

DR. ERIC PEDERSEN

Dean of the College of
Science, Engineering & Technology



DIXIE STATE UNIVERSITY™

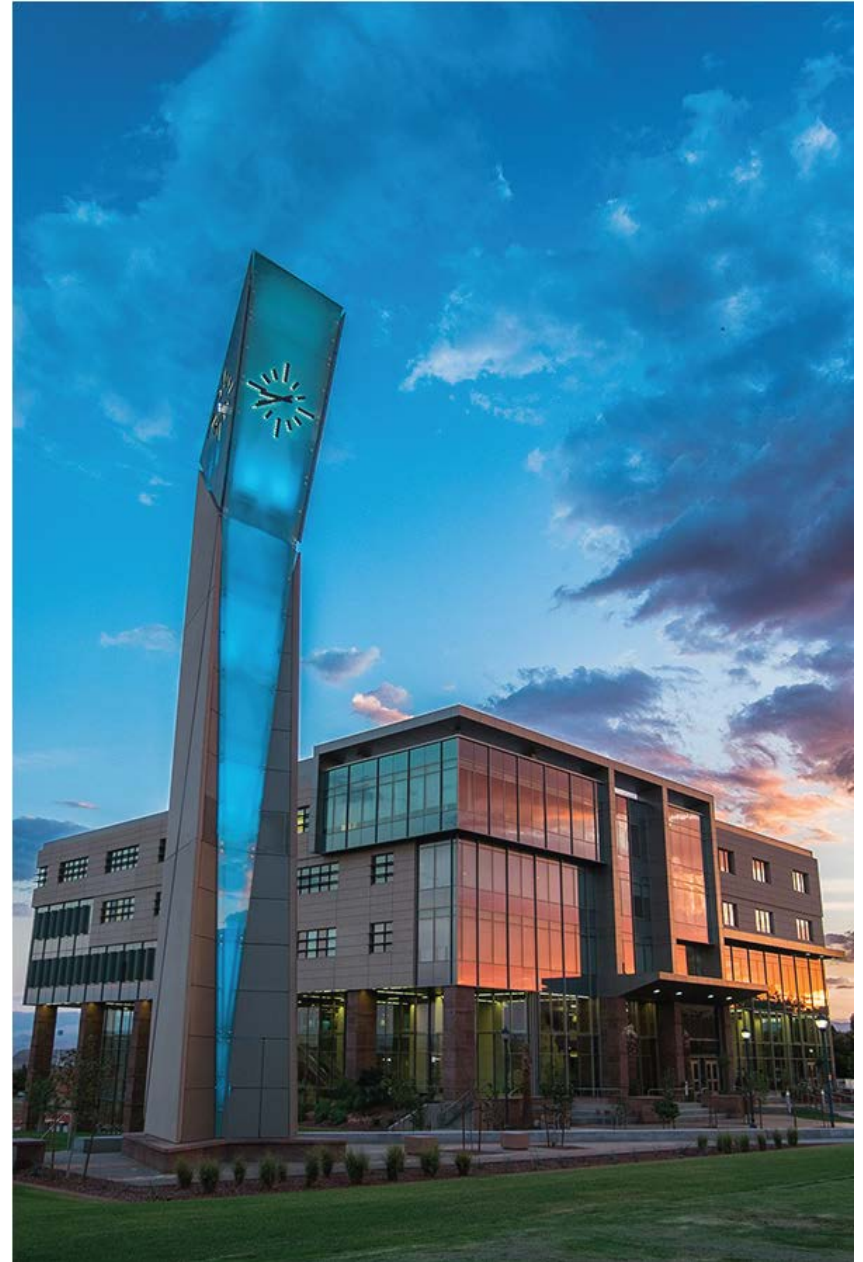
11,200+
students enrolled

4
master's degrees

45
bachelor's degrees

11
associates degrees

21
certificates and endorsements



The goal of the dual-mission model of the
COLLEGE OF SCIENCE, ENGINEERING & TECHNOLOGY
at Dixie State University:



MEET WORKFORCE NEEDS



THE PROBLEM

Local industry lacks the skilled tech talent they need to fill positions, grow, and solve 21st century problems

PROBLEM



12,500-25,000

Number of open tech jobs
within 300 miles of St. George/DSU
with an average salary of \$80,000

**EVERY 12.5 JOBS AT \$80K=
\$1 MILLION INCOME**

**EVERY 12.5K JOBS AT \$80K=
\$1 BILLION INCOME**

**EVERY 25K JOBS AT \$80K=
\$2 BILLION INCOME**

PROBLEM



9

Number of computer science trained teachers in K-12 schools in Utah in 2016

PROBLEM



40%

Percentage of K-12 schools that
teach computer programming

PROBLEM



10%

Percentage of Utah's computer science graduates **that were women** in 2015.

