

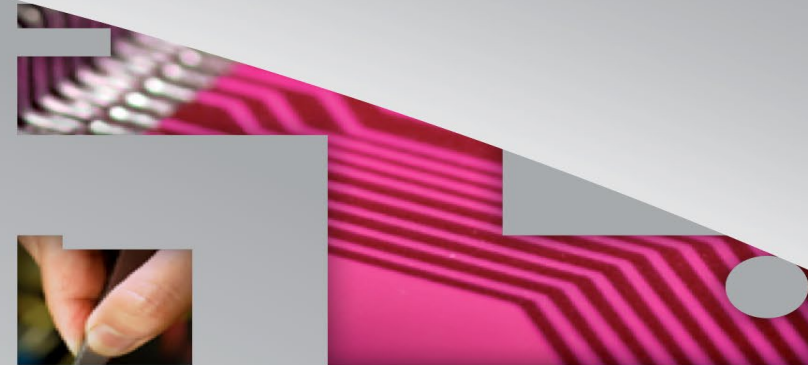
ME/RE Graduate Program

ABHIJIT DASGUPTA

JEONG H. KIM PROFESSOR OF MECHANICAL ENGINEERING

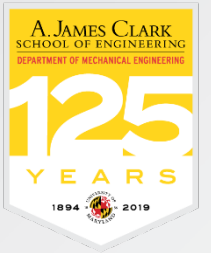
DIRECTOR OF GRADUATE STUDIES

ASSOC CHAIR FOR ACADEMIC AFFAIRS



A. JAMES CLARK
SCHOOL OF ENGINEERING

Education in times of Covid-19 pandemic



COVID-19 Dashboard

[Return to the Fall 2020 Reopening Plan](#)

This dashboard provides our community with transparent and timely data about the prevalence of COVID-19 within our campus, based on UMD testing. We are all working together to prevent the spread of coronavirus 4 Maryland.

Overview

Overview Details

KEEP TERPS SAFE - UMD COVID PUBLIC DASHBOARD

Tests for Week of
8/16/2020 - 8/22/2020

3,832

6,877 Cumulative tests since
June 8th 2020

New Cases for Week of
8/16/2020 - 8/22/2020

5

Determined by UMD Administered test,
self reporting and state reporting of
individuals who have physically been on
the UMD campus within the past 14 days

Positivity Rate for UMD
Administered Tests for
Week of 8/16/2020 -
8/22/2020

0.1%

Relative Campus
Density for Week of
8/16/2020 - 8/22/2020

35%

Comparison based on last year's wireless
device statistics for the same time period

Quarantine Bed
Availability

100%

No Symptoms but had close contact with
someone who tested positive for COVID-
19

Isolation Bed
Availability

87%

Tested Positive for COVID-19



- All classes online until Sep 14
- Limited face-to-face sessions after Sep 14

UNIVERSITY OF MARYLAND

Requirements for Returning to Campus

Faculty/Staff



COVID-19
HEALTH AND SAFETY
TRAINING & PLEDGE
(SPANISH) (CREOLE)

COVID-19 TESTING

CONFIRM TEST RESULTS
(SPANISH) (CREOLE)

DAILY SYMPTOM CHECK
(SPANISH) (CREOLE)

Students



COVID-19 STUDENT
TRAINING & PLEDGE

COVID-19 TESTING

CONFIRM TEST RESULTS

DAILY SYMPTOM CHECK

Resources



4MARYLAND

RESEARCH

RETURN TO CAMPUS

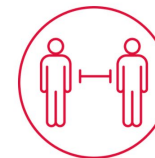
SUPERVISOR REPORTS
(VPN ACCESS REQUIRED)



Wear a face covering.



Wash your hands and use hand sanitizer



Stay at least 6 feet apart from others.



If you are sick, stay home and rest.

