Statewide Model Programs of Study

Health Sciences and Technology

Thank you for joining! We will get started shortly



Agenda

Quick Notes:

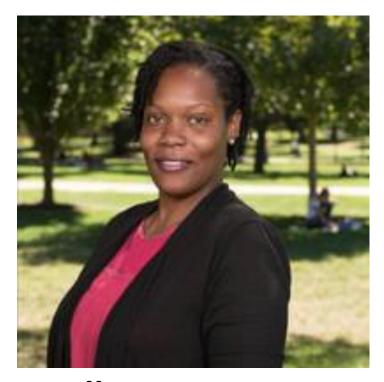
- Highly encourage
 Q&A and Chat Box
- This webinar is being recorded
- Slide deck will be linked in the chat

- Welcome from ICCB and EdSystems
- Background on Model POS Guides
 - Policy Alignment
 - Role of Advisory Committee
- Model POS Mapping Process
- Review of POS Guide for Health Sciences and Technology
- POS in Action: City Colleges of Chicago, Roadmap and "Model Pathways"
- Feedback and Next Steps





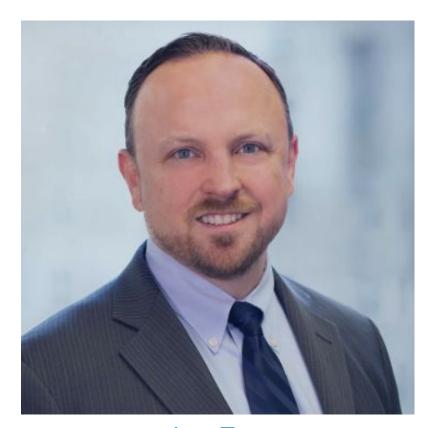
Welcome from Illinois Community College Board



Janelle Jones
Director for CTE



EdSystems Staff



Jon Furr Executive Director



Juan Jose Gonzalez Pathways Director



Meagan Mitchell Pathways Manager



The EdSystems Mission

Shape and strengthen education and workforce systems to advance racial equity and prepare more young people for productive careers and lives in a global economy.



College & Career Pathways



Bridges to Postsecondary



Data Impact & Leadership







Background on Model Programs of Study



Why Develop Statewide Model Programs of Study?

The primary purposes and goals for the Model Programs of Study Guides are to:

- Provide guidance and exemplars for local programs to adopt or customize as they develop programs of study for approval as part of the Perkins V Plan.
- Identify priority dual credit and early college courses that are foundational to the industry area and well-situated for statewide scaling and articulation.
- Define the competencies that should be sequenced across a program of study course sequence to prepare students for the future of work in that industry area.
- Identify entry points for employers to support coursework and related experiences.



Why Develop Statewide Model Programs of Study? Pt. 2

Intended audiences:

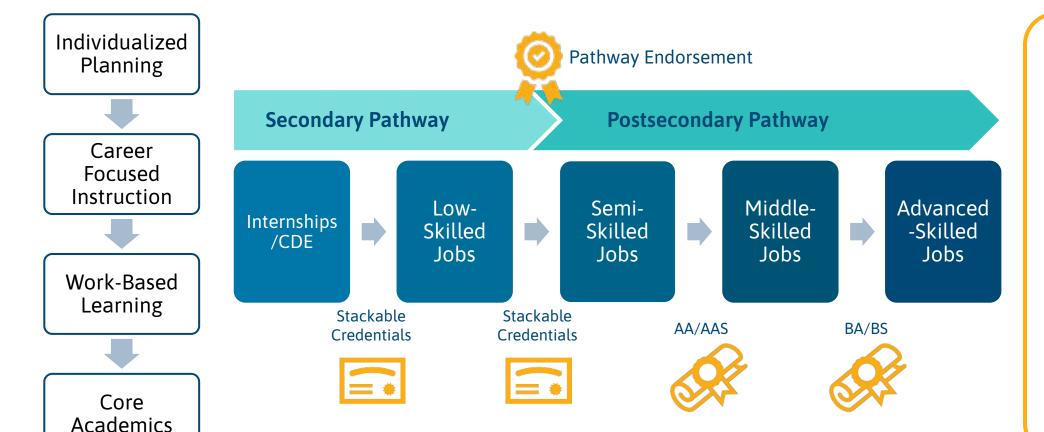
- High school faculty working in pathways
- Community College faculty and staff (e.g. academic deans & department heads, early college liaisons, etc.)
- Education for Employment System Directors

Subsequent Presentations

- October = Education
- November = Manufacturing and Engineering
- January = Information Technology



State Pathways Model



OUTCOMES:

Credential Attainment

£

Labor Market /
Economic
Development





College and Career Pathway Endorsement Framework



INDIVIDUAL PLAN

Each student completing an endorsement must have an individualized plan, which includes college planning linked to early understanding of career goals, financial aid, resume, and personal statement.

