UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