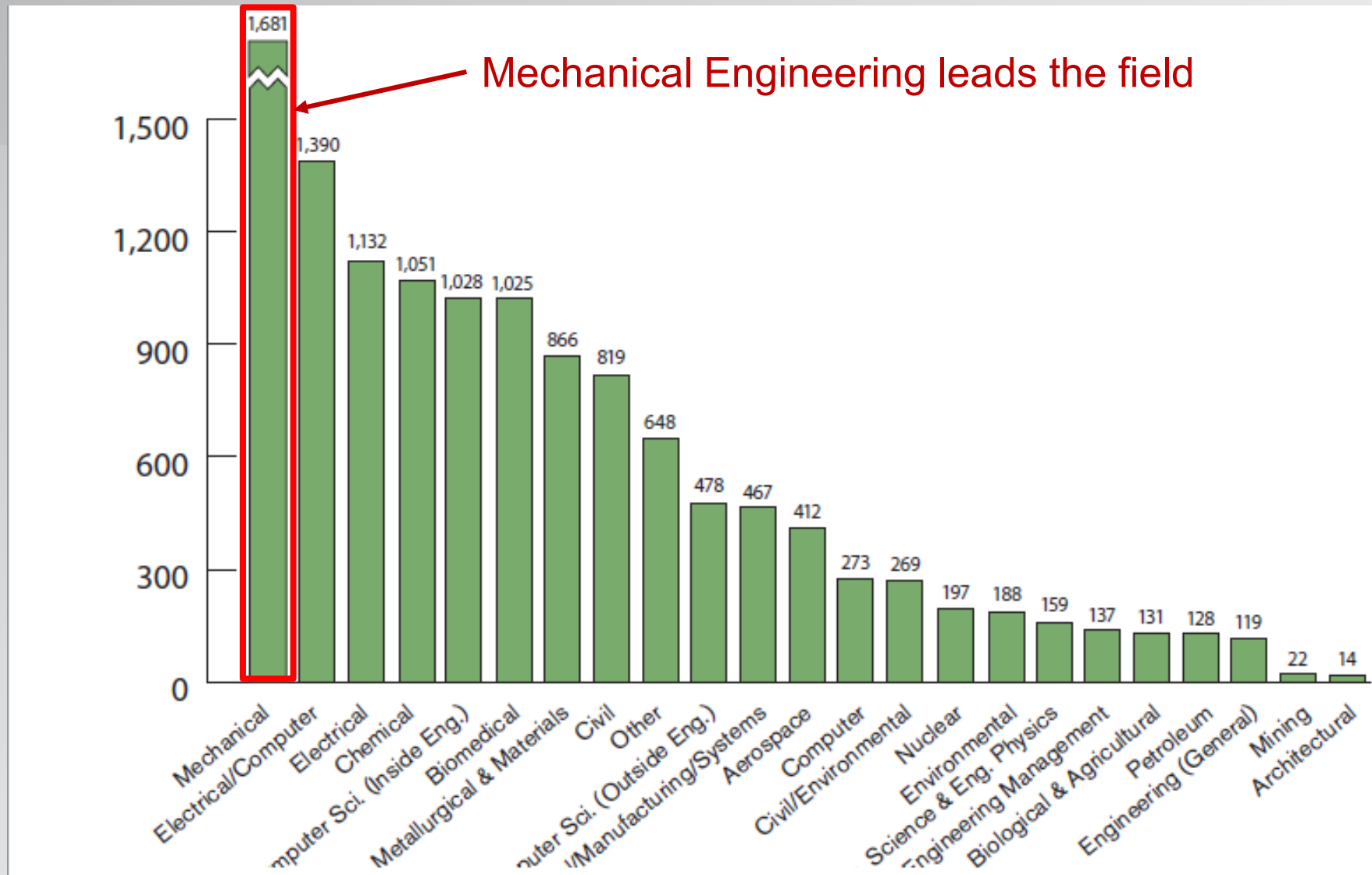
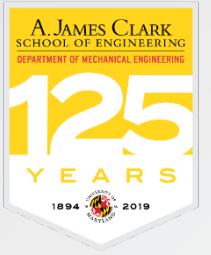
Work safe, work smart