PROFESSIONAL LEARNING

Awareness, exploration, and preparation activities that provide opportunities for students to interact with adults in their workplace

9th | 10th | 11th | 12th

At least 2 career exploration activities or 1 intensive experience | 60 cumulative hours of paid or credit supervised career development experience with a professional skills assessment

At least 2 team-based challenges with adult mentoring

Through these experiences, a student gains essential employability and technical

competencies in their identified sector.

CAREER-FOCUSED INSTRUCTIONAL SEQUENCE

Two years of secondary coursework, or equivalent competencies, that articulate to a postsecondary credential with labor market value. Must include at least 6 hours of early college credit.

9th | 10th | 11th | 12th

Orientation / Introduction

Skill Development

Capstone / Advanced Courses

ACADEMIC READINESS

Ready for non-remedial coursework in reading and math by high school graduation through criteria defined by district and local community college

Policy Alignment



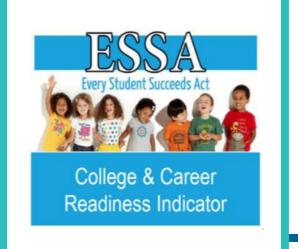




TEACH ILLINOIS STRONG TEACHERS, STRONG CLASSROOMS

POLICY SOLUTIONS TO ALLEVIATE TEACHER SHORTAGES IN ILLINOIS SEPTEMBER 2018

ILLINOIS STATE BOARD OF EDUCATION







State Pathways Policy Framework: College, Career and Life Ready

Accelerated Towards a Career Area

- Multiple years of coursework, increasing commitment to the field
- Emphasis on Early college coursework in "Career-focused" subjects
- Courses go Beyond
 Traditional High School
 CTE and Industry
 Credentials, include
 Complementary General
 Education Courses

Academically Ready for College

- Required success in College-Level, career-focused coursework and electives
- Required placement college-level placement in Math and English (through collaboration with local Community College)

Foundational Skills for All Careers

- General employability and entrepreneurial skills embedded in HS experience
- Student have a familiarity with work-based setting and robust experience in problem-based learning





2020 Guides

- Education
- Health Sciences
- Information Technology
- Manufacturing and Engineering

edsystemsniu.org/guides

2021 Guides

- Agriculture, Food and Natural Resources
- Architecture, Construction and Energy
- Arts and Communications
- Finance and Business Services





Role of Advisory Committee

Expertise and guidance:

- What are trends in the industry that aren't reflected in Labor Market Information?
- What credentials/degrees are emerging as most promising in the field?
- How does our desk analysis relate to on-the-ground implementation?
- What are future of work implications for this sector?

Inform key decision-points in this process:

- Pathway map approach
- Selecting strategic early college credit courses
- Identifying key competencies (building from existing State technical competencies)



