

Growth Strategy 2019 - 2025

Grow excellence
funding, program & reputation

Grow faculty

Grow enrollment



State of the College

Hanchen Huang, Dean
Fall 2021

- Working environment
- Faculty and staff
- Education, research, & prominence
- Trajectory

Working environment: collegial and inclusive

The Kavi and Friends Computer Engineering Scholarship Endowment

This newly endowed scholarship demonstrates the strength of our CSE faculty, as well as the desire to support our students as they strive for their potential. This special scholarship will help Computer Engineering students for years to come and symbolize the special bond that exists among faculty in our department.

CMD-IT (National Center for Minorities and People with Disabilities in Information Technology) University Award

Given to CSE Department for Retention of Minorities and Students with Disabilities in Computer Science, the award recognizes U.S. institutions that have demonstrated a commitment to retaining students from underrepresented groups, such as African Americans, Native Americans, Hispanics, and People with Disabilities, in undergraduate computer science programs over the last five years. It comes with a \$15,000 cash award.

ASEE (American Society for Engineering Education) Bronze Award

Given to the UNT College of Engineering, the award recognizes the significant and measurable progress UNT Engineering has made in increasing its diversity and inclusion efforts in recruitment, enrollment, and outreach as well as its new and ongoing initiatives in those areas.



People – 17 new faculty members (1/2)



Asif Baba
Clinical Associate Professor, CSCE
Data science, information security, Internet of Things, decentralized blockchain



Amir Jafari
Associate Professor, BMEN
Robotics



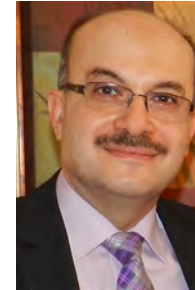
Hung Luyen
Assistant Professor, EE
Antenna design, applied electromagnetics



Heng Fan
Assistant Professor, CSCE
Computer vision, artificial intelligence and machine learning



Yuede Ji
Assistant Professor, CSCE
Cybersecurity, high-performance computing, graph analytics



Abdelnasser Ouda
Clinical Associate Professor, CSCE
Autonomic computing



Neda Habibi
Assistant Professor, BMEN
Nanotechnology, drug delivery, cancer treatment, self-assembled biomaterials



Moo-Yeal Lee
Associate Professor, BMEN
3D bioprinting of human tissues for disease modeling and predictive drug screening



Tejasvi Parapudi
Clinical Assistant Professor, CSCE
Developing machine learning algorithms for clinical and biomedical use cases, IoT data analytics and security

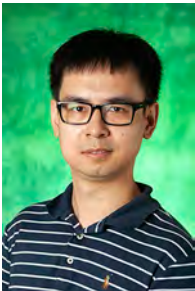
People – 17 new faculty members (2/2)



Russel Pears

Clinical Associate Professor, CSCE

Novel algorithms for machine learning, data stream mining and pattern recognition



Chenxi Qiu

Assistant Professor, CSCE

Cybersecurity



JN Reddy

Distinguished Research Professor, ME

Micropolar approach for web core beams, non-local effects in lattice structures



Sayed Shah

Clinical Assistant Professor, CSCE

Machine learning, deep learning, audio analytics, edge intelligence, smart cities, AI applications in healthcare diagnostics



Shirin Shirvani

Clinical Assistant Professor, CSCE

Machine learning, optimization, data mining, bioinformatics; development of intelligent behavior; sensor-driven robotics



King Man Siu

Assistant Professor, EE

Power Electronics in Renewable Energy Systems



Zeenat Tariq

Clinical Assistant Professor, CSCE

AI in health care, machine learning, deep learning, smart cities, edge intelligence



Vijay Vasudevan

Chair and Professor, MTSE

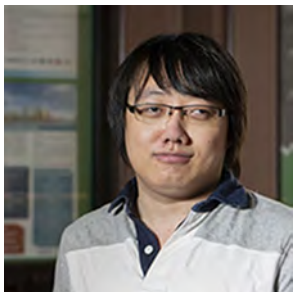
Physical metallurgy and electron microscopy

