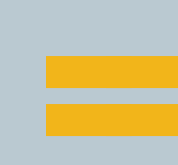


ENTREPRENEURIAL MINDSET



ENGINEERING SKILLSET



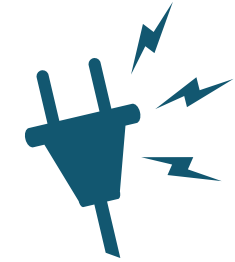
EDUCATIONAL OUTCOMES

THE 3C's



CURIOSITY

In a world of accelerating change, today's solutions are often obsolete tomorrow. Since discoveries are made by the curious, we must empower our students to investigate a rapidly changing world with an insatiable curiosity.



CONNECTIONS

Discoveries, however, are not enough. Information only yields insight when connected with other information. We must teach our students to habitually pursue knowledge and integrate it with their own discoveries to reveal innovative solutions.



CREATING VALUE

Innovative solutions are most meaningful when they create extraordinary value for others. Therefore, students must be champions of value creation. As educators, we must train students to persistently anticipate and meet the needs of a changing world.

OPPORTUNITY

IDENTIFY
an opportunity

INVESTIGATE
the market

CREATE
a preliminary
business model

EVALUATE
technical feasibility
customer value
societal benefits
economic viability

TEST
concepts quickly via
customer engagement

ASSESS
policy and
regulatory issues

DESIGN

DETERMINE
design requirements

PERFORM
technical design

ANALYZE
solutions

DEVELOP
new technologies
(optional)

CREATE
a model or prototype

VALIDATE
functions

IMPACT

COMMUNICATE
an engineering solution
in economic terms

COMMUNICATE
an engineering solution
in terms of societal benefits

VALIDATE
market interest

DEVELOP
partnerships and
build a team

IDENTIFY
supply chains
distribution methods

PROTECT
intellectual property

THESE SPECIFIC **SKILLS** REINFORCE THE
DEVELOPMENT OF AN ENTREPRENEURIAL MINDSET..

ENTREPRENEURIAL MINDSET

COUPLED WITH

ENGINEERING THOUGHT AND ACTION

EXPRESSED THROUGH

COLLABORATION

AND

COMMUNICATION

AND FOUNDED ON

CHARACTER

THIS IS THE ENGINEER WE NEED.
MINDSET ADDS TO A STRONG FOUNDATION.

CURIOSITY

DEMONSTRATE constant curiosity about our changing world
EXPLORE a contrarian view of accepted solutions

CONNECTIONS

INTEGRATE information from many sources to gain insight
ASSESS and **MANAGE** risk

CREATING VALUE

IDENTIFY unexpected opportunities to create extraordinary value
PERSIST through and learn from failure

APPLY creative thinking to ambiguous problems
APPLY systems thinking to complex problems
EVALUATE technical feasibility and economic drivers
EXAMINE societal and individual needs

FORM and **WORK** in teams
UNDERSTAND the motivations and perspectives of others

CONVEY engineering solutions in economic terms
SUBSTANTIATE claims with data and facts

IDENTIFY personal passions and a plan for professional development
FULFILL commitments in a timely manner
DISCERN and **PURSUE** ethical practices
CONTRIBUTE to society as an active citizen

KEEN STUDENT OUTCOMES CAN BE
MEASURED THROUGH ACTION AND ACTIVITY.