Mapping Process



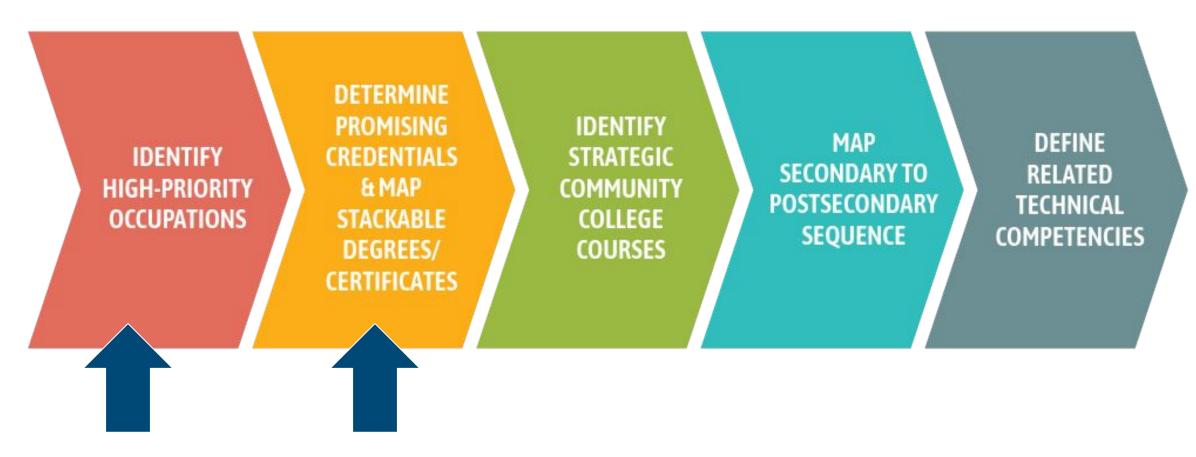
Model Programs of Study Mapping Process



6 month process



Model Programs of Study Mapping Process







High Priority Occupations & Promising Credentials

- Using Department of Labor data and the MIT Living Wage Calculator for the State of Illinois as a reference, High Priority Occupation defined
 - Occupations with a positive growth outlook and
 - Occupations whose salaries are near or greater than the "Living Wage" of 1 Adult + 1 Child in Illinois.
- A "promising credential" is a degree or college certification that immediately prepares an individual for entry into a high-priority occupation, with a focus on credentials available in typical Illinois Community College.
 - Credential may also be is a clear precursor to or stackable credential for a high-priority occupation



Finance/Business Example	Median Wage Hourly	Living Wage?	Growth?	Entry Education	Annual Job Openings	Percentage Growth (2016-2026)
Accountants and Auditors	33.89	Yes	Yes	Bachelor's Degree	5,510	8%
Business Operations Specialist	36.81	Yes	Yes	Bachelor's Degree		
<u>Financial Analyst</u>	39.29	Yes	Yes	Bachelor's Degree	1,310	7%
<u>Actuary</u>	49.34	Yes	Yes	Bachelor's Degree	140	23%
Market Research Analysts and Marketing Specialists	29.15	Yes	Yes	Bachelor's Degree	2960	22%
Human Resource Specialist	28.79	Yes	Yes	Bachelor's Degree	2230	6%
First-Line Supervisor of Retail Sales Workers	18.74	No	Yes	High school diploma	5,620	3%
First-Line Supervisor of Office & Administrative Support Workers	28.3	Yes	No	High school diploma	4,450	0%
First-Line Supervisor of Non-Retail Sales Workers	34.04	Yes	Yes	High school diploma	1,070	3%
Human Resource Assistant	19.49	No	No	Postsecondary nondegree award	380	-4%
Lodging Manager	21.62	No	Yes?	High school diploma or equivalent	180	9%
Insurance Claims and Policy Processing Clerks	19.94	No	Yes	High school diploma or equivalent	1090	10%

Common CC Programs

Guided Transfer

- Business AA**^^
- Accounting AA**^^
- Actuary AA^{^^}

Business AAS, with specialities/certs^^

- General,**
- Insurance,
- HR,**
- Entrepreneurship,**
- Management,**
- Marketing,**
- Hospitality**

Supply Chain

Supply Chain AAS, AA/AS^{^^}

Accounting

Accounting AAS**^^

Leading to Occupations/Careers

Entry Level Bachelor's Degree Positions

- Business Operations Specialist OR Financial Analyst OR Market Research Analysts OR Human Resource Specialist
- Accountants and Auditors
- Actuary

Small/Local Business

- First-Line Supervisor of Retail Sales Workers OR Office & Administrative Support Workers OR First-Line Supervisor of Non-Retail Sales Workers
- Human Resource Assistant OR Lodging Manager OR Insurance Claim Clerk

Supply Chain

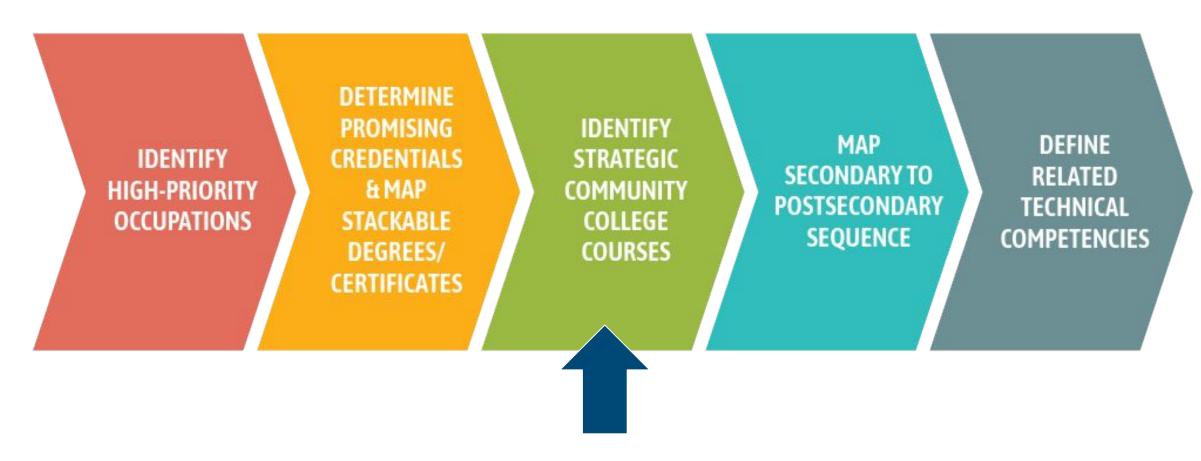
 Supply Chain Manager OR Production, Planning, & Expediting Clerks