People – new Young Investigator awards



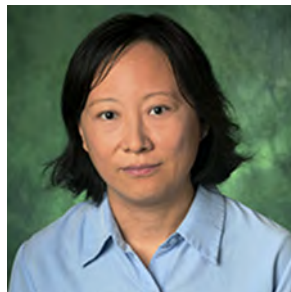
Diana Berman

NSF CAREER Award, 2021



Hua Sun

NSF CAREER Award, 2021



Hui Zhao

NSF CAREER Award, 2021



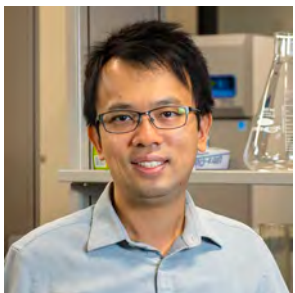
Amir Jafari

NSF CAREER Award, 2021
Awarded at UTSA



Ifana Mahbub

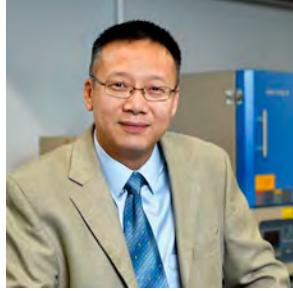
DARPA Young Faculty Award, 2021



Clement Chan

NIH MIRA, 2021

People – external recognition of faculty



Jincheng Du

Fellow of ASM International,
2021



Brian Meckes

Ralph E. Powe Award, 2021
ORAU



Cheng Yu

SEI Fellow of American
Society of Civil Engineers,
2021



Narendra Dahotre

Tech Inventors Finalist, Tech
Titans



Vish Prasad

ASME 2020 Heat Transfer
Memorial Award



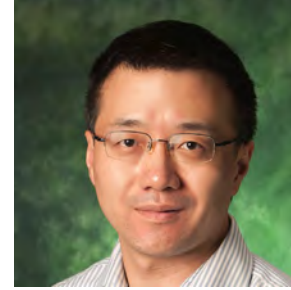
Qing Yang

Tech Titans of the Future –
University Finalist, Tech Titans



Yijie Jiang

Ralph E. Powe Award, 2020
ORAU



Song Fu

Tech Titans of the Future –
University Finalist, Tech Titans

People – internal recognition of faculty



Yan Huang

Regents Professor, 2021



Wonbong Choi

Research Leadership Award,
2021



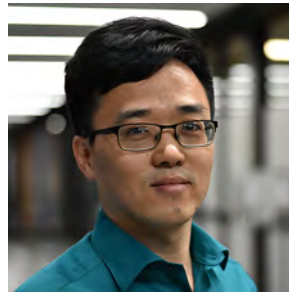
Diana Berman

College of Engineering
Distinguished Faculty Fellow,
2021



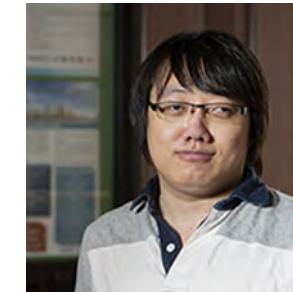
Renee Bryce

Distinguished Teaching
Professor, 2021



Qing Yang

College of Engineering Faculty
Research Award, 2021



Hua Sun

College of Engineering
Distinguished Faculty Fellow,
2021



Ifana Mahbub

Presidential Early Career
Professor, 2021



Rick Reidy

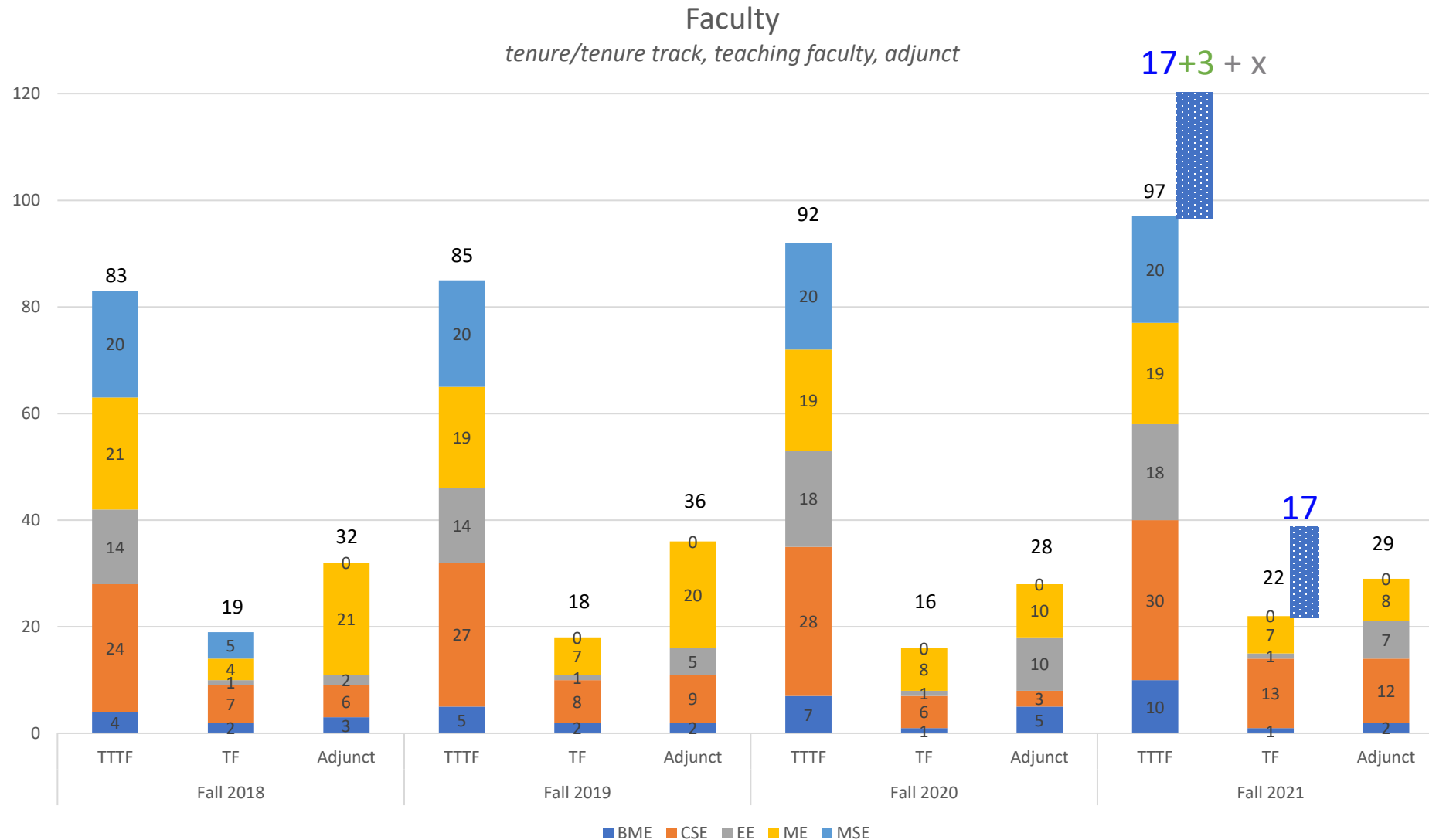
College of Engineering Faculty
Teaching Award, 2021



Hui Zhao

College of Engineering
Distinguished Faculty Fellow,
2021

People – faculty by the numbers



*adjunct calculated by course



People – 10 new staff members



Tish Alexander
MTSE
Administrative Coordinator



Miranda Hogan
CSCE
Marketing Specialist



Victor Tralci
Advising
Associate Academic Advisor



Shelby Ancira
CSCE
Administrative Coordinator



Chido Kwande
CSCE
Office Support Associate



Shannon Venenga
CSCE
Administrative Specialist



Donna Cox
Advising
Associate Academic Advisor



Emma Roberts
ME
*Graduate Student &
Program Specialist*



Alex Dao
Marketing
Graphic Design Specialist



Melinda Spinelli
EE
Administrative Specialist

People – 8 staff promotions/transfers



Abdal Elkhroubi
Advising
Academic Advisor



Kendall Martin
Research Services
Senior Research Analyst



Errica Smith
Advising
Academic Advisor



Stacey Garcia
EE
Administrative Coordinator



Adrian Parks
Advising
Senior College Recruiter



Beverly Wilks
Advising
Sr. Academic Advisor



Rusty Jordan
Research Services
Administrative Coordinator



Marla Salsman
Dean's Office
Sr. Administrative Specialist

People – Star Performers



Liz Assaad
Office of the Dean



Mia Dallas
Advising Office



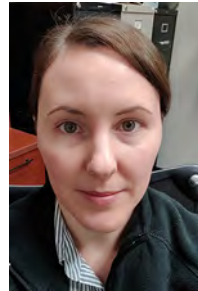
Kayla Green
Office of the Dean



Porsha Reeves
Advising Office



Kathryn Beasley
Office of the Dean



Lisa Dunlop
Materials Science
and Engineering



Rusty Jordan
Research Services



Robbin Shull
Mechanical
Engineering



Jim Byford
IT

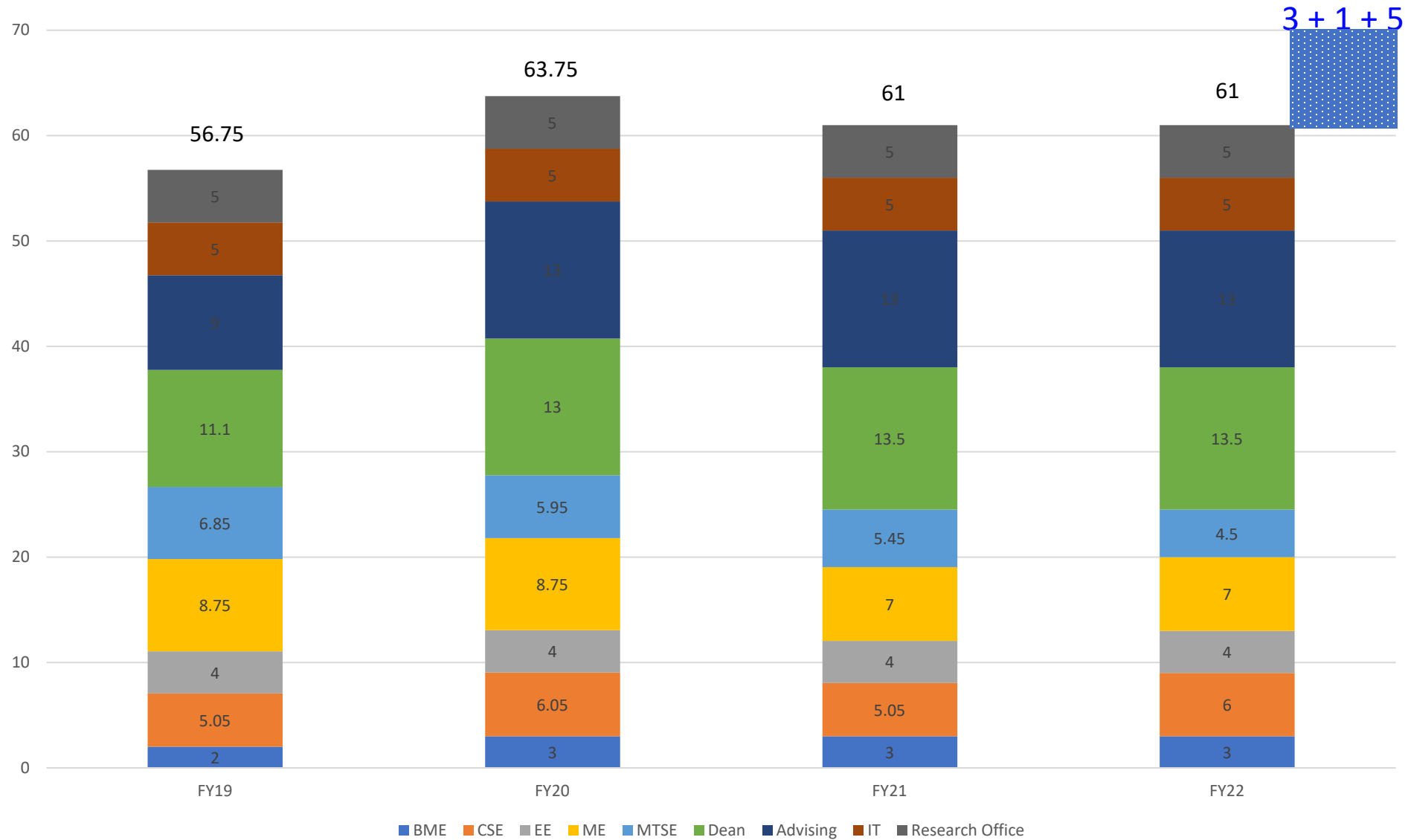


Cindy Dutton
Office of the Dean



Kendall Martin
Research Services

People – staff by the numbers



3 + 1 + 5



People – college team

Academic Affairs: **Nandika D'Souza**

Research: **Andrey Voevodin**

Faculty Affairs: **Barrett Bryant**

Finance and Admin: **Liz Assaad**

Advancement & Corporate Relations: **Angus McColl**

Marketing and Communications: **Kayla Green**

IT: **Jim Byford**

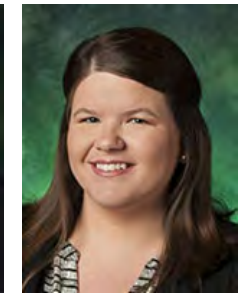
Graduate Programs: **Kathryn Beasley**

Undergraduate Advising: **Nancy Van Hoy**

Research Services: **Leyla Kimball**

Executive Assistant to the Dean & Sr Operations Coordinator: **Lisa Martin**

Chairs: **Shengli Fu, Stephanie Ludi, Kuruvilla John, Vijay Vasudevan, Vijay Vaidyanathan**



