



Illinois State
University

College of Engineering Proposal

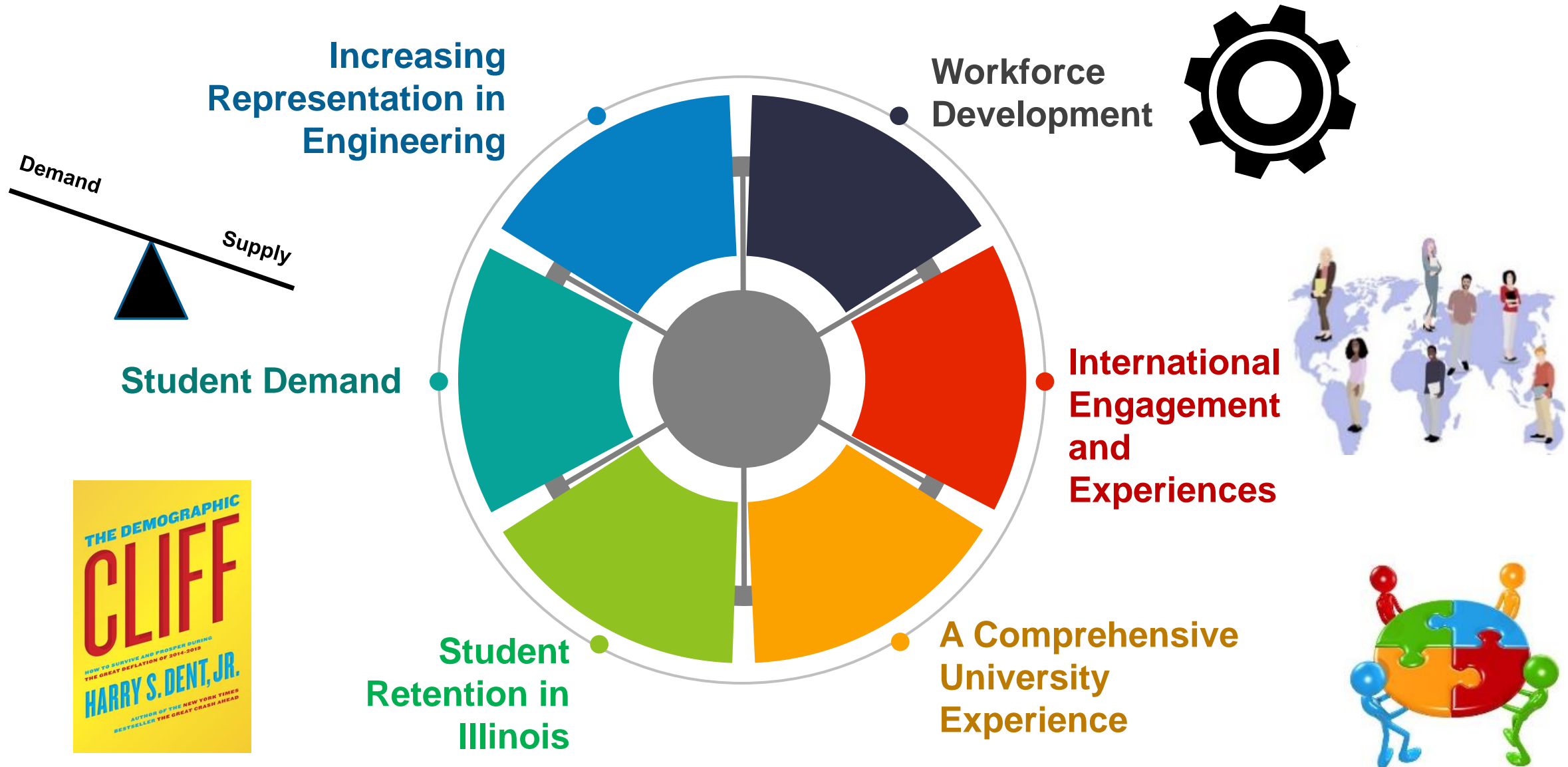