Clerk Roles

 Payroll & Timekeeping, OR, Bookkeeping, Accounting, & Auditing Clerk, OR Billing and Posting Clerks

^{**} Aligns with ISBE CTE Program of Study Matrix

Model Programs of Study Mapping Process





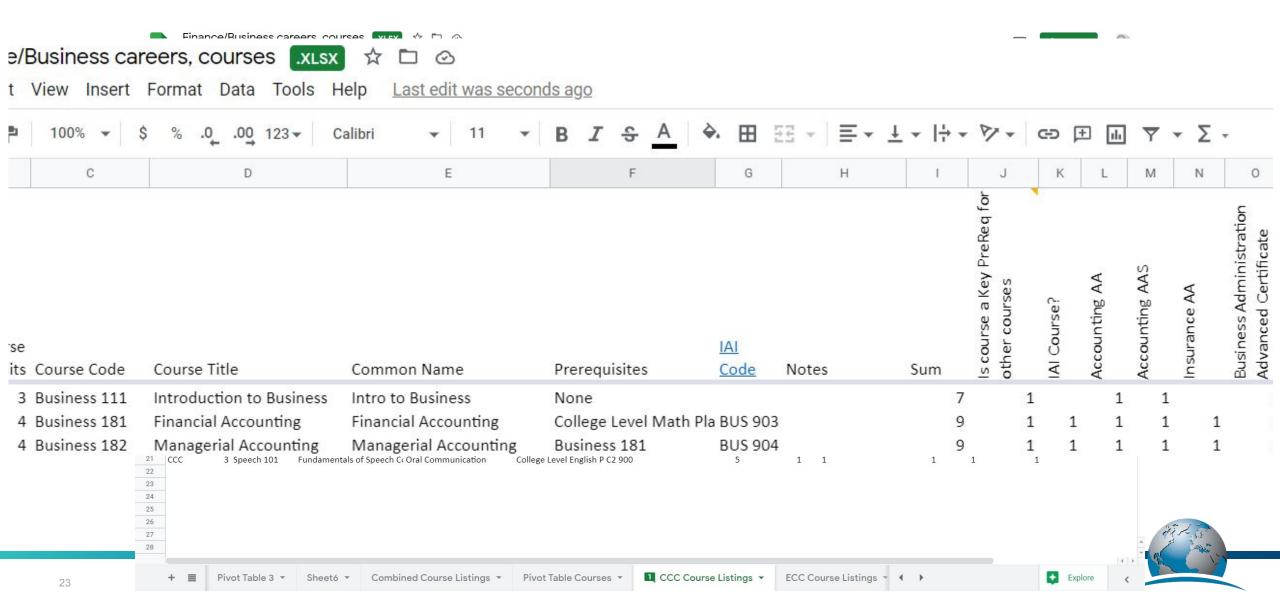


Identify Strategic Community College Courses

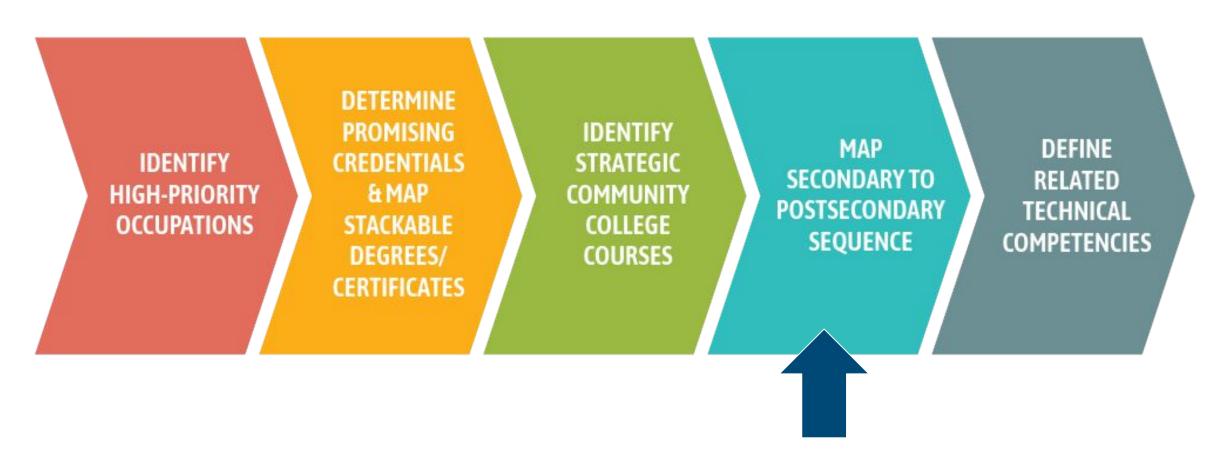
- Analyze "promising credential" program requirements at various Community Colleges in the state
- Tally and label all of the "career-focused" & "general education" courses across programs to determine which of these courses:
 - Are most common across targeted programs,
 - Are more likely accessible for dual credit, and
 - Have the potential for transferability and currency (through the Illinois Articulation Initiative) or have industry credentials