People – implementation of initiatives

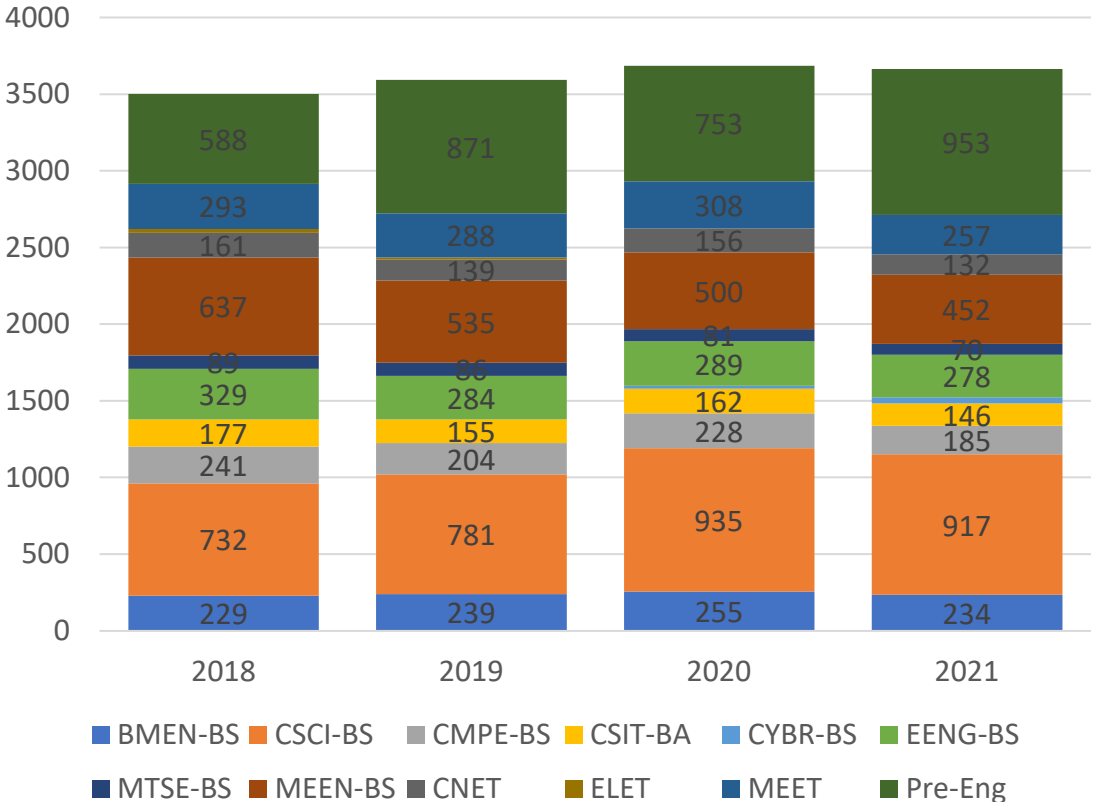
- Lecturer conversion to clinical faculty
- Equity/market adjustment of salary
- Distinguished Faculty Fellow
- Award nomination
- *Research Revitalization Initiative*

Education – new programs (growing enrollment)

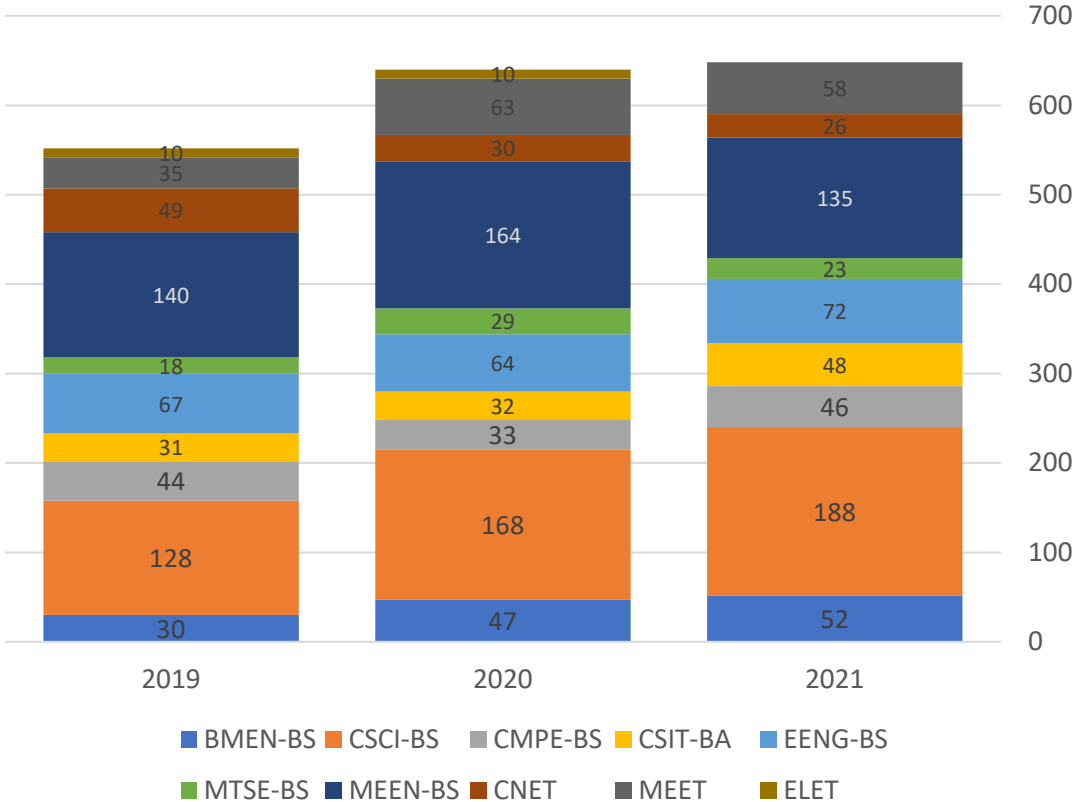
Program	Start Date	Yr 1 Projected Enrollment	Yr 5 Projected Enrollment	Current Enrollment
MS Artificial Intelligence	Fall 2020; THECB approved 12/16/19	25	100	124
MS Data Engineering	Spring 2021; THECB approved 7/22/20	25	90	33
MS Engineering Management	Fall 2020; THECB approved 4/24/20	20	80	32
MS Cybersecurity	Fall 2020; THECB approved 3/9/20	15	45	31
BS Cybersecurity	Fall 2020; THECB approved 3/9/20	20	200	41 (73 pre-majors)
BS Construction Management	Fall 2021; THECB approved 7/9/20	20	100	41

