STRATEGIC PLAN · 2022

FORWARD. *Faster.*

UNIVERSITY of DENVER

DANIEL FELIX RITCHIE SCHOOL
OF ENGINEERING &
COMPUTER SCIENCE

THANK YOU STRATEGIC PLANNING COMMITTEE!

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Mission

Advancing technical and scientific knowledge and capabilities to improve quality of life for our global society.

Vision

We are a diverse learning and teaching community discovering creative solutions for healthy, global citizens living in a smart, sustainable world.

Our Values

STRATEGIC OBJECTIVES

STRATEGIC OBJECTIVE #1

Instill a culture of inclusive excellence and more than double the percentage of students who come from diverse backgrounds.

TD1SI1: Financial Support for Students
TD4SI2: A Community of Diversity, Equity and Inclusive Excellence

BUILD A SMART, SUSTAINABLE WORLD

DEVELOP AND INSPIRE HEALTHY GLOBAL CITIZENS

STRATEGIC OBJECTIVE #2

Focus our research and education program to address two, relevant real-world global goals.

TD1SI2: Enhancing and Expanding our Learning Environment
TD1SI3: SI 3: Navigating DU, Navigating Life
TD2SI3: SI 3: International Impact
TD4SI3: Sustainable DU

STRATEGIC OBJECTIVE #3

Modernize the undergraduate program.

TD1SI2: Enhancing and Expanding our Learning Environment
TD1SI5: Preparing for Careers and Lives of Purpose
TD2SI3: International Impact
TD2SI4: Knowledge Bridges

ARTIFICIAL INTELLIGENCE

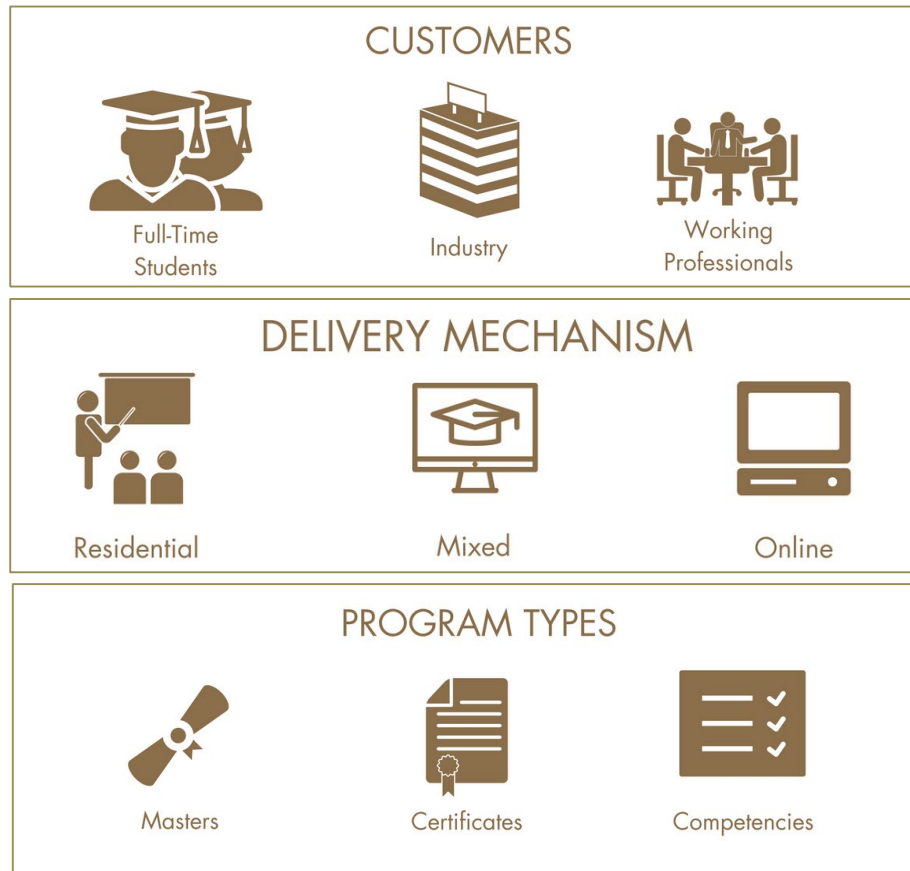BIOMECHANICS

CYBERPHYSICAL SECURITY

ROBOTICS

SMART CITIES

STRATEGIC OBJECTIVE #4

Grow the research enterprise.

