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*A National Science Foundation Center of Excellence*

## **Dr. Karen Wosczyzna-Birch**

Principal Investigator & Executive Director  
College of Technology

Regional Center for Next Generation Manufacturing

# College of Technology – (COT)



## Creation

- Legislatively created in 1995
- Merger of Technical Colleges with Community Colleges
- Established by Higher Education Council

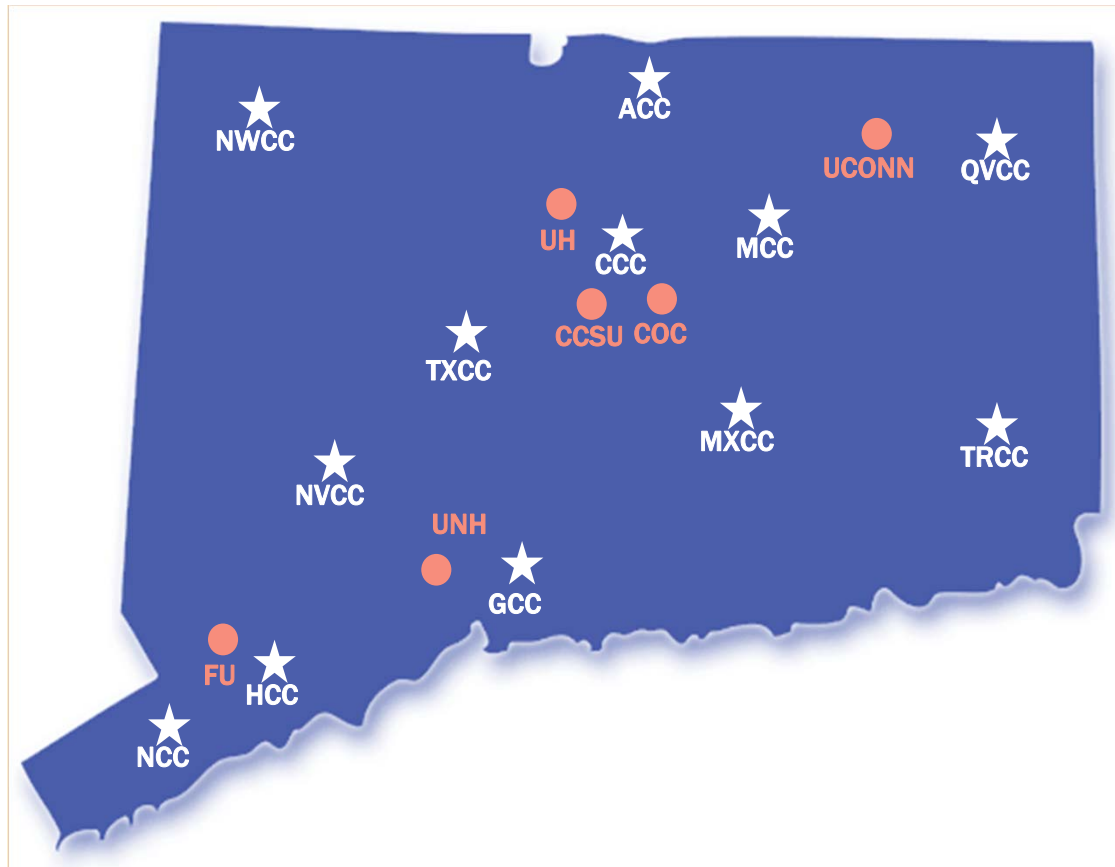
## Purpose

- Seamless pathways between community colleges & universities & technical high schools
- Articulation agreements for engineering and technology programs
- Respond to workforce needs through community college programs

## Leadership

- Governed by a Site Wide Coordinator's Council
  - Community Colleges
  - State & Private Universities
  - High Schools
  - Non-Profits
  - Business & Industry
  - Consultants