Education – undergraduate

Undergraduate Enrollment by Program
per fall census

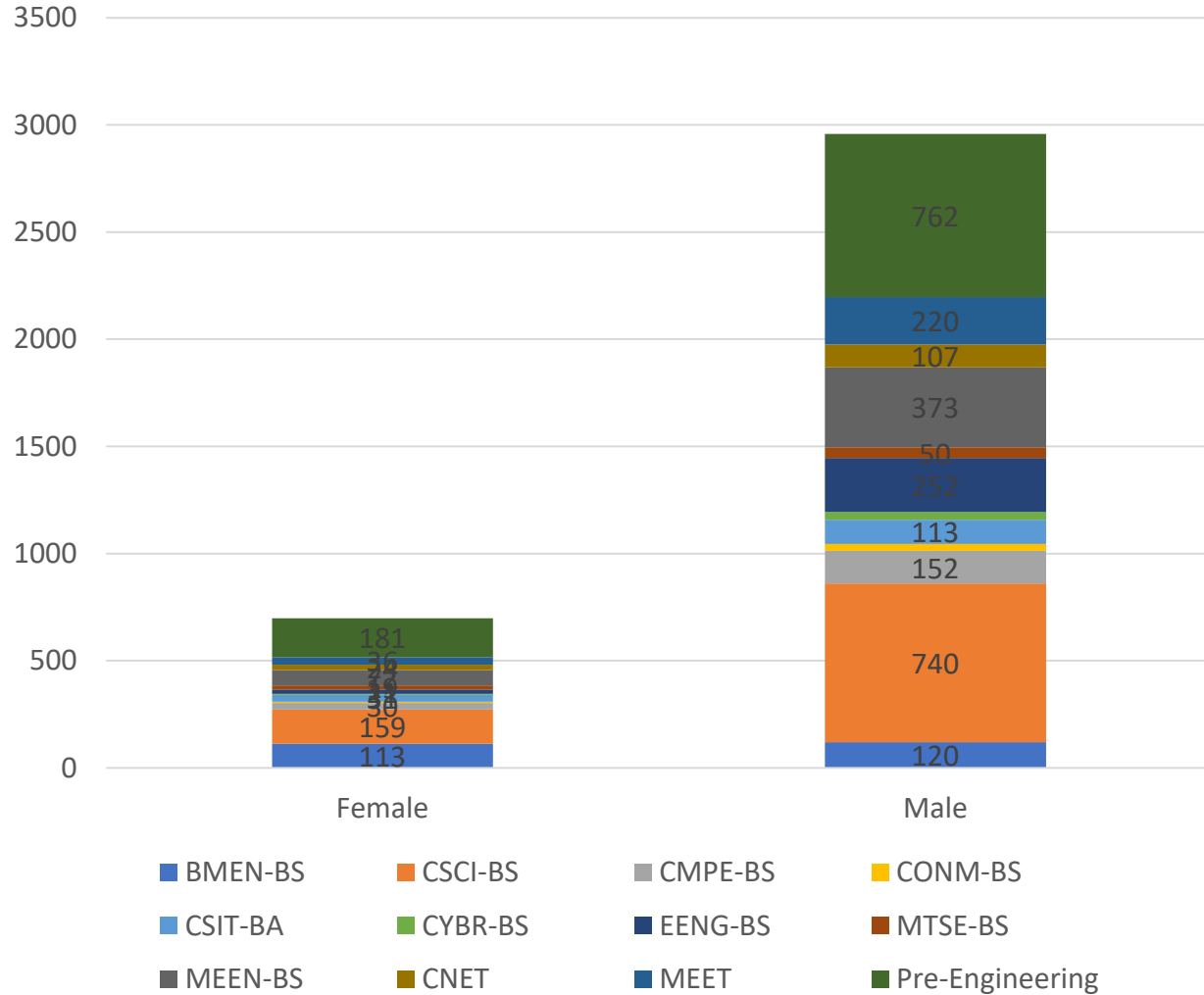


BS Graduates by Program
per fiscal year

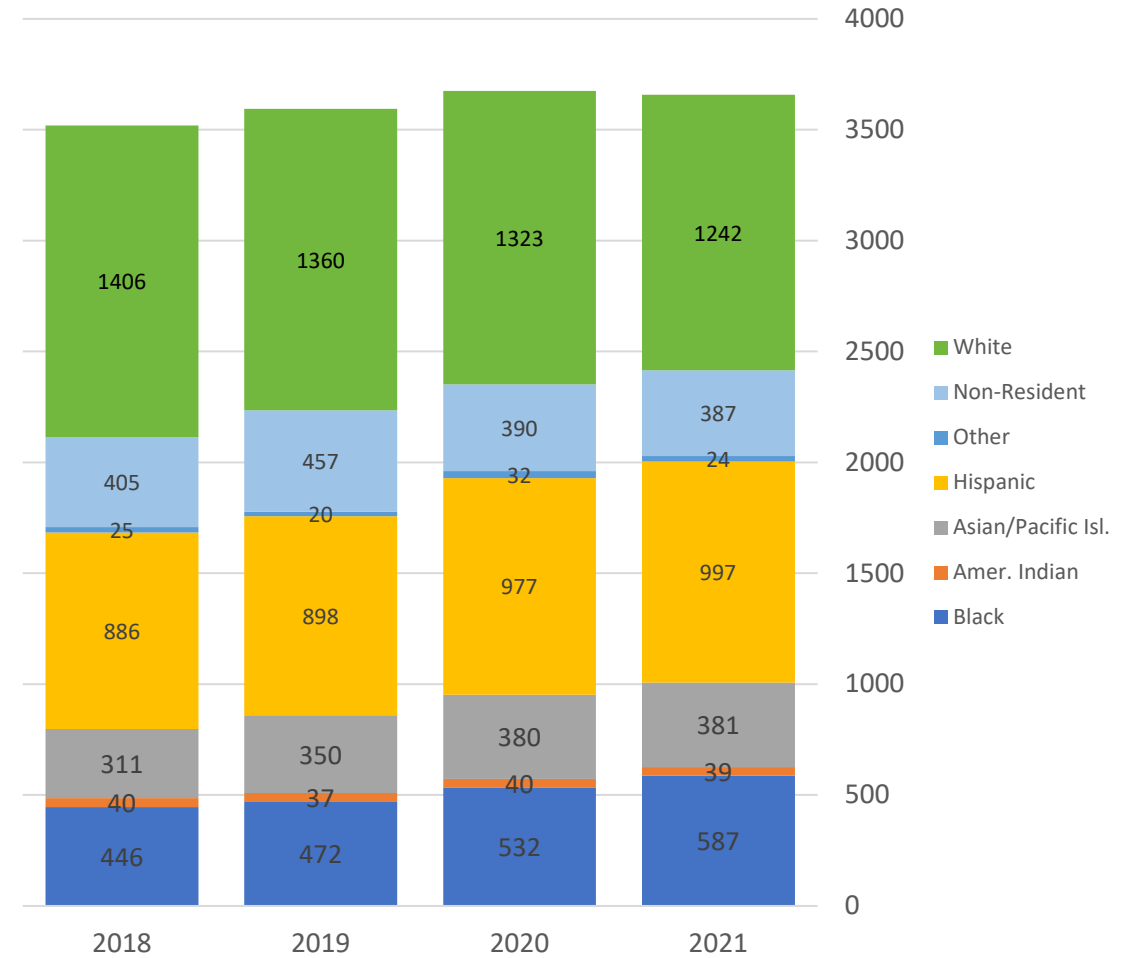


Education – undergraduate

Gender

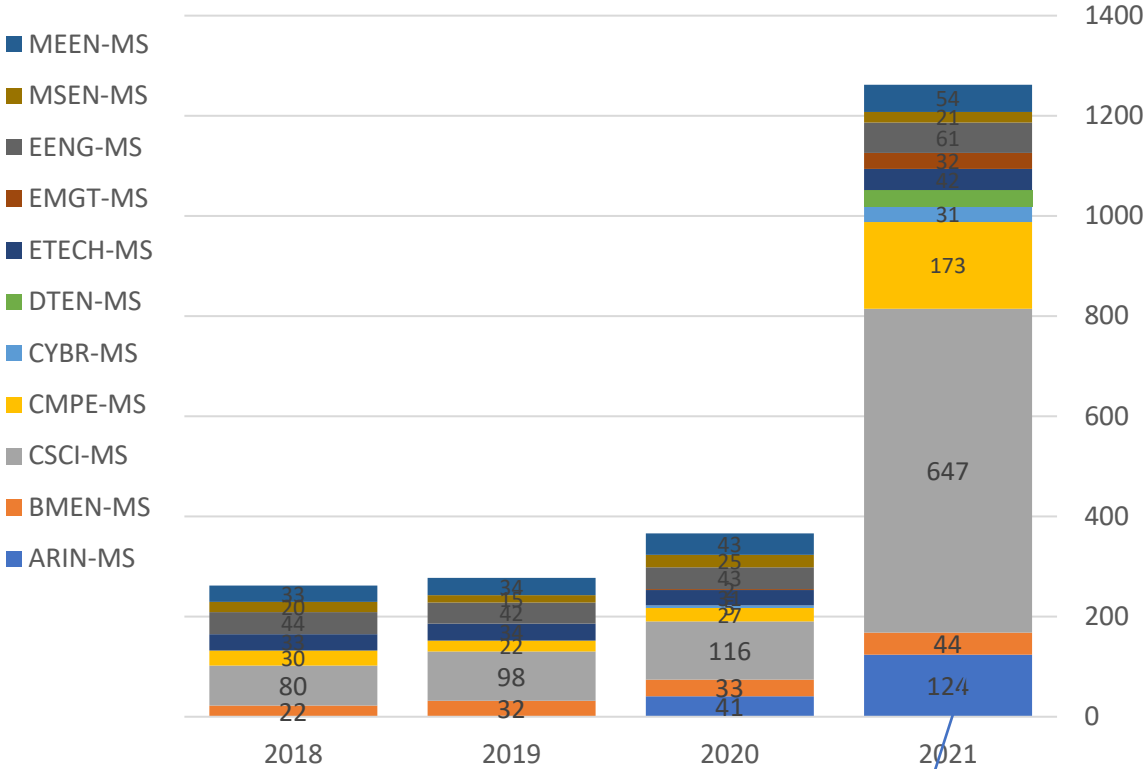