TD2SI1: Faculty Talent, Excellence and Diversity Initiative
TD2SI2: Supporting Research, Scholarship and Creative Expression
TD3SI4: Partner in Innovation and Entrepreneurship in Denver
TD4SI3: Sustainable DU

STRATEGIC OBJECTIVE #5

Offer a suite of highly relevant new programs.

TD2SI5: Preparing for Careers and Lives of Purpose
TD3SI4: Partner in Innovation and Entrepreneurship in Denver

STRATEGIC OBJECTIVE #6

Improve brand domestically and abroad.

PROJECT
X-ITE

DIGITAL
LITERACY

E-STEM
CENTER

INSTITUTE ON
DISRUPTIVE
INNOVATION

NEW
PROGRAMS

UNIVERSITY-WIDE INITIATIVES

TD2SI 6: Project for Innovation, Entrepreneurship and Technology
TD3SI4: Partner in Innovation and Entrepreneurship in Denver

OUTCOMES

Thank you!

Appendix

VALUES

We believe:

- **Students are the center** of our academic programs
- Students gain deeper knowledge through **experiential learning**
- **Inclusive excellence is essential** to tapping into diverse talents, ways of thinking and working together
- **Collaboration across disciplines, boundaries and fields** can lead to breakthroughs and innovation
- **Continuous innovation** is essential to teaching and research
- Creative thinking is fueled by an **inquisitive nature and a quest for discovery**

STRATEGIC OBJECTIVES

Strategic Objectives

- Instill a culture of **inclusive excellence** and **more than double** the percentage of students who come from diverse backgrounds

- Focus research and education programs to address two relevant, real-world **Global Goals**

- Modernize the **undergraduate program**

- Grow the **research enterprise**

- Build a suite of highly relevant **new programs**

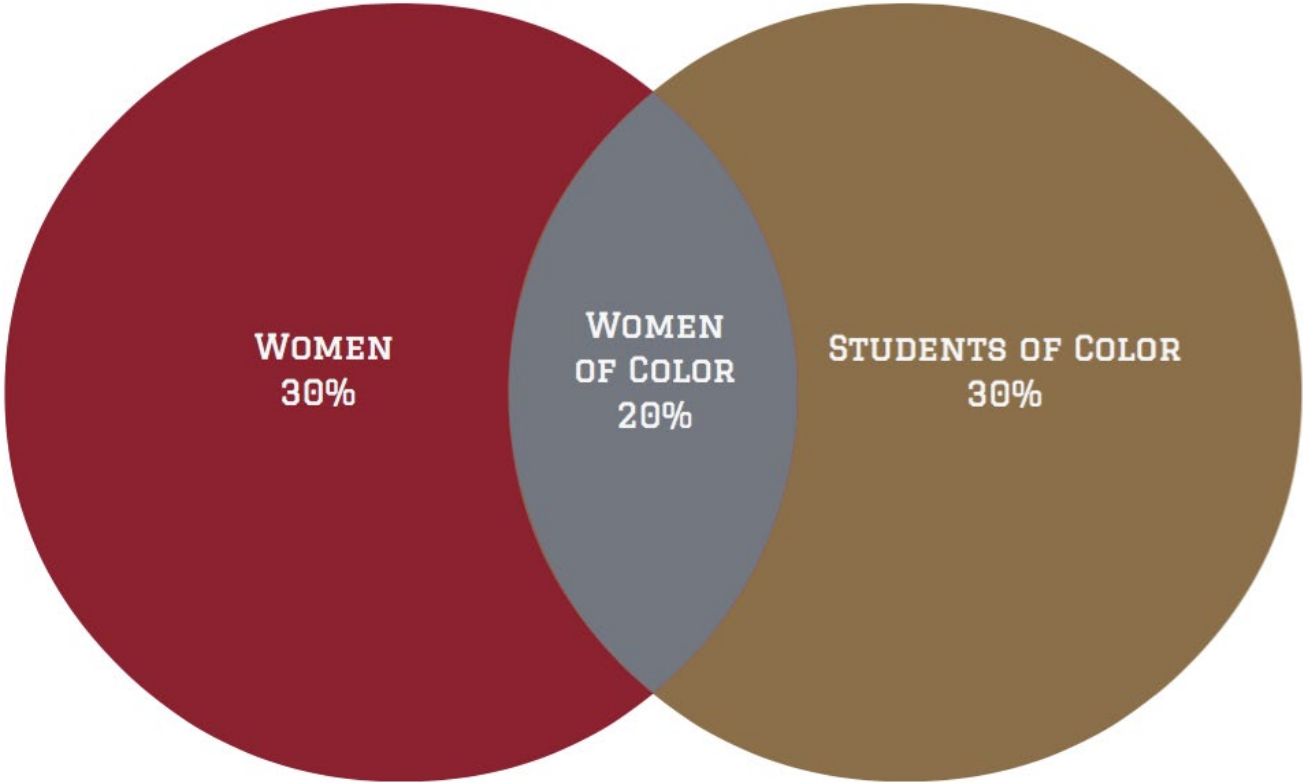- Improve **brand and reputation** domestically and abroad