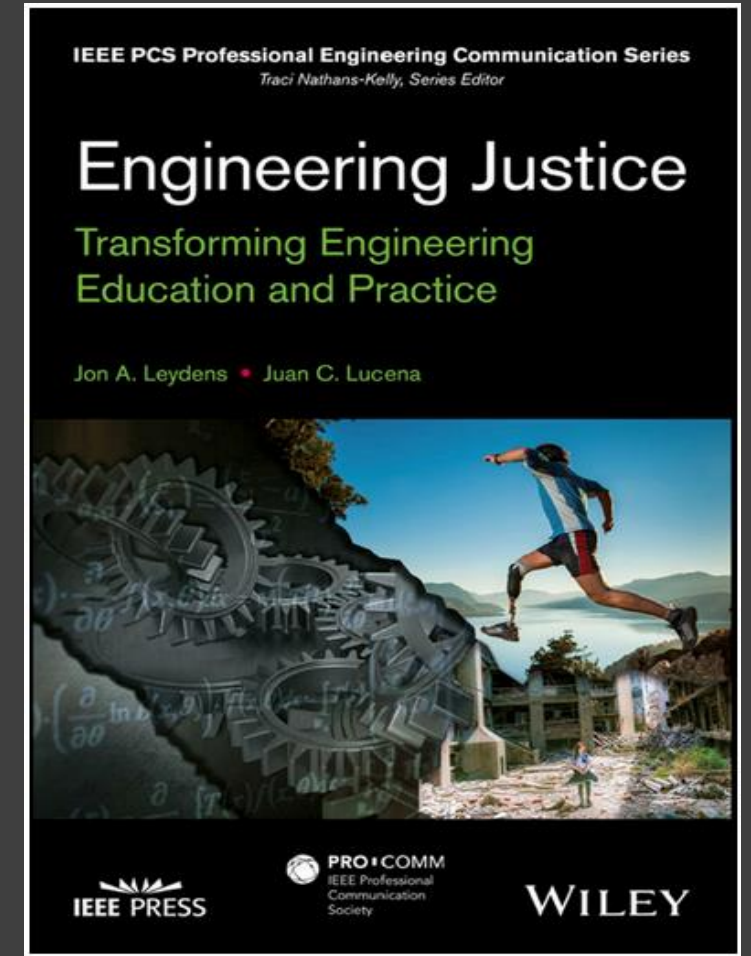
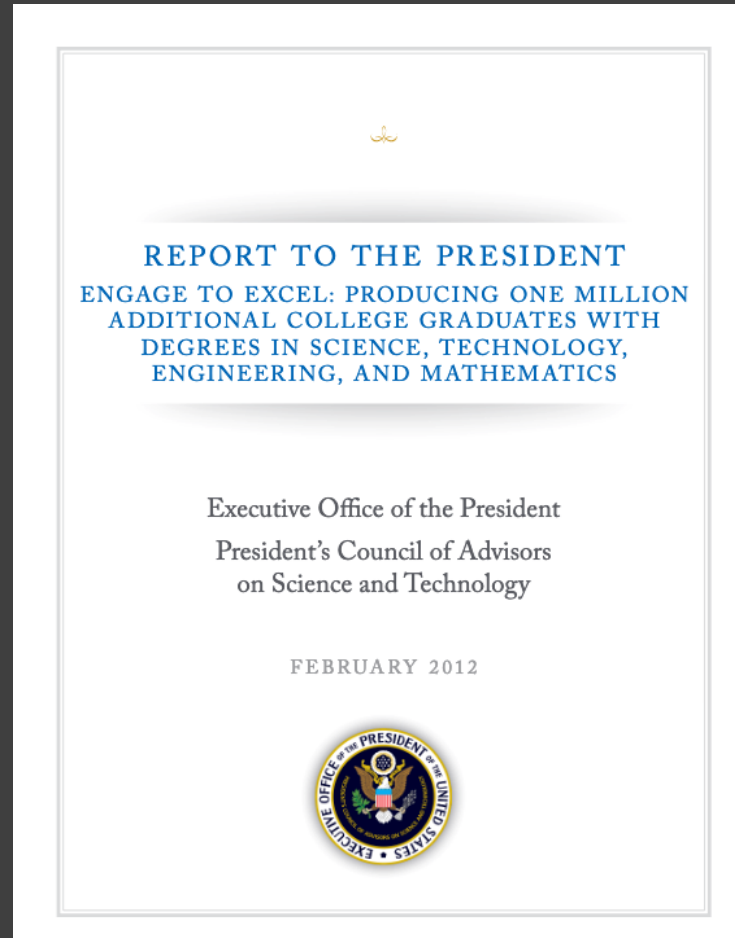