Ethnicity



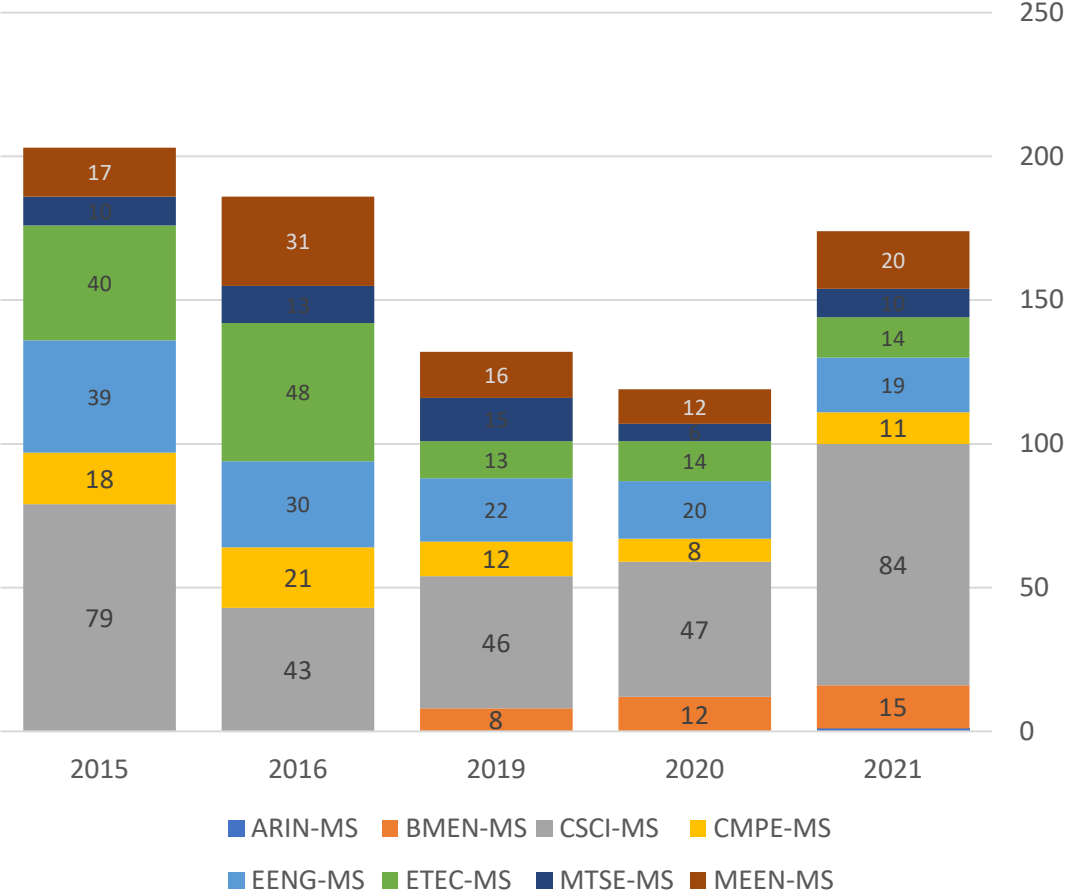
Education – MS graduate

MS Enrollment by Program
per fall census



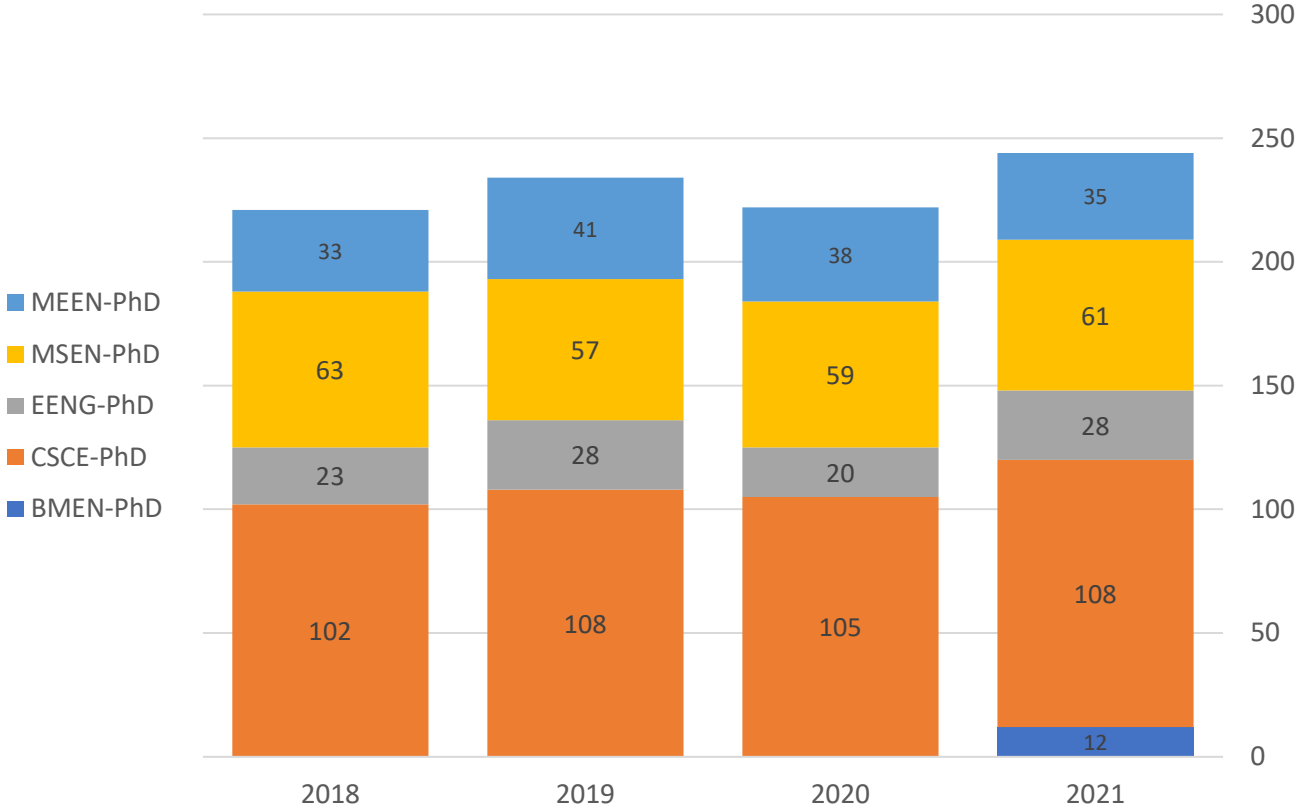
AI MS Concentration Distribution:
Machine Learning: 99
Autonomous Systems: 12
Biomedical Engineering: 13