<https://return.umd.edu/>

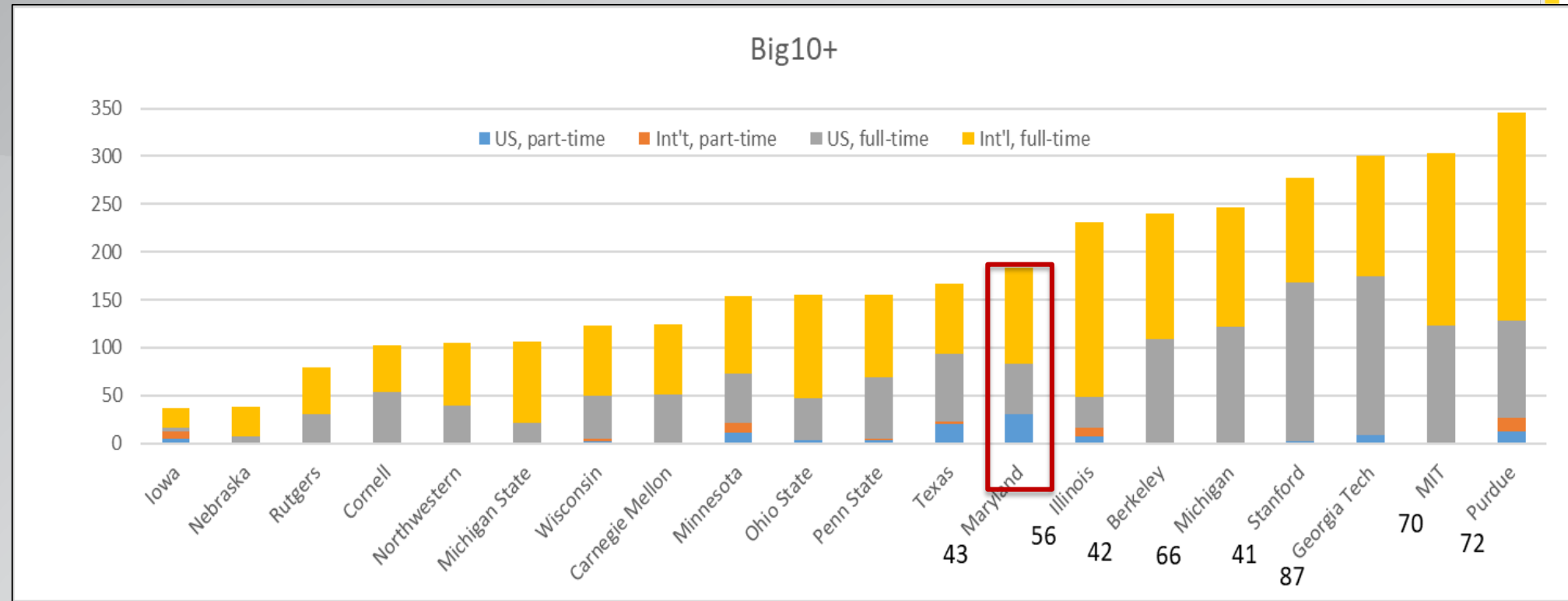
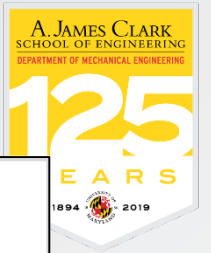
<https://umd.edu/covid-19-dashboard>



You chose the right discipline !



You picked a respected mid-sized Big10+ Program:

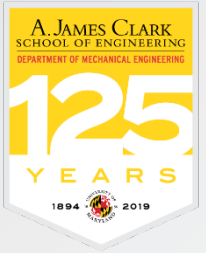


#s in black indicate approx. Faculty FTE

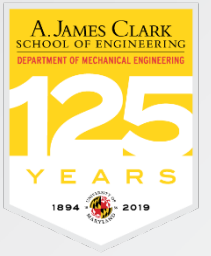
- Purdue (72 Faculty) leads in total Ph.D. and international full-time Ph.D.
- GaTech (87 Faculty) and Stanford (41 Faculty) lead in domestic full-time Ph.D.
- UMD (43 Faculty) leads in domestic part-time Ph.D.
- Our program is ranked 17/179 in USNWR (8th among public Univs)