OUTCOMES

In three to five years, the Ritchie School will become known as an innovative jewel of a school in engineering and computer science that has achieved the following:

- Substantially **greater percentage** of undergraduates will be **students of color, will be women, and will be 1st generation**
- Substantially more undergraduates will major in engineering or computer science and more non-majors will take more Ritchie courses
- New programs will **contribute substantial new revenue to the unit**
- The amount of **research funding** flowing through, and PhD students, in the School will have **increased dramatically**
- **Ranked by USNWR** in Graduate Engineering and Computer Science
- **Improve USNWR** Undergraduate Engineering Ranking
- Lead up to **five critical University–wide initiatives**

STRATEGIC OBJECTIVE #1

Instill a culture of inclusive excellence and more than double the percentage of students who come from diverse backgrounds

WOMEN
30%

WOMEN
OF COLOR
20%

STUDENTS OF COLOR
30%

STRATEGIC OBJECTIVE #2

Focus our research and education program to address two, relevant real-world global goal

DEVELOP AND INSPIRE HEALTHY GLOBAL CITIZENS

BUILD A SMART, SUSTAINABLE WORLD

STRATEGIC OBJECTIVE #3

Modernize the undergraduate program

- All students participate in at least one (1) project-oriented, team-based, customer / product / service-driven **experiential, inclusive, and public-good oriented** course each year

- All students engage in at least one (1) **extra- curricular experience** each year

- All students have at least one **internship or Co- Op** before they graduate

- All students have an **NAE Grand Challenges experience**

- Faculty commit to a high level of engagement with students inside and outside the classroom

- All students are assessed annually against the Ritchie School graduate characteristics

STRATEGIC OBJECTIVE #5

Offer a suite of highly relevant new programs

- Examples: certificates, competencies, new Masters
  - Suite of MS Degrees
    - Cybersecurity
    - Data Science
    - Internet of Things
    - Web Development
    - Financial Engineering
    - Product Design
- Description
  - Accelerated Format, designed to be completed in 12 Months
  - Full time, On-Campus
  - Discounted Tuition
  - Industry Internship Required Component of Curriculum
  - Non-Thesis, Terminal Degrees

UNIVERSITY-WIDE INITIATIVES

PROJECT X-ITE

INSTITUTE ON DISRUPTIVE INNOVATION

DIGITAL LITERACY

E-STEAM CENTER

MULTI-MODAL, MULTI-DISCIPLINE; NEW PROGRAMS