Identify Strategic Community College Courses



Model Programs of Study Mapping Process







Map Secondary to Postsecondary Sequence

- Recommend early college courses reasonably accessible to HS students, goal is to at least get 6+ career-focused credit hours by HS graduation
- Keep open possibility for unique opportunities, i.e. work-based learning or capstone course
- Consider typical teacher and faculty credentials, as well as course delivery and approval processes
- Suggest initial post secondary courses and sequences that continue to accelerate student
- Recommend sequence in general education subject areas, including early college and AP supplements

Model Programs of Study Mapping Process







Define Related Technical Competencies for Key Courses

- Select foundational courses in each Model Programs of Study area
 - Courses map to multiple credentials within the industry area,
 - Can be accessed for early college credit at secondary level, and
 - Not currently recognized by the IL Articulation Initiative (IAI)
- Determine a set of technical competencies for each course (i.e. learning objectives)



Review Health Sciences POS Guide









AP or **Dual Credit**

ENGLISH

Dual Credit

Course

Dual Credit Course Affiliated With IAI Code

Course or Program Prepares for Industry Credential Postsecondary Course Affiliated

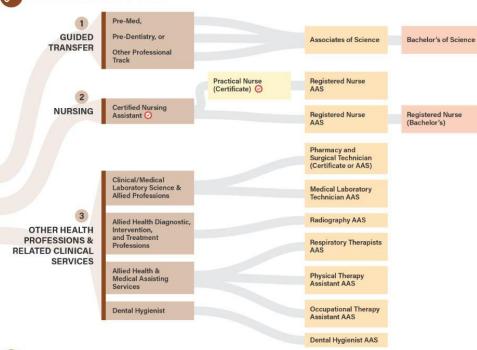
with IAI Code

College and Career Pathway Endorsement



If courses in this column were accomplished through early college credit, students should take the next required course in the sequence or, if none, additional AAS or Major Courses





SELECTED OCCUPATIONS, WAGES, & JOB GROWTH

	Program	Typical Job	Near or Above Living Wage Threshold for 1 Adult + 1 Child ¹	Median Hourly Wage ²	Growth in Illinois: Annual Job Openings ²	Growth in Illinois: % Change Over 10 years ²	Stackable?	
	Pre-Professional Track	Pediatricans, General	Y	\$66.93	30	2%	Typically Requires	
1		Dentists	Υ Υ	\$68.79	190	9%	& Prof. School	
2	Nursing / Registered Nurse	Nursing Assistants	N	\$13.72	7,340	5%	Typically Required for LPN or RN	
		Licensed Practical and Licensed Vocational Nurses	Y	\$24.24	1,640	2%	Can Stack to RN at Select IL College	
		Registered Nurses	Y	\$34.74	8,690	15%	Can Stack to BSN Select IL Colleges	
3	Surgical Technology	Surgical/Pharmacy Technicians	Y	\$15.44 - \$23.05	220 - 1,600	1 – 5%		
	Medical & Laboratory Tech.	Medical and Clinical Laboratory Technologists	Υ	\$34.44	410	4%	Not Typically	
	Radiography	Radiologic Technologists	Y	\$30.52	380	2%		
	Respiratory Therapy	Respiratory Therapists	Y	\$28.62	350	17%	Stackable	
	Physical Therapist Assistant	Physical Therapist Assistants	Υ	\$28.60	730	20%		
	Occupational Therapy Assistant	Occupational Therapy Assistants	Y	\$29.75	380	21%		
3	Dental Hygiene	Dental Hygienists	Y	\$35.68	580	9%	Not Typically Stackable	