# COT – Higher Education Partners



## Legend

### Community Colleges (12)

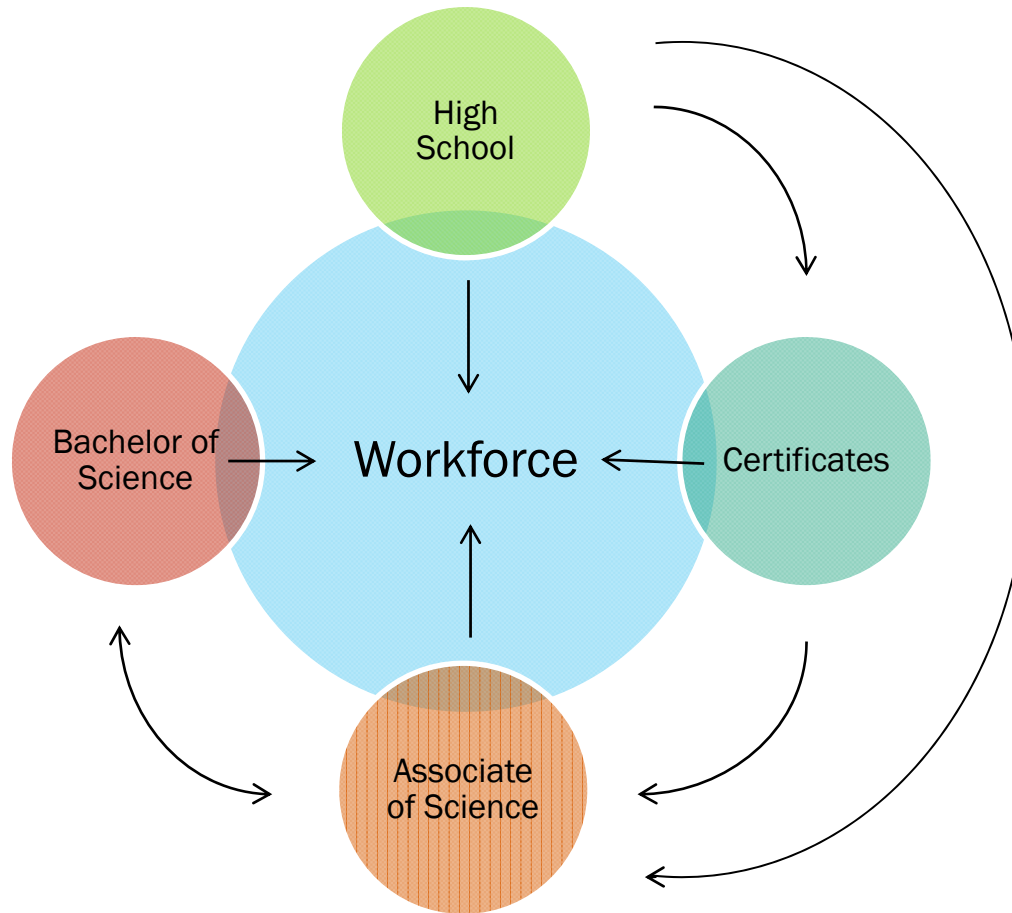
ACC	Asnuntuck CC
CCC	Capital CC
GCC	Gateway CC
HCC	Housatonic CC
MCC	Manchester CC
MXCC	Middlesex CC
NCC	Norwalk CC
NVCC	Naugatuck Valley CC
NWCC	Northwestern CT CC
TRCC	Three Rivers CC
TXCC	Tunxis CC
QVCC	Quinebaug Valley CC

### Universities (8)

UCONN	University of Connecticut
UNH	University of New Haven
CCSU	Central Connecticut University
COC	Charter Oak State College
FU	Fairfield University
UH	University of Hartford
SCSU	Southern CT State University
ECSU	Eastern CT State University