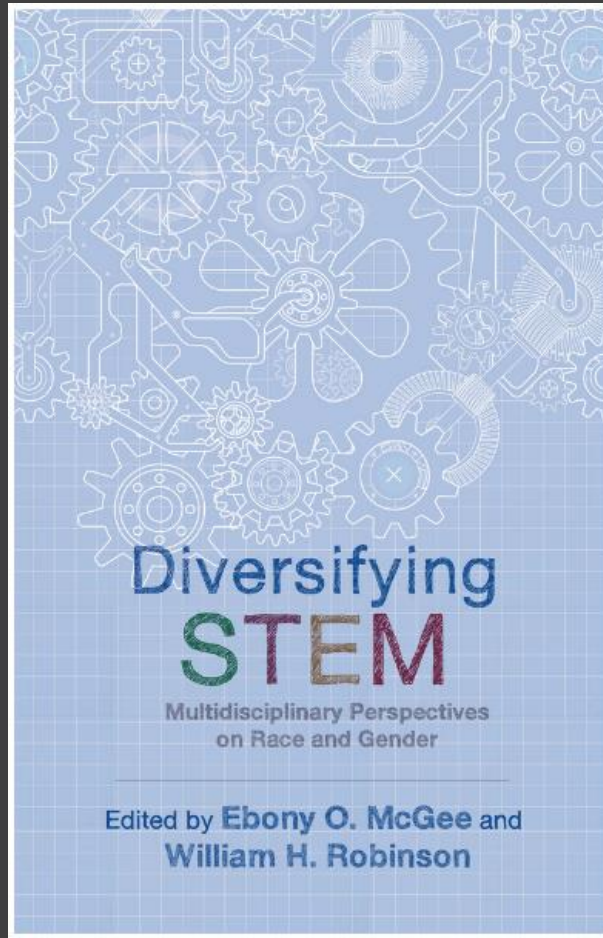
Presented to the IBHE Board

