Engineering  
PHD, Texas A&M, 2021  
PHD, Texas A&M University, 2021  
PHD, Texas A&M University, 2019

Thyagarajan, Ravi, Professor Of The Practice  
Mechanical Engineering  
PHD, California Institute of Technology, 1989

Tsenn, Joanna N, Instructional Associate Professor  
Mechanical Engineering  
PHD, Texas A&M University, 2016

Tseregounis, Spyros, Professor of the Practice  
Mechanical Engineering  
PHD, University of California at Los Angeles, 1984

Walsh, Michael, Associate Professor of the Practice  
Mechanical Engineering  
MFA, University of Southern California, 2001

Wang, Ya, Associate Professor  
Mechanical Engineering  
PHD, Virginia Tech, 2012

Weaver-Rosen, Jonathan, Instructional Assistant Professor  
Mechanical Engineering  
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Wen, Sy-Bor, Associate Professor  
Mechanical Engineering  
PHD, University of California at Berkeley, 2006

Wilkerson, Justin W, Associate Professor  
Mechanical Engineering  
PHD, Johns Hopkins University, 2014

Wright, Lesley M, Associate Professor  
Mechanical Engineering  
PHD, Texas A&M University, 2006

Yu, Choongho, Professor  
Mechanical Engineering  
PHD, The University of Texas at Austin, 2004

Zheng, Minghui, Associate Professor  
Mechanical Engineering  
PHD, University of California, Berkeley, 2017

Zhou, Yuxiao, Assistant Professor  
Mechanical Engineering  
PHD, Pennsylvania State University, 2020

## Masters

- Master of Engineering in Mechanical Engineering (<http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/mechanical/meng/>)
- Master of Science in Mechanical Engineering (<http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/mechanical/ms/>)

## Doctoral

- Doctor of Philosophy in Mechanical Engineering (<http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/mechanical/phd/>)