MS Graduates by Program
per fiscal year

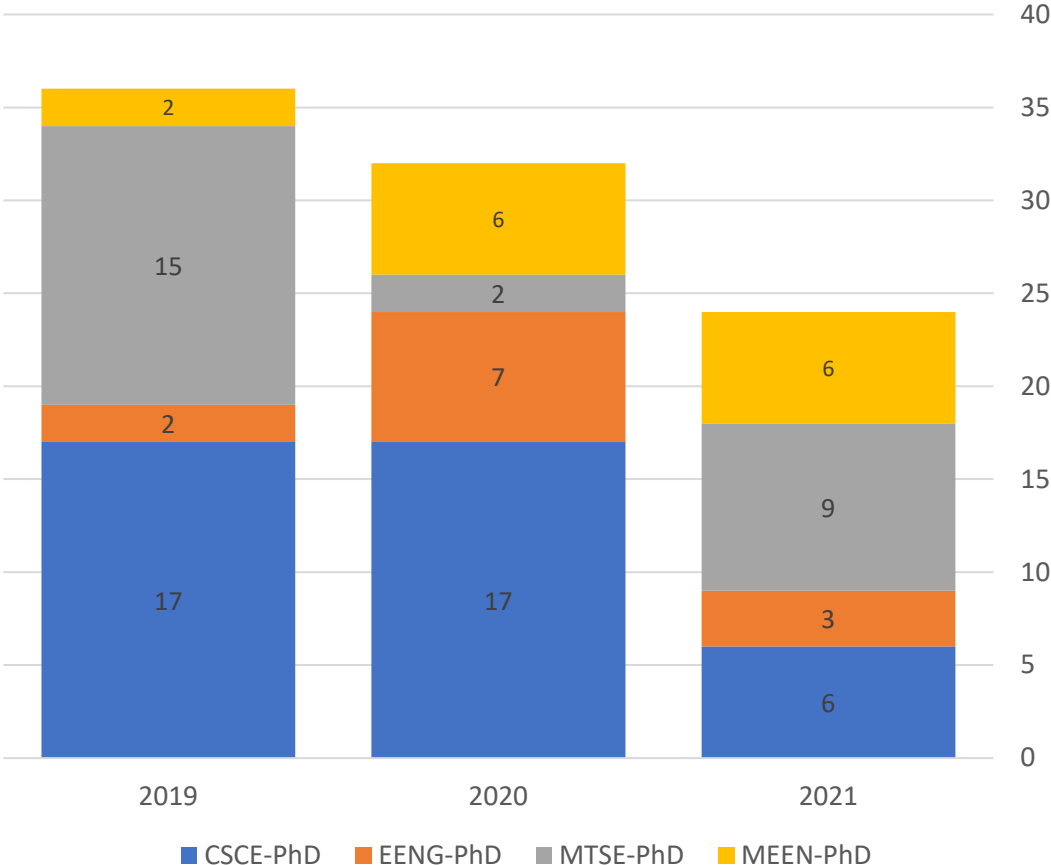


Education – PhD graduate

PhD Enrollment by Program
per fall census

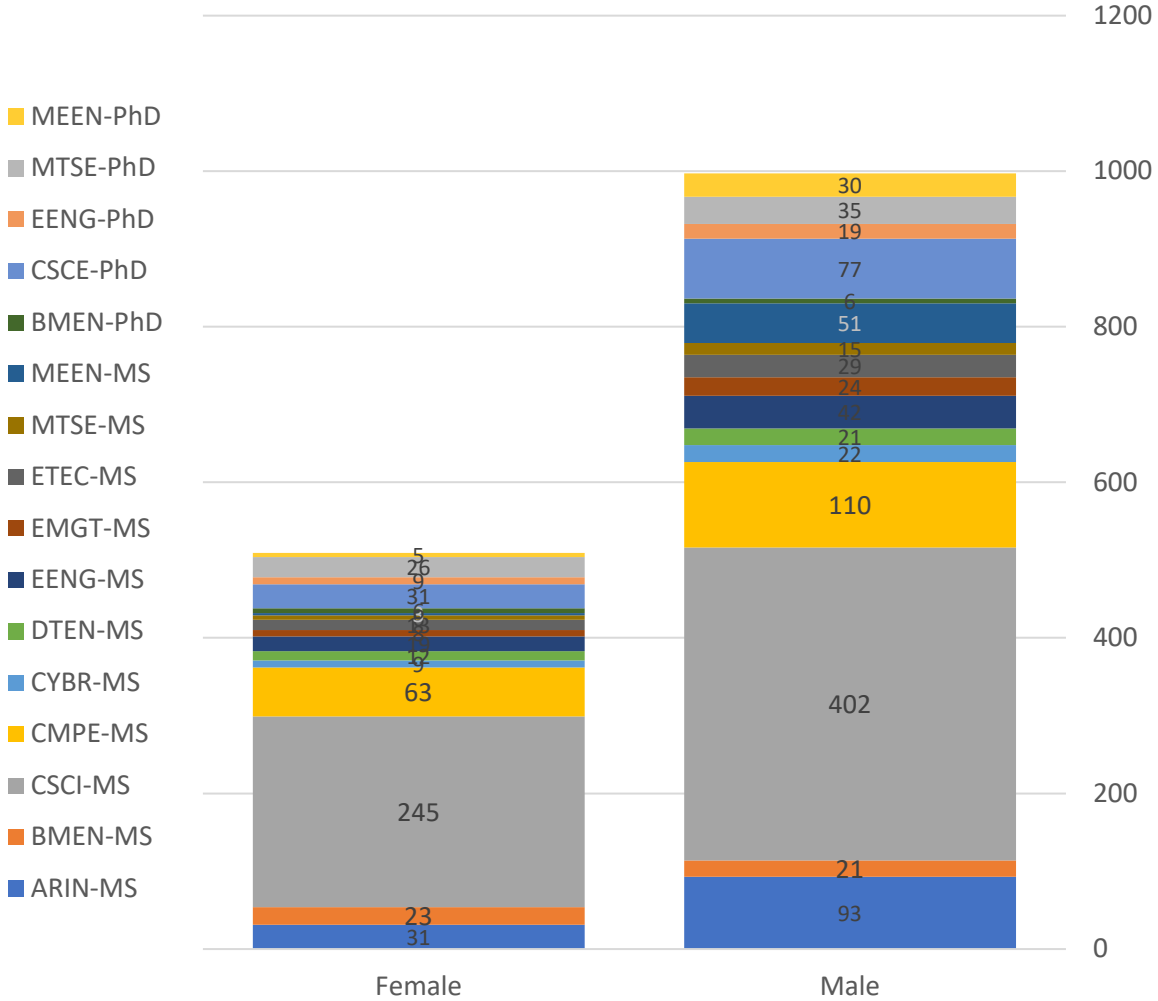


PhD Graduates by Program
per fiscal year

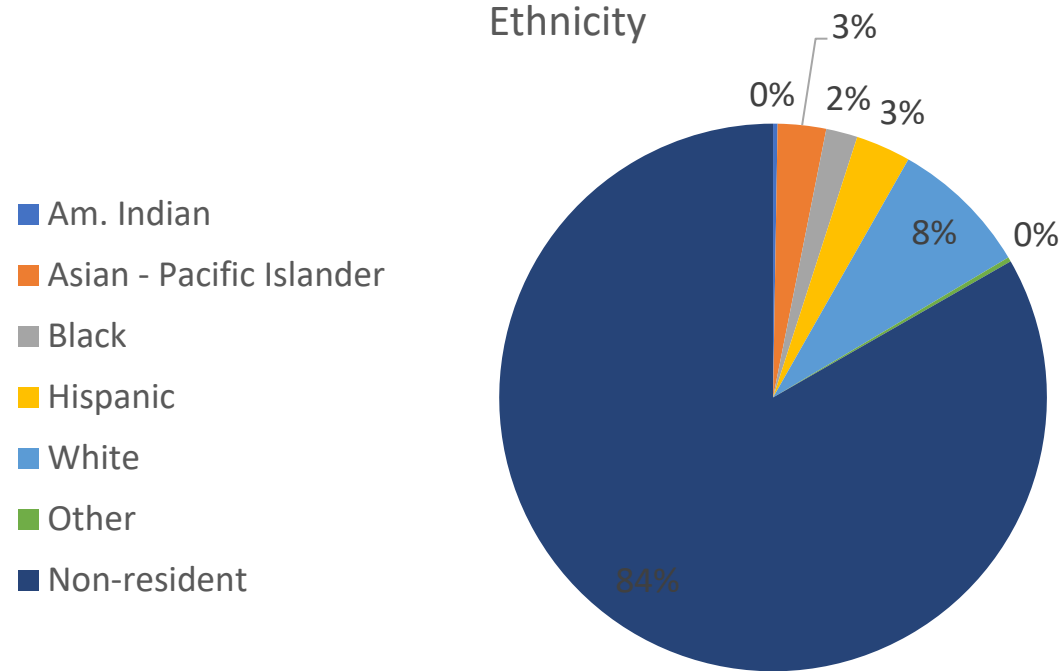


Education – MS & PhD graduate

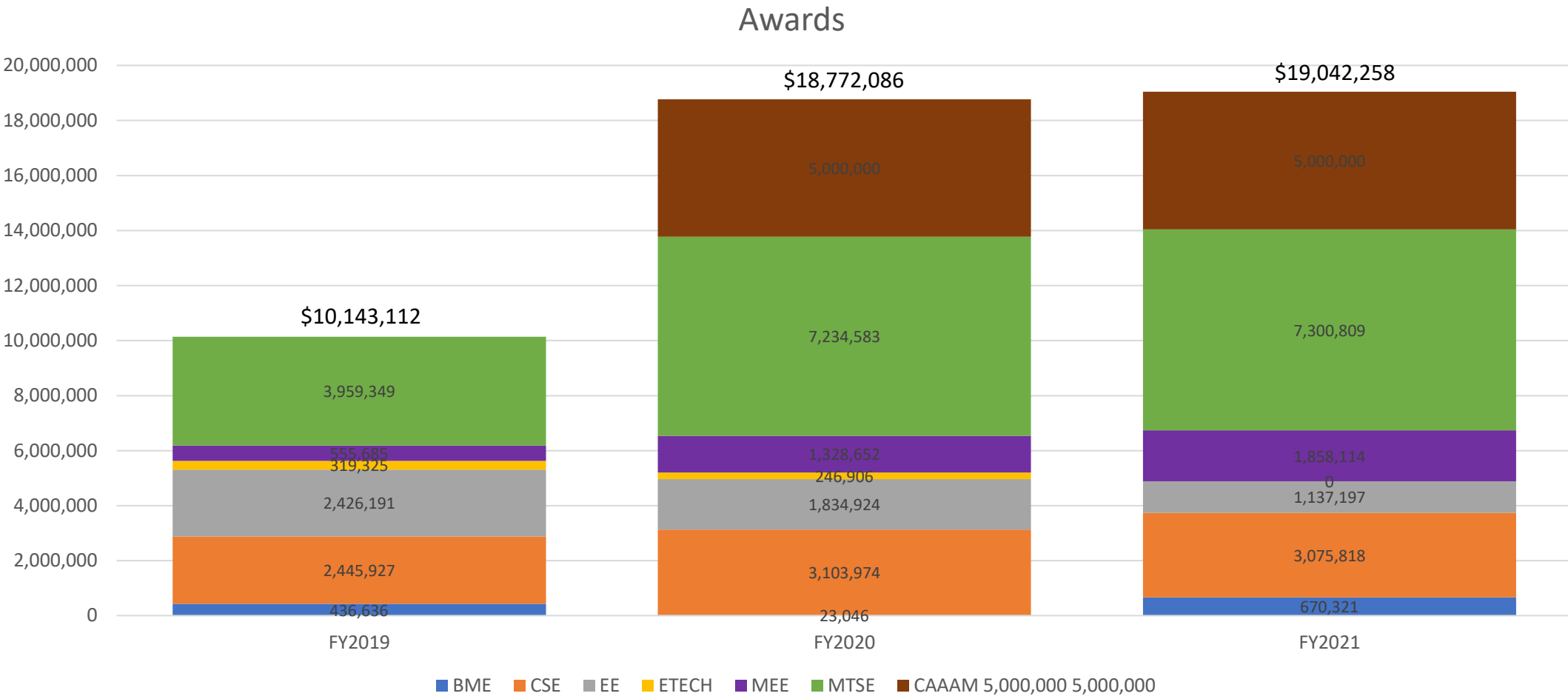
Gender



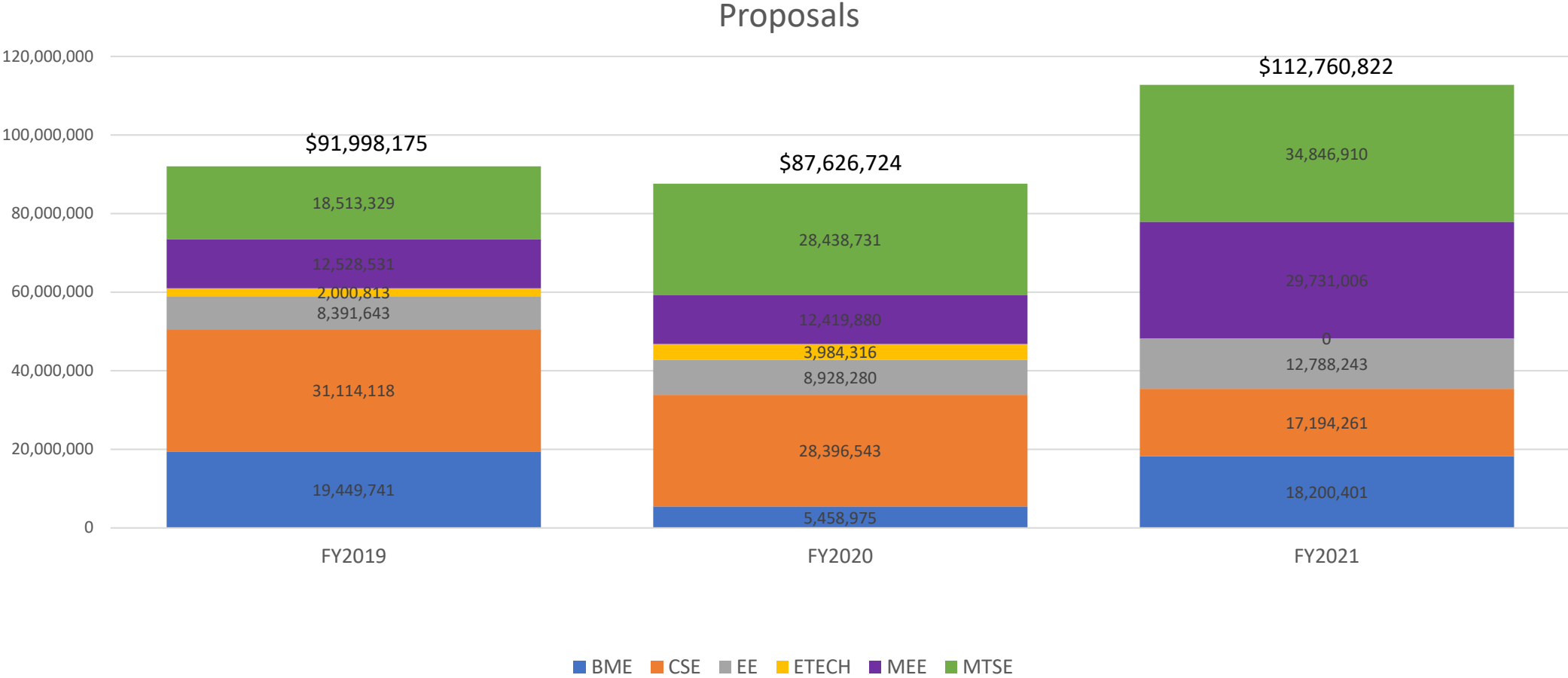
Ethnicity



Research – awards

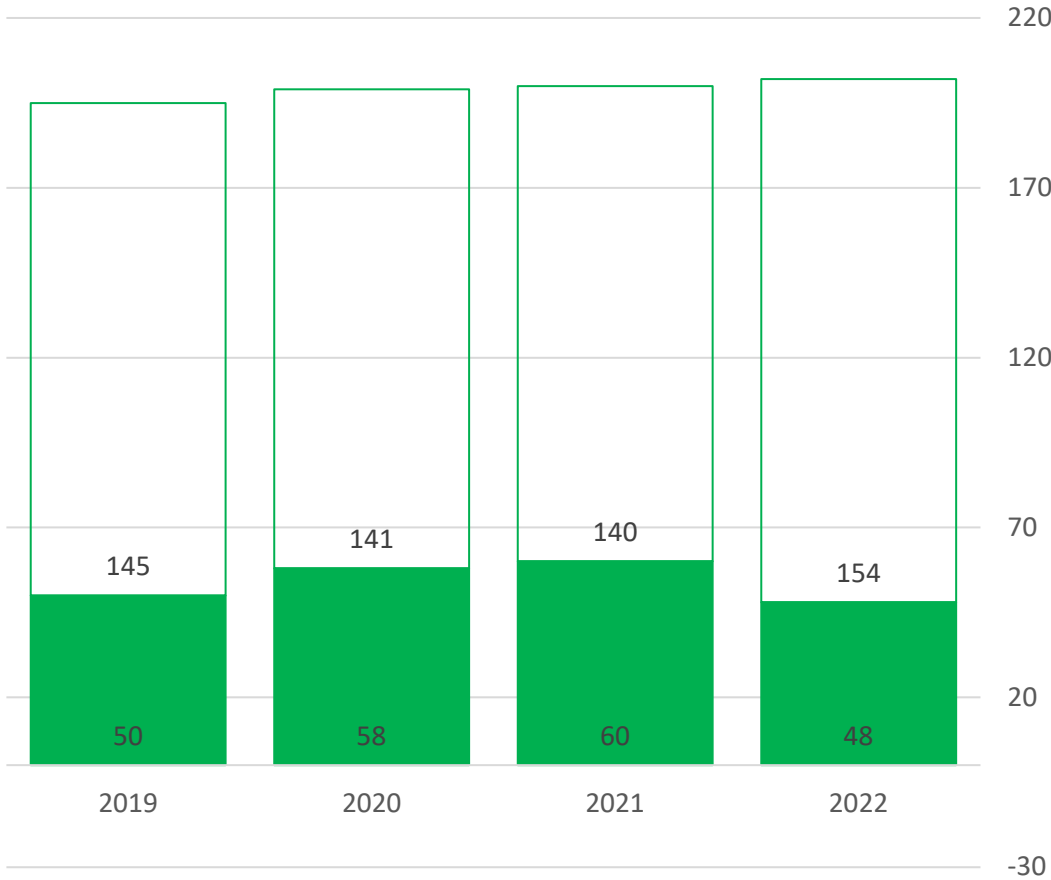