THE DEPARTMENT OF
MECHANICAL
ENGINEERING



UMD ME/RE faculty/Curricular Profile



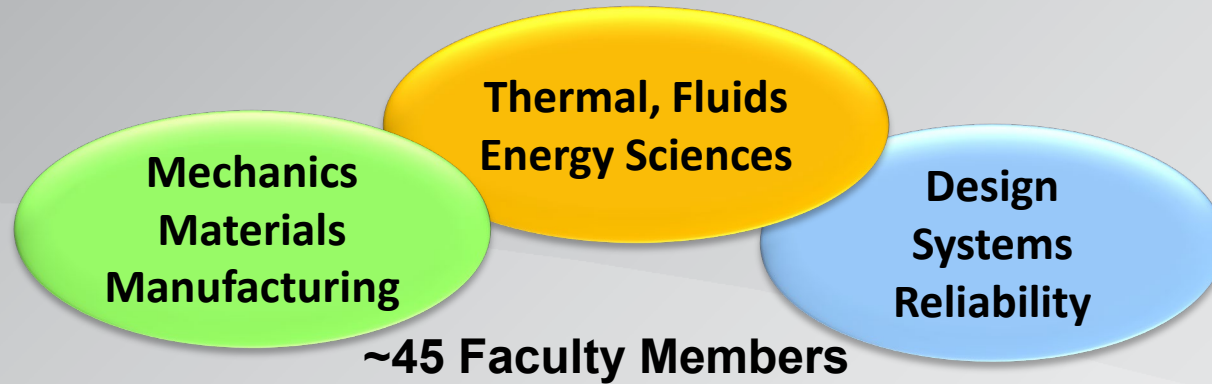
DSR
Design and
System
Reliability
(17 Faculty)

MMM
Mechanics,
Materials, &
Manufacturing
(14 Faculty)

TFES
Thermal, Fluids
and Energy
Sciences
(14 Faculty)

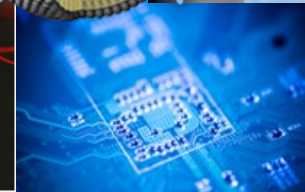
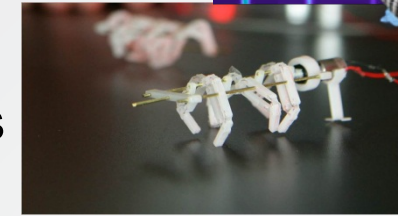
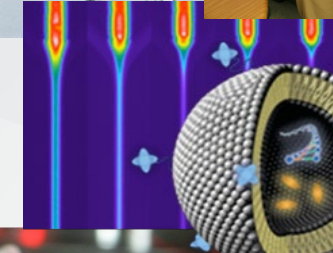
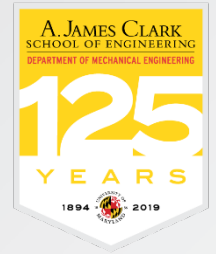
- 45 Tenured & Tenure-Track Faculty
- 13 Research Faculty + 35 Teaching Faculty
- 10 National Academy of Engineering Members
- 9 Named and Chaired Professorships:
 - 4 Minta Martin Professors
 - Jeong H. Kim Professor
 - Nicole Kim Professor
 - George E. Dieter Professor
 - Wilson Elkins Professor
 - Regents Professor
- 2 Distinguished Univ. Professors
- 8 Keystone Professors
- 4 Glenn L. Martin Institute Professors
- 4 PECASE Recipients
- 46 Professional Society Fellows

Your research options in ME/RE:



Research Areas:

- Biosystems Engineering
- Medical Devices
- Control Systems
- Robotics
- Electronic Systems
- Microsystems
- Nanomechanics
- Sensors & Actuators
- Smart Materials & Structures
- Reliability and Risk Analysis
- Cyber Security
- Human-Machine Interactions
- Hydrodynamics
- Combustion
- Thermal Systems
- Energy Systems
- Advanced Manufacturing
- Design



Honors and Awards (2019):

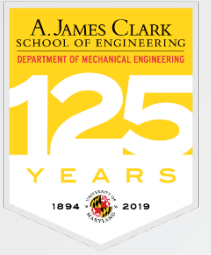
18 External Awards:

- MIT Rising Stars Workshop
- Women in IT
- Society for Risk Analysis Student Merit Award
- Qualcomm Innovation Fellowship
- Nonlinear Dynamics Journal Award
- ASHRAE Scholarship
- IMAPS Adamson Award
- IHPCSS Summer School
- STLE Scholarship
- Conference Awards:
 - ICRA Best Paper
 - IEEE Eurosime Best Poster
 - IEEE BHI Travel Grant

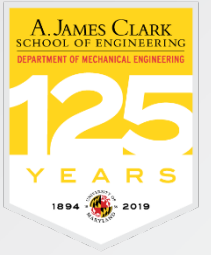
12 Internal Awards:

- URM Fellowships (GEM, LSAMP)
- Future Faculty Fellows
- Clark Fellows
- Summer Fellowships
- 3 Minute Thesis/Dissertation Presentations
- Outstanding Dissertation/Thesis Awards
- UMD GRAD First Place Award
- Outstanding Graduate Assistant
- Best TA Award
- GDF-Suez Fellowship
- Goldhaber Travel Grant
- Richard/Stefanie Vogel Graduate Student Award
- CEEE & CALCE Best Presenters

Encourage all of you to work with your faculty advisor to apply for prestigious external awards, e.g. NSF, DoE, NDSEG, NSTRF



Our graduates do very well in job-placement:



Academia:

- Ramin Bighamian – Faculty, GMU; Post-Doc USC (Hahn)
- Ethan Lust – Faculty, Naval Academy, Annapolis (Duncan)
- Shayandev Sinha – Research Fellow, Harvard (Das)
- Guang Chen – Post Doc, Princeton (Das)
- Alexandros Charalambides – Post-Doc, Robotics Instt, CMU (Bergbreiter)
- Xiang Zhang – Post Doc, Oregon State University (Ohadi)
- Brual Shah – Post Doc, USC (S. K. Gupta)
- An Wang – Post Doc, UMD (Duncan)

Government Labs:

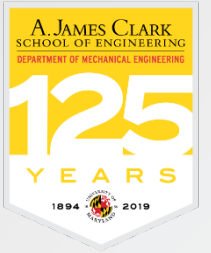
- David Deisenroth – Post Doc NIST (Ohadi/Bar-Cohen)
- Philip Guerieri – ARL (Zachariah)
- Adam Barrett – NASC, Pax River (Modarres)
- Neil Dalal – JHU-APL (Dasgupta/Das)
- Frank van Gessel: NSWC, Indian Head (Chung)
- Jason Morin – Air Force Research Lab (Fourney)
- Wayne Churaman – DoD (Bergbreiter)
- Saliou Telly (NSWC, Carderock, MD)

Industry:

- Ayan Moitra – Intel - AI (Balachandran)
- Nripendra Patel – ASML (Pecht)
- Byung Yub Kim – Northrup Grumman (Han)
- Samuel Massa – Northrup Grumman (Dasgupta)
- Mehdi Kohani – Apple (Pecht)
- Seyed Ali Moeini – Apple (McCluskey)
- Bulong Wu – Apple (Han)
- Kenneth Mahan – Apple (Han)
- Xuan Liu – Apple (Stoliarov)
- James White – Exponent (Sunderland)
- Rui Wang – Exxon Mobil (Balachandran)
- Shane Hsu (Tesla)
- Hao Huang (Microsoft)