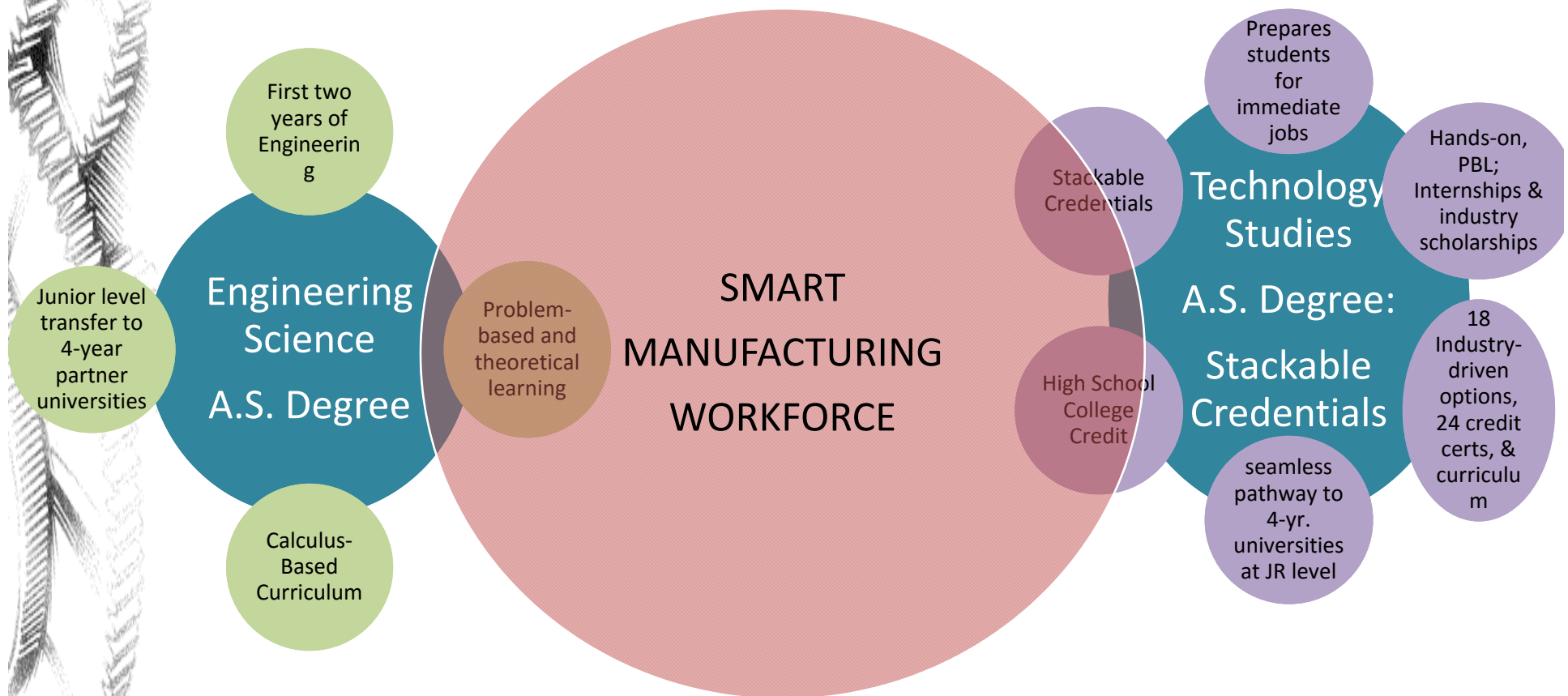


# COT Pathways & Articulation



# COT Pathways & Articulation

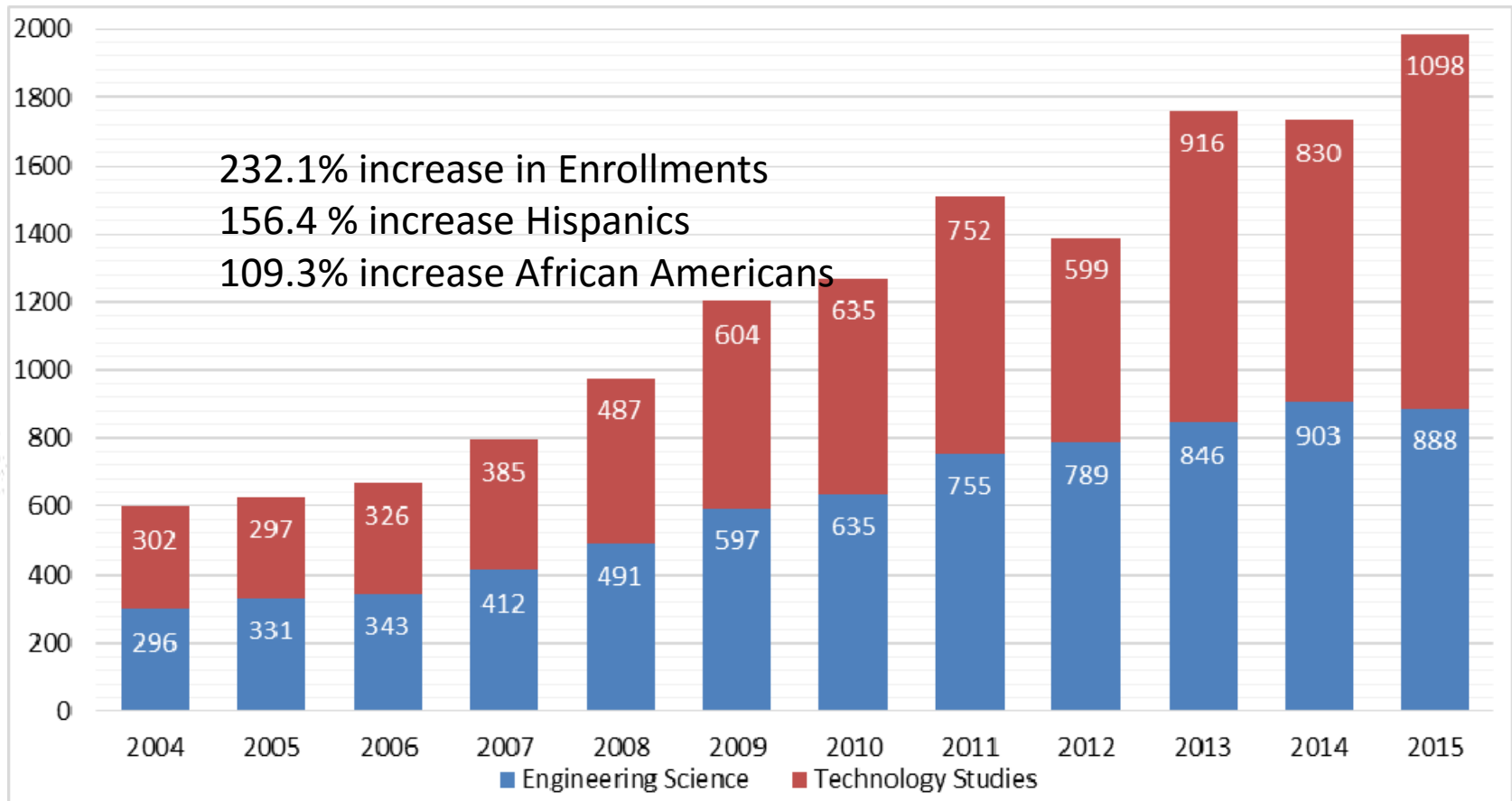
All CCs have same core curriculum for each pathway