March 15, 2022



Compelling Case for a New Engineering College at ISU





... an opportunity to move forward.

Intentionally Designed From the Ground up as a Model for Equity and Diversity

01

Design

Designed from
the Ground Up
Unencumbered
from Legacy
Practices and
Impediments

02

Consultations

Consultations
with
Engineering
Deans and
Administrators
leading
innovations in
EDI

03

Best Practices

Aligned with
ASEE 15 Best
Practices for
Recruiting and
Retaining
Underrepresented
Minorities in
Engineering

04

IBHE-Aligned

Aligned with
IBHE Strategic
Plan:
A Thriving
Illinois

05

Student Support

Generous
Financial Aid
Scholarships
and Multi-
Dimensional
Wrap Around
Support
Services

EDUCATION FRAMEWORK

MISSION STATEMENT SUMMARY

Our vision is that ISU Engineering is recognized for excellence in the education of a diverse community of students who possess the attitudes, behaviors, and skills of engineering professionals. Building upon our Engaged Institution culture and faculty commitment to excellence, ISU Engineering prepares graduates for success by melding theory and practice in core engineering disciplines and innovative cross-disciplinary experiences.



STUDENT RECRUITING AND PATHWAYS

FIRST YEAR ENTRY

TRANSFERS

INTERNATIONAL STUDENTS



DEGREE PROGRAMS

BS
Electrical
Engineering

ABET Accredited
Optional
Concentrations

BS
Mechanical
Engineering

ABET Accredited
Optional
Concentrations

BS
General
Engineering

Optional
Concentrations

MINORS



POST GRADUATE PATHS

SUPPORT

MENTORSHIP



WRAP AROUND SUPPORT SERVICES

ENGINEERING CURRICULA

GENERAL EDUCATION

10 COURSES
30 CREDIT HOURS

MATH & NATURAL SCIENCE

9 COURSES
32 CREDIT HOURS

ENGINEERING

16 COURSES
54 CREDIT HOURS

STUDENT ELECTIVES
2 COURSES
6 CREDIT HOURS

		CREDIT HOURS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
YEAR 1	FALL		COMMUNICATIONS			MATH				NATURAL SCIENCE				INTRO				
	SPRING		COMMUNICATIONS			MATH				NATURAL SCIENCE				DESIGN				
YEAR 2	FALL		FINE ARTS			MATH				NATURAL SCIENCE			PROJECTS		FOUNDATION			
	SPRING		HUMANITIES			SOCIAL SCIENCE				NATURAL SCIENCE			DESIGN		FOUNDATION			
YEAR 3	FALL		CIVIC LIFE			LANGUAGE				DESIGN			FOUNDATION			ELECTIVE		
	SPRING		GENERAL			MATH				PROJECTS			FOUNDATION		TECHNICAL			
YEAR 4	FALL		US TRADITIONS			MATH				TOPICS			CAPSTONE			ELECTIVE		
	SPRING		GENERAL			TECHNICAL				CAPSTONE			TOPICS					

Aspiration: To be an exemplar for EDI/Diversity Student Success

Diversity Action Plan	Faculty Development Programs	Institutional Leadership Engagement	Scholarships and Fellowships	Targeted First Year Programs
Equity Impact Analysis	Framework for Inclusive Teaching Excellence	Goal 1: Academic Affairs Retreat	Recruitment & Retention: \$504,000	Orientation & Support Programs
Educational Diversity Enhancement Program	GROWTH Change Team	Intentional Faculty Diversity Hiring Plan	40-50 Redbird Scholarships (\$2,000 - \$6,000 each)	Flexible, Balanced Course Loads Across All Years
COACHE	Framework for Inclusive Service & Support Excellence	Leadership Accountability & Reward Systems Centered on EDI	New \$1,000 Financial Block Threshold (Up from \$250)	First-year Introduction to Engineering Course
Joint Hire Program	Microaggression Workshops		Link Diversity Students with Professional Organizations	
Search Advocate Program	University Faculty Mentoring Network		Charles Morris STEM Scholarships	
Equity, Diversity, and Inclusion Metrics	NCFDD		Support for Diversity RSOs	

Aspiration: To be an exemplar for EDI/Diversity Student Success

Work-Life Balance

Engineering Living & Learning Community

Interdisciplinary Engineering Collaborative Spaces

Access to MultiCultural Center Resources

Targeted Experiential Learning (All Levels)

Hands-on, Experiential Learning Curriculum

Deductive + Inductive Problem-Solving Methods

User-Centered Design Curriculum

Internships + Externships

Access to Partner Donated State-of-the-Art Equipment

Research-Based Projects

Early Alert Programs

Tutoring & Peer Academic Coaching

Redbird Care Team + Persistence Committee; micro Grants

Call GPA 911 (Online Support Outreach)