Graduate ecosystem ENME/ENRE



A. Dasgupta
DGS, ENME

Assoc Chair, Acad Affairs



J. Herrmann
Dir, ENRE

K. Poppler James
Dir, Acad & Student Affairs



D. Craig
Prog Admin Specialist



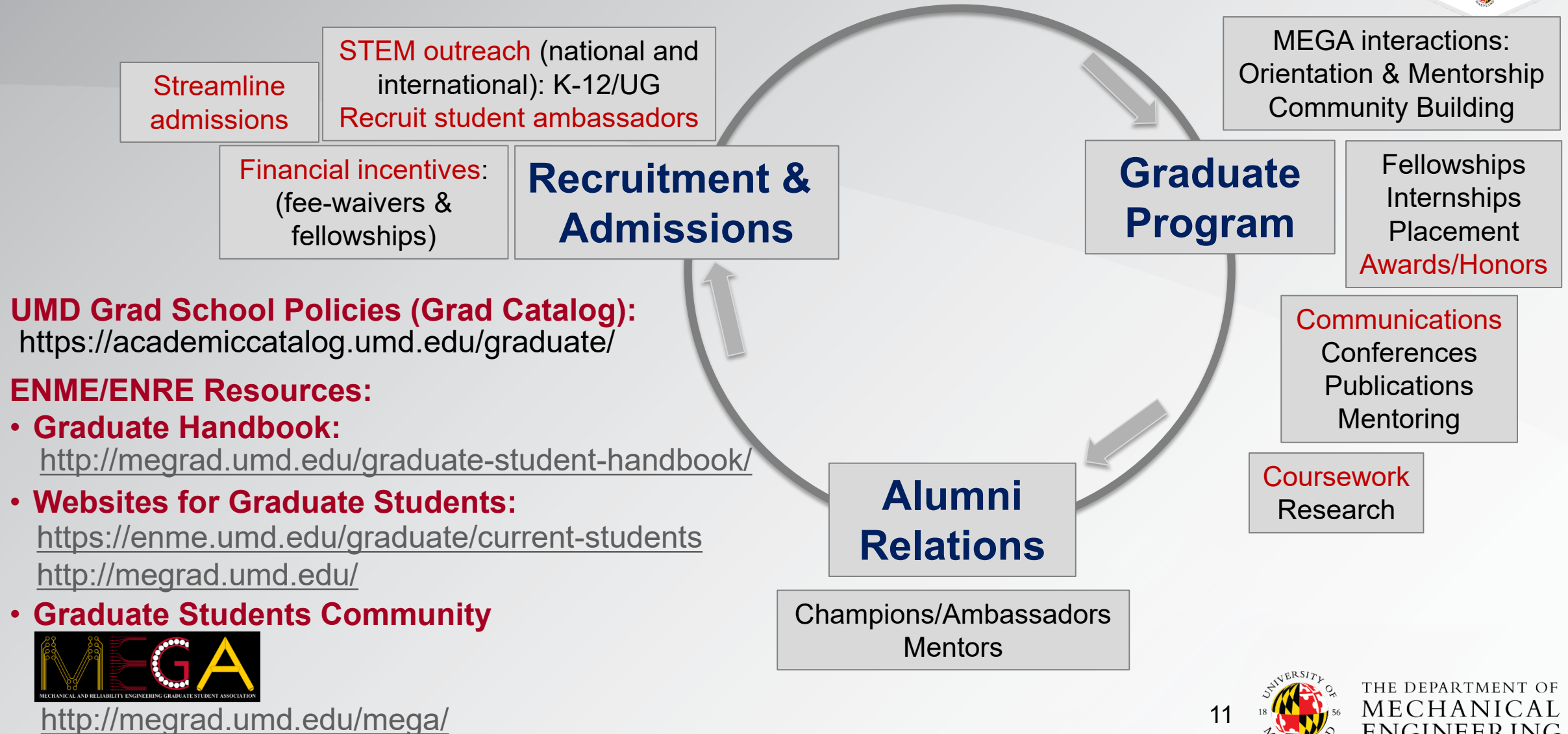
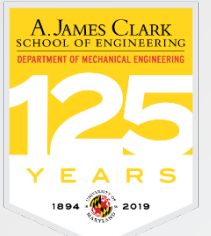
M. Petry
Program Manger



Stakeholders:

- Graduate Students
 - Current students (MEGA);
 - GRA/GTA community
 - New applicants
 - Alumni
- Faculty:
 - Graduate Committee
 - Faculty Advisors for GRAs
 - Faculty instructors for GTAs
- Other Depts in Clark School, MAGE
- UMD Administration
 - Assoc Dean, Grad Studies, Clark School
 - Graduate School
 - Registrar's Office
- Potential Employers
- Peer Institutions (Big10+)

Summary: The Graduate educational experience





UNIVERSITY OF
MARYLAND