**OVER 18 OPTIONS INCLUDING AN ADDITIVE MANUFACTURING OPTION**



# Enrollment 2004-2015





# Regional Center for Next Generation Manufacturing (RCNGM)



- 3 Rounds of National Science Foundation Advanced Technological Education (NSF ATE) Funding



- NSF Center of Excellence
- Targets Underserved & Underrepresented Populations
- Provides Degrees & Credentials for Workforce Readiness
- Recognized infrastructure of COT as a national model
- Received an international supplement in 2012 for international collaboration with Germany



# COT-RCNGM Goals

## Goal One

- Student Recruitment & Persistence

## Goal Two

- Professional Development

## Goal Three

- Curriculum Development

## Goal Four

- Dissemination – Regional Collaboration



# Student Recruitment & Persistence: Maker Movement Initiatives



- 1<sup>st</sup> Annual Greater Hartford Maker Faire: Oct. 3, 2015
- Over 1500 attendees and 58 Makers
- 2<sup>nd</sup> Annual Greater Hartford Maker Faire
  - Saturday, October 8, 2016
  - Tunxis Community College
  - Featured in August 1<sup>st</sup>, 2016, AACC "Community Daily "article published nationally



CC students featured in article

American Association of Community Colleges' *Community College Daily*  
[Recruiting for Manufacturing through Maker Faires](#)

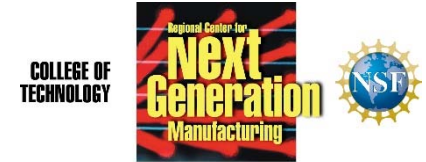


“For Wosczyzna-Birch, the success of that event led to her participation in a gathering for the Nation of Makers initiative in June at the White House. She is now the Connecticut lead for the National Maker Network. Wosczyzna-Birch spoke last week at the High Impact Technology Exchange Conference (HI-TEC) in Pittsburgh. It is organized by 31 Advanced Technological Education (ATE) centers and projects, including the American Association of Community Colleges (AACC). “

### **“Prototyping products**

An additive manufacturing program’s 3-D models of attendees’ faces is one example of the interactive activities the colleges used to show off advanced technologies and their students’ skills, as well as a way to start conversations about technical careers.”

## RCNGM: COLLABORATORS



### NSF AND ACADEMIC PARTNERS

- Mechanical & Manufacturing Technologies (MET2)
- Regionally with all New England States
- MatEdU: Edmonds CC Washington, NSF Center and Project Grant – TEAMM
- AMCC. St. Louisville, Kentucky
- NCATC

### 8 CT ADVANCED MANUFACTURING CENTERS

Asnuntuck CC, Naugatuck Valley CC, Housatonic CC, Quinebaug Valley CC  
Manchester CC, Middlesex CC, Three Rivers CC, Capital CC

**NEW Metal Additive Mfg Center in 2017 at ACC**  
**UCONN/Pratt and Whitney Additive Mfg Center**