^{1.} Living wage calculations are based on MIT's Living Calculator (livingwage.mit.edu), where the "Living Wage" for 1 Adult + 1 Child is \$26.27/hour for the state of Illinois. "Near" defined as 85% of the statewide living wage, which is \$22.33/hour

^{2.} U.S. Department of Labor, CareerOnestop (careeronestop.org/explorecareers)

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Pre-Med, **GUIDED** Pre-Dentistry, or Bachelor's of Science **Associates of Science TRANSFER** Other Professional Track **Practical Nurse Registered Nurse** (Certificate) ② AAS **Certified Nursing NURSING Registered Nurse Registered Nurse** Assistant 🕗 AAS (Bachelor's) Pharmacy and Surgical Technician (Certificate or AAS) Clinical/Medical **Laboratory Science & Medical Laboratory** Allied Professions **Technician AAS** 3 Radiography AAS Allied Health Diagnostic, **OTHER HEALTH** Intervention, and Treatment **PROFESSIONS & Respiratory Therapists Professions RELATED CLINICAL** AAS **SERVICES** Allied Health & **Physical Therapy Medical Assisting Assistant AAS** Services **Occupational Therapy Dental Hygienist Assistant AAS**

Dental Hygienist AAS

ORIENTATION / INTRODUCTION

Grades 9-10

Orientation to Health Occupations or Health Occupations Introductory Skills Development

CAREER

FOCUSED

COURSES

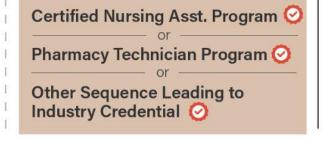
SKILL DEVELOPMENT

Grades 10-12



CAPSTONE / ADVANCED

Grades 12

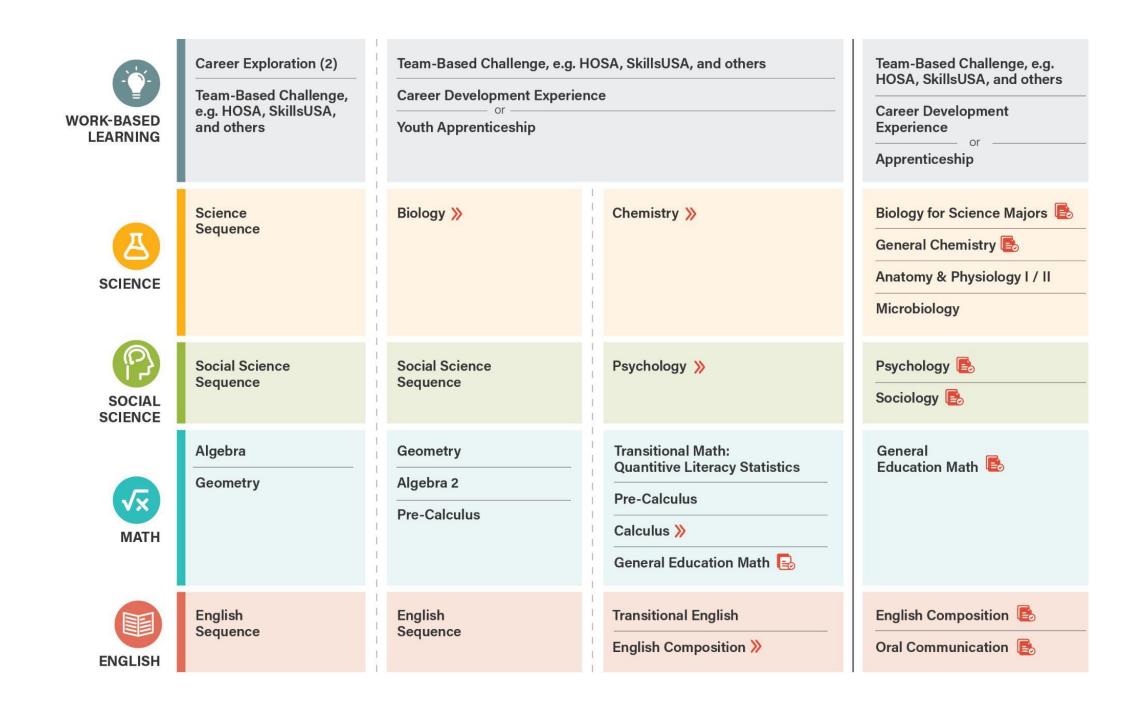




Recommended 1st Year

Continue AS or AAS Course Sequence

Courses and Work-Based Learning Address the PWR Act Recommended Technical and Essential Employability Competencies