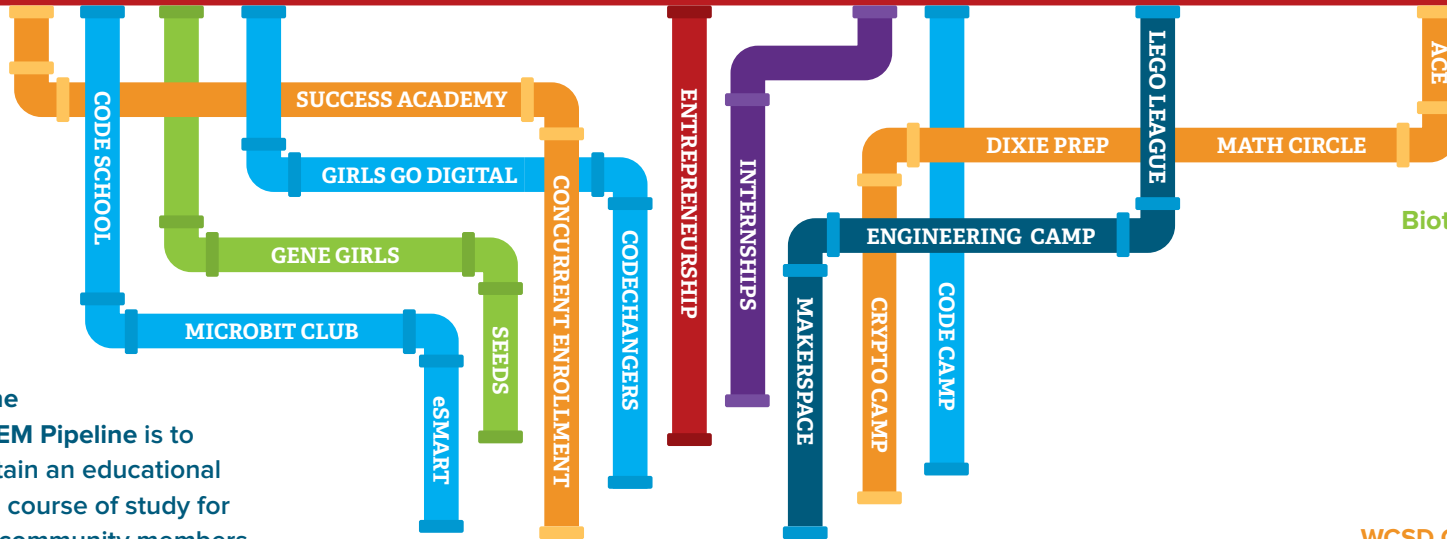
HOW WE'RE SOLVING **THE PROBLEMS**

- **START EARLY: AGES 8-18**
- **GIVE GIRLS OPPORTUNITIES**
- **PROVIDE TRAINING FOR ADULTS**
- **CONCURRENT ENROLLMENT**
- **CODE SCHOOL, DESIGN SCHOOL**
- **INTERNSHIPS**

DIXIE STATE UNIVERSITY™ K-16 PIPELINE

43,500 K-12 STUDENTS FROM 5 SOUTHERN UTAH COUNTIES *

*Beaver, Garfield, Iron, Kane, Washington



STEM █
Tech █
Engineering █
Biotech/Biology/Physical Science █
Entrepreneurship █
Internship █

- Dixie PREP: grades 6-8
- Red Rock Math Circle: grades 6-7
- Crypto Camp: grades 9-12
- SUCCESS Academy: grades 10-12
- ACE Academy: grades 10-12
- WCSD Concurrent Enrollment: grades 9-12
- Code Camp: grades K-adult
- CodeChangers: grades 2-12
- Girls Go Digital: grades 2-12
- Microbit Club: grades 5-7
- eSMART: girls grade 8
- Code School: grade 12-adult
- Entrepreneurship: University level, adult
- Gene Girls: grades 9-10
- SEEDS: grades K-8
- FIRST® LEGO® League: grades K-9
- Engineering Camp: grades 9-12
- Makerspace: University level, adult
- Internships: University level

The goal of the DSU K-16 STEM Pipeline is to build and sustain an educational and engaging course of study for students and community members in Southern Utah to fill the demand for qualified tech talent in the local private sector and fuel the robust regional labor market.

NEW DEGREES!

- Bachelor of Science in Mechanical Engineering
- Bachelor of Arts/Science in Design
- Bachelor of Science in Bioinformatics
- Bachelor of Science in Molecular Biology/Biochemistry
- Bachelor of Science in Applied and Computational Mathematics
- Certificates: Design, Biotechnology, Maker, and Computing Fundamentals

FIND OUT MORE: STEM.DIXIE.EDU
CONTACT: heizer@dixie.edu

DSU™
COLLEGE OF SCIENCE, ENGINEERING & TECHNOLOGY
 13 bachelor's degrees
 22 emphases
 11 minors
 1 associate degree
 4 certificates

25K
OPEN JOBS
IN REGIONAL
TECH MARKET
indeed.com



**10,000+ youth
enrolled in
DSU STEM
pipeline
in 2018**

DIXIE STATE UNIVERSITY™

AND

WASHINGTON COUNTY
SCHOOL DISTRICT

**TECH
PIPELINE**

K-8

ESMART
CODE CAMP
PROGRAMMING CLUBS
DIXIE PREP
RED ROCK MATH CIRCLE
GIRLS GO DIGITAL
CODECHANGERS

HIGH SCHOOL

DESIGN SCHOOL/CODE SCHOOL
CONCURRENT ENROLLMENT
SUCCESS ACADEMY
ACE ACADEMY *
CTE HIGH SCHOOL*

DSU

DIXIE TECH
CERTIFICATE PROGRAM
ASSOCIATE DEGREE
BACHELOR'S DEGREE

DIXIE STATE UNIVERSITY™

AND

WASHINGTON COUNTY
SCHOOL DISTRICT

**MECHANICAL
ENGINEERING
PIPELINE**

K-8

FIRST LEGO LEAGUE
FIRST TECH CHALLENGE
LEGO ROBOTICS
DIXIE PREP
RED ROCK MATH CIRCLE

HIGH SCHOOL

ENGINEERING CAMP
CONCURRENT ENROLLMENT
SUCCESS ACADEMY
ACE ACADEMY
CTE HIGH SCHOOL*

DSU

DIXIE TECH
CERTIFICATE PROGRAM
ASSOCIATE DEGREE
BACHELOR'S DEGREE