Research – proposals



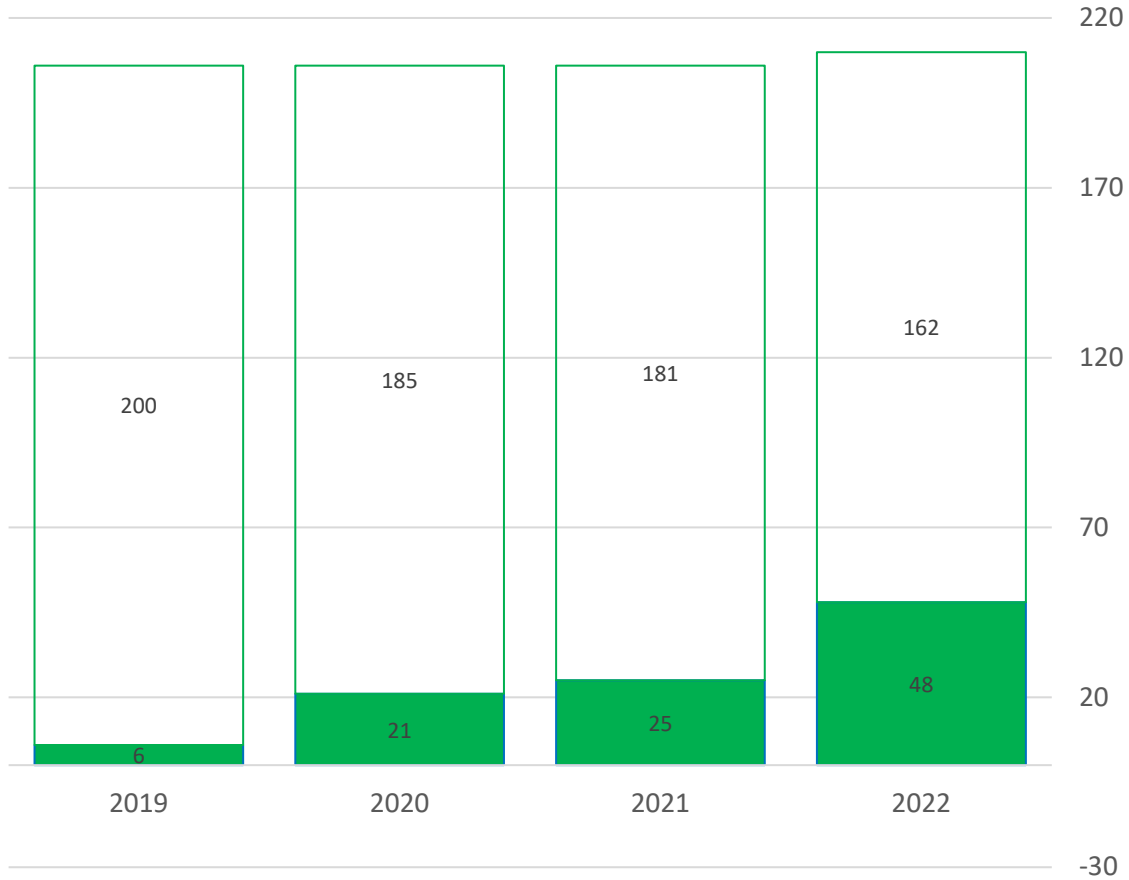
Prominence – research and education

U.S. News Graduate Engineering Ranking



■ Better Than □ Our Graduate Ranking

U.S. News Undergraduate Engineering Ranking

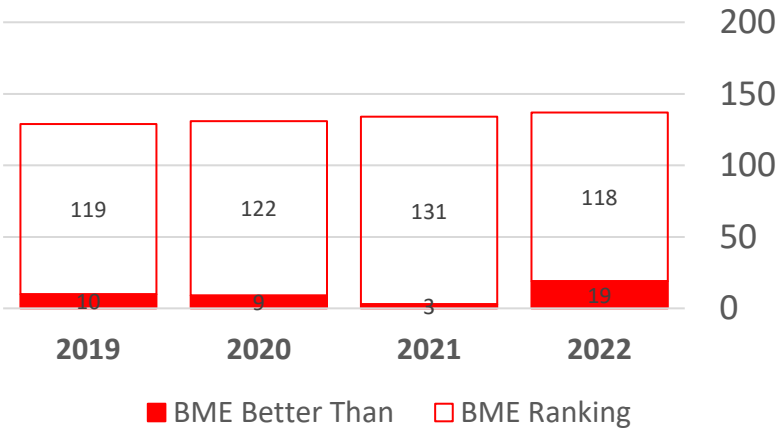


■ Better Than □ Our Undergrad Ranking

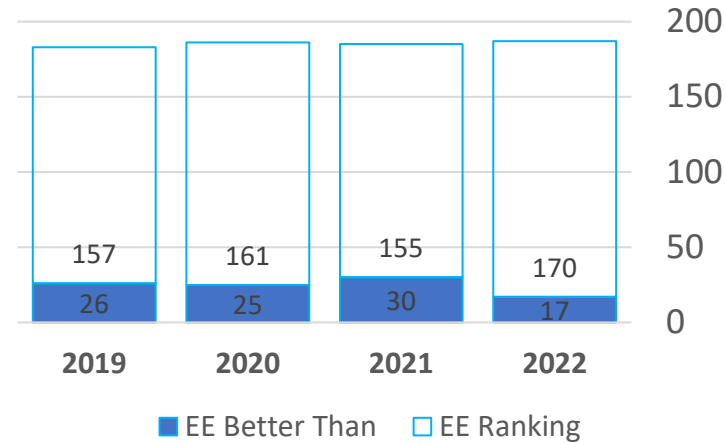


Prominence – research and education

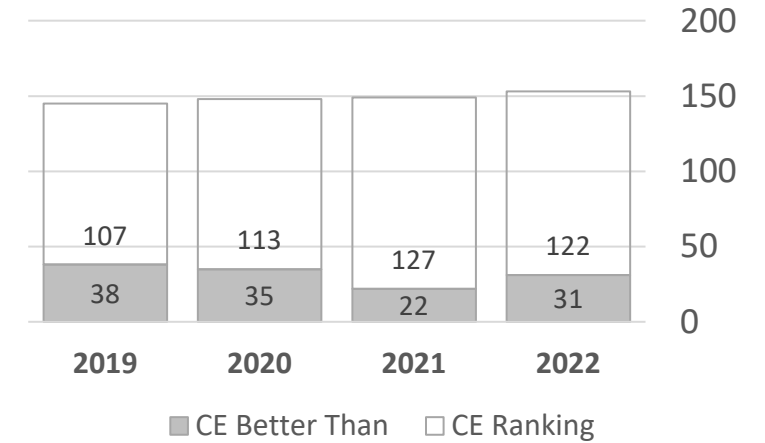
BME



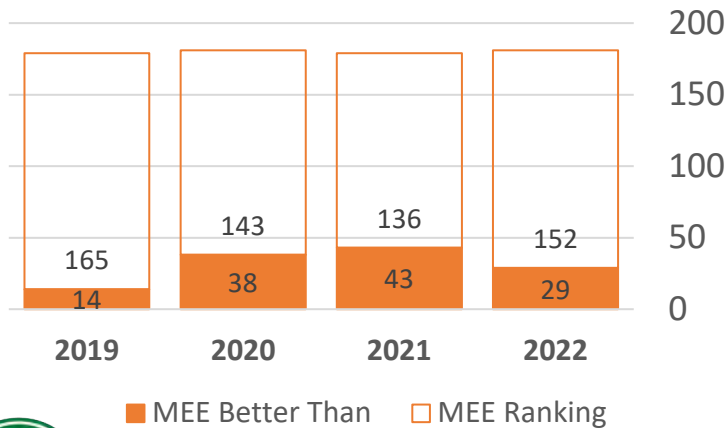