Comprehensive & Proactive Advising

Student Success Dashboards

Pipeline Programs

Partnerships with Community-Based Organizations

Community Colleges partnerships to Support Seamless Transfers

Articulation + Reverse Articulation Agreements

Pilot Targeted Student Admission Pathway Programs

Positive Self-Efficacy Programs

Support Through STEM Alliance, CeMaST, MASAI

SOAR Scholarships Designed to Eliminate Institutional Bias

College Level Peer Academic Coaching

Food Pantry; Career Closet; Diversity Student Counseling Child-Care Center

Aspiration: To be an exemplar for EDI/Diversity Student Success

Positive Identity Development Programs

Creative Learning Spaces;
Identify Affirming Spaces

Space for Engineering RSOs e.g. SBE, SWE, SPHE

Students Encouraged to join ISUs 400+ Affirmative Groups

Partnerships with Key Professional Organizations

Society for Women Engineers; National Society of Black Engineers; AISES; SPHE

Students Engagement with Alumni for Mentoring & Scholarships

Integrate Engineering Students into Existing Centers e.g. CeMaST, STEM Labs

Entrepreneurship Programs

Opportunities for Hands-on Experience with Industry Partners e.g. Rivian, ADM

Students Participation in Startup Showcase; Illinois Innovation Network

Support through STEM DEI Taskforce

Support through Blacks in Deep Tech

Facilitated Study Groups

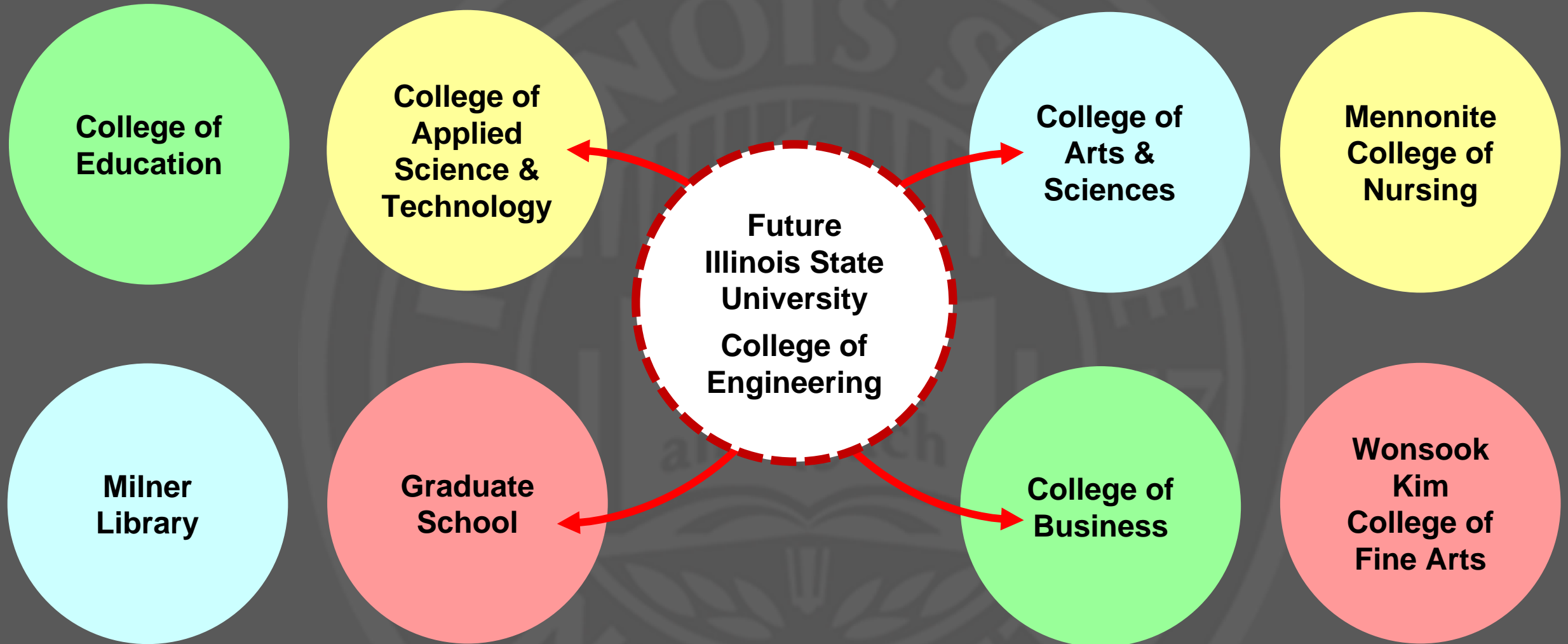
Strong Supplemental Instruction Program

Summer Bridge Programs

Four Aspirational Summer Bridge Programs Identified as Models

External grants: Proposal to Establish a HHMI Bridge Program for Science Majors

A Strategic Addition to ISU's Portfolio



SITE LOCATION

College of Engineering Site

Turner Hall
Department of Technology

Degarmo Hall
College of Education

Fell Hall
College of Arts and Sciences

McCormick Hall
College of Applied Science and Technology

State Farm Hall of Business
College of Business

Center for the Visual Arts
Wonsook Kim College of Fine Arts

Edwards Hall
Mennonite College of Nursing

Schroeder Hall
College of Arts and Sciences

Felmley Hall
College of Arts and Sciences

Stevenson Hall
Economics, English, Foreign Languages,
Mathematics, and Philosophy