Strategic Dual Credit Course Competencies

MEDICAL TERMINOLOGY **Key Competencies Building and** Students can correctly spell and pronounce medical language relating to **Defining Words** anatomical, diagnostic, and symptomatic medical terms. Students can correctly construct, identify, define, and analyze medical terms and language, using word roots, prefixes, suffixes, and combining forms. Students can recognize and translate medical abbreviations. Anatomy and Students will identify and describe components of the human body in relation **Body Structure** to other structures or locations in the body, incorporating anatomical planes, directional terms, quadrants, and regions. Students can identify major human body structures and organs, their function, and their related medical terms. Topics At minimum, courses should cover the following topics: Topics

- · Reproductive Systems: Male and Female
- · Senses: Eye and Ear
- · Muscoskeletal System
- Urinary System
- Respiratory System
- Integumentary System
- Digestive System
- · Cardiovascular System
- · Lymphatic and Immune System
- · Endocrine System

At minimum, courses should cover the following topics:

- · Introductory Chemistry for A&P
- · Cell Structure and Function
- Nervous System and Special Senses Digestive System and Metabolism
- Cardiovascular System
- Respiratory System · Reproductive System
- Muscular System
- · Endocrine System
- Urinary System Tissues
- · Skin and the Integumentary System
- Skeletal System

Model Programs of Study in Action

City Colleges of Chicago



What is the Chicago Roadmap?



The Chicago Roadmap is a comprehensive partnership agreement between City Colleges of Chicago and Chicago Public Schools, that seeks to **break down institutional silos** and focus on **transformational practices** that build on Chicago's **public education value proposition**.



The Roadmap Development Process

Foundational Research

- Education First conducted background research, analyzed program artifacts from CPS and CCC and key partner organizations
- Analyzed disaggregated student data provided by CPS and CCC

Analysis of Strengths & Challenges

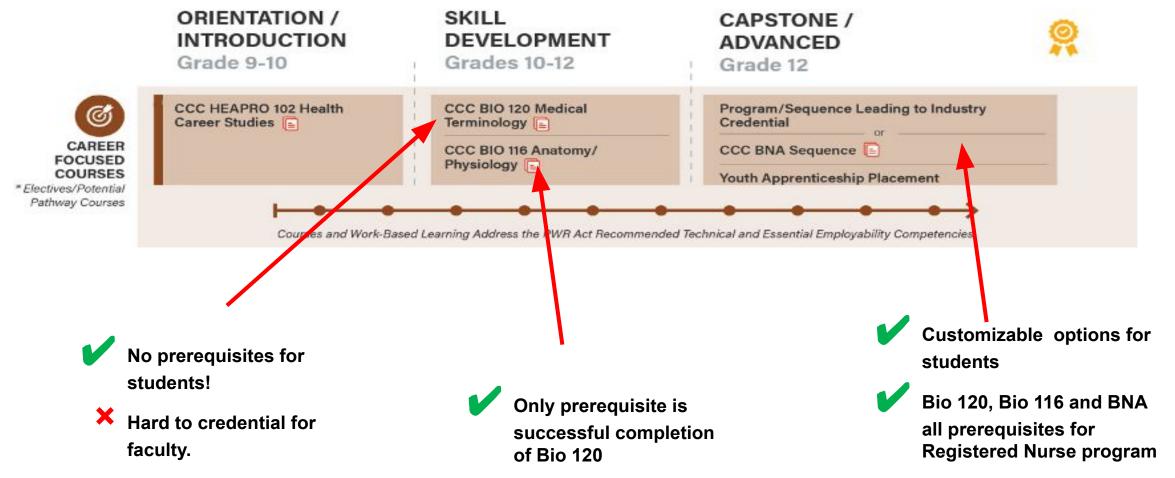
- Interviewed 52 stakeholders, convened 17 nonprofits and 15 philanthropic partners, conducted 12 focus groups with students, parents, faculty and staff, and interviewed 10 national experts and leaders of K-12 and community college systems partnerships
- Created detailed report on current assets and 12 key challenges in Chicago

Planning & Development

- Team of 25 CPS & CCC stakeholders translated the research into an actionable document
- Developed 5 Key Domains for the roadmap and 9 game-changers for equity strategies to address the key challenges, and this became the foundation for the Roadmap
- From here, we developed the yearly strategies needed to "solve for" the challenges
- Developed governance structure, fundraising needs, and yearly roadmap working plan



CPS-CCC Healthcare Pathway





Problem-solving for Bio 120 (hard to credential)