EE



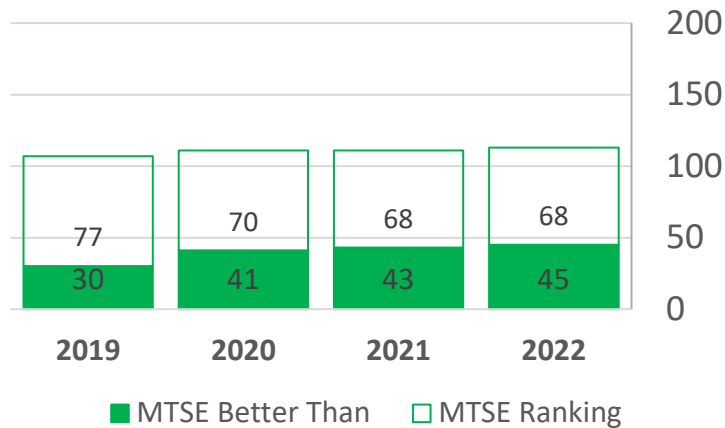
CE



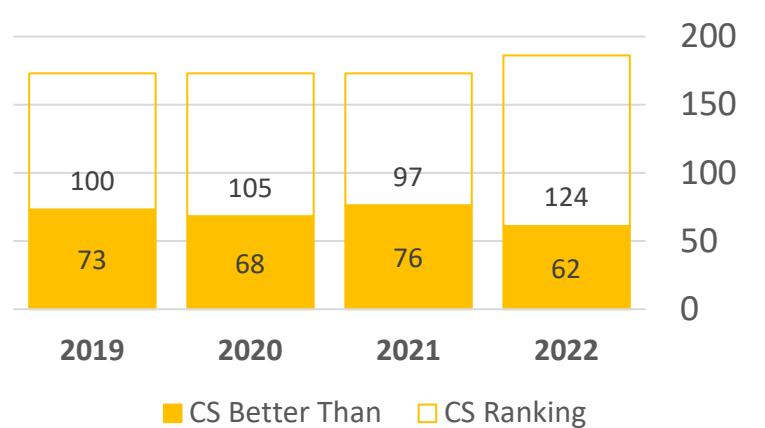
ME



MTSE



CS



State of the College – past, present, and future

Top 100 – future actions

- Faculty/Staff – success, messaging
- Chairs/Dean – vision, strategy, messaging

Grow excellence
funding, program & reputation

- By FY 2025
- \$30M/yr
 - PhD in all
 - Top 100



Grow faculty

- By FY 2025
- 120 TTT
 - 20-30 TF



Grow enrollment

- By FY 2025
- 4000 BS
 - 1000 MS/PhD