Old Union
School of Information Technology



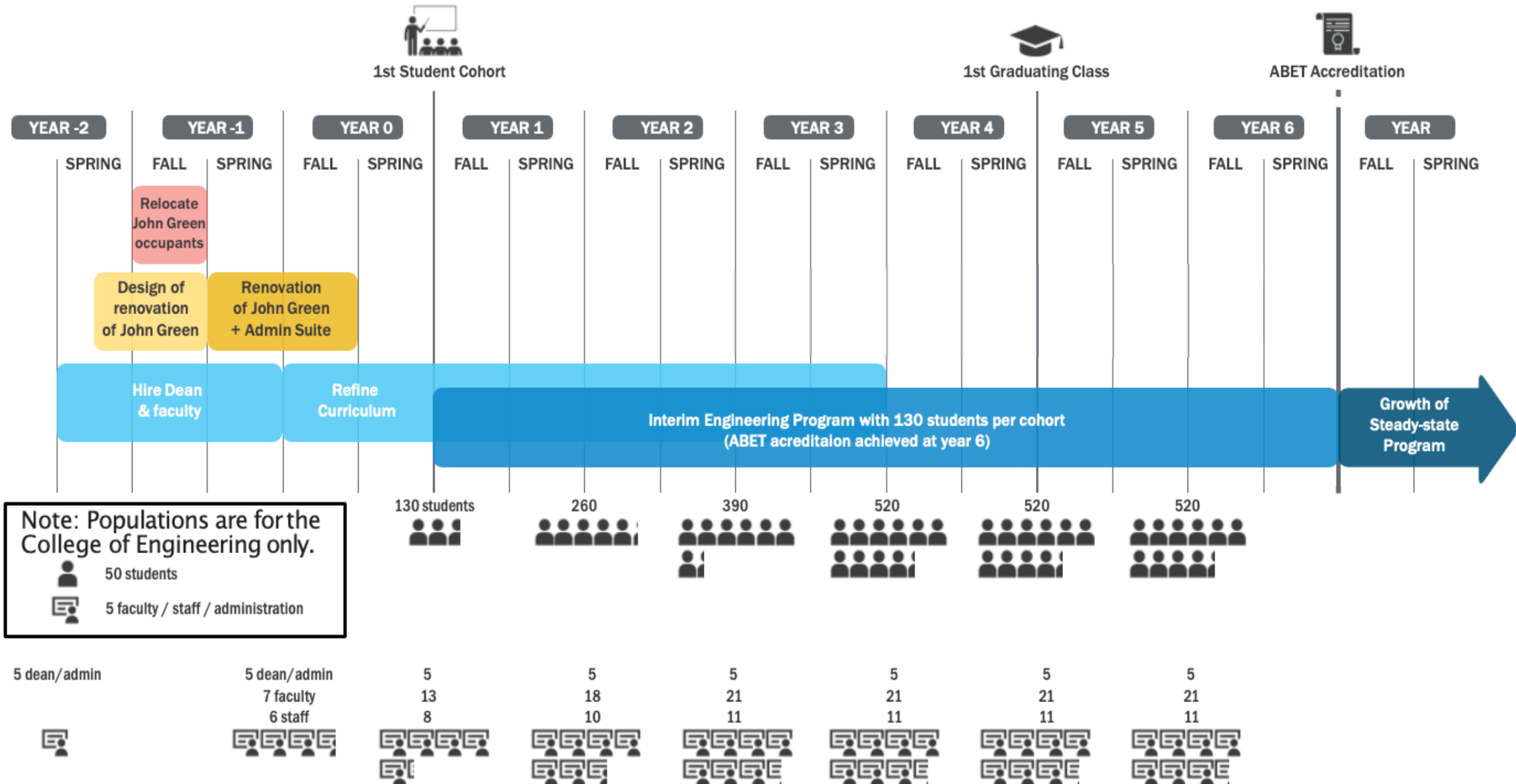
15 mins walk

QUAD

College Ave



Implementation Timeline



Thank You!