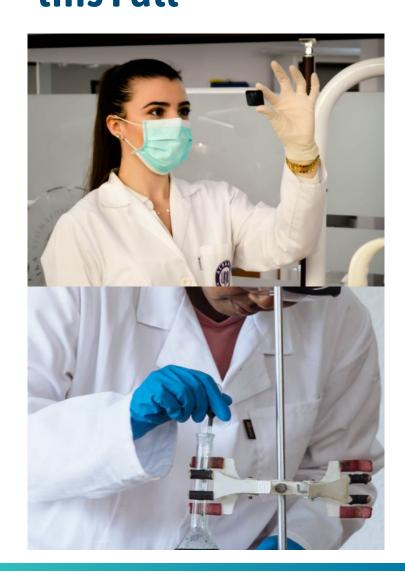
In FY21, CCC piloted a new "Model C" for delivering Dual Credit: a CCC Faculty teaching **CPS classes synchronously and virtually.**

- We were able to offer dual credit to schools that never had it before, due to small size of school, lack of dual-credit qualified teachers, or schools without a full class of qualified students
- Model C can be offered to multiple schools at the same time

BIO 120, a required class for most healthcare pathways, is now offered to students across CPS. Students from these schools participated :	Additional new Model C offerings include:
 Southshore Gage Park HS Julian HS Roosevelt HS Clemente HS Juarez HS Sullivan HS 	 Afr. American Studies: TRIO program Afr. American Studies: Gary Comer Youth Center Math: Noble Street DRW HS Criminal Justice: Perspectives Joslin Business: King HS, Perspectives Joslin HS and MSA HS English: King HS English: Perspectives MSAHS



Healthcare Career Pathway Launched at 8 CPS High Schools this Fall



124 students started in Healthcare Model Pathway now, in Fall 2021 at: CVCA, Dunbar, Gage Park, Instituto Health Sciences, Juarez, North Grand, South Shore, and Washington High Schools

135 students will start in the Spring.

Sophomore Course

Intro to Medical Terminology (Bio 120)

Junior Course

Anatomy and Physiology (Bio 116)

*new to healthcare pathway



Next Steps for CPS/CCC Model Pathway Implementation:

DEVELOPMENT

INCUBATION

IMPLEMENTATION

- CPS & CCC are working collaboratively to develop a model pathway in Construction Technology/ Master Builder program. Our goal is to have this fully developed and ready for implementation in FY23.
- We are currently incubating 2 Model **Pathways: Information Technology** (3 tracks) and Advanced Manufacturing
- Incubating means building knowledge of these programs at high schools, selecting & prepping schools for an FY23 start.
- Healthcare Model Pathway is implemented in 8 CPS high schools. We plan to increase the # of high schools with the **Healthcare Model Pathway** in FY23.



Model Programs of Study Feedback and Next Steps



Something still circling in my mind is...

Something that squares with my thinking is...

Three takeaways I have are...

Feedback:

Survey QR Code



https://niu.az1.qualtrics.com/jfe/form/SV_4VhZXbPLe740vC6



Survey Questions:

Model Programs of Study

Assess the implementation of the Model Programs of Study.

Advisory Committee

Assess the effectiveness of the committee or join an upcoming committee.

Webinar Review

Assess the effectiveness of the Webinar session.



Next Steps: Upcoming Statewide Model Programs of Study Webinars

Education

October 19, 2021 | 2-3:30pm

Manufacturing and Engineering November 16, 2021 | 2-3:30pm

Information Technology
January 11, 2022 | 2-3:30pm

Agriculture, Food, and Natural Resources

January 25, 2022 | 2-3:30pm

Architecture, Construction, and Energy February 22, 2022 | 2-3:30pm

Finance and Business Services March 15, 2022 | 2-3:30pm

Arts and Communications
April 19, 2022 | 2-3:30pm



Next Steps: Potential Statewide Model POS Guides Creation

Human and Public Services (Non-Education)

Potential Guides

Culinary and Hospitality

(Will narrow to 2 of the 3 to the right)

Transportation, Distribution and Logistics



Link to I-WIN Resource Hub



Subscribe to the I-WIN Newsletter!









Highlight and explore innovative models for work-based learning, initial focus on virtual

Engage in conversations on creating sustainable, high-quality models that provide broader and more equitable access, with a focus on building social capital for Black and Latinx students

Build connections among communities to share best practices, learnings and resources

Identify needs for state policy changes or support systems





Thank You

Survey: https://niu.az1.qualtrics.com/jfe/form/SV-4VhZXbPLe740vC6

Guides: <u>edsystemsniu.org/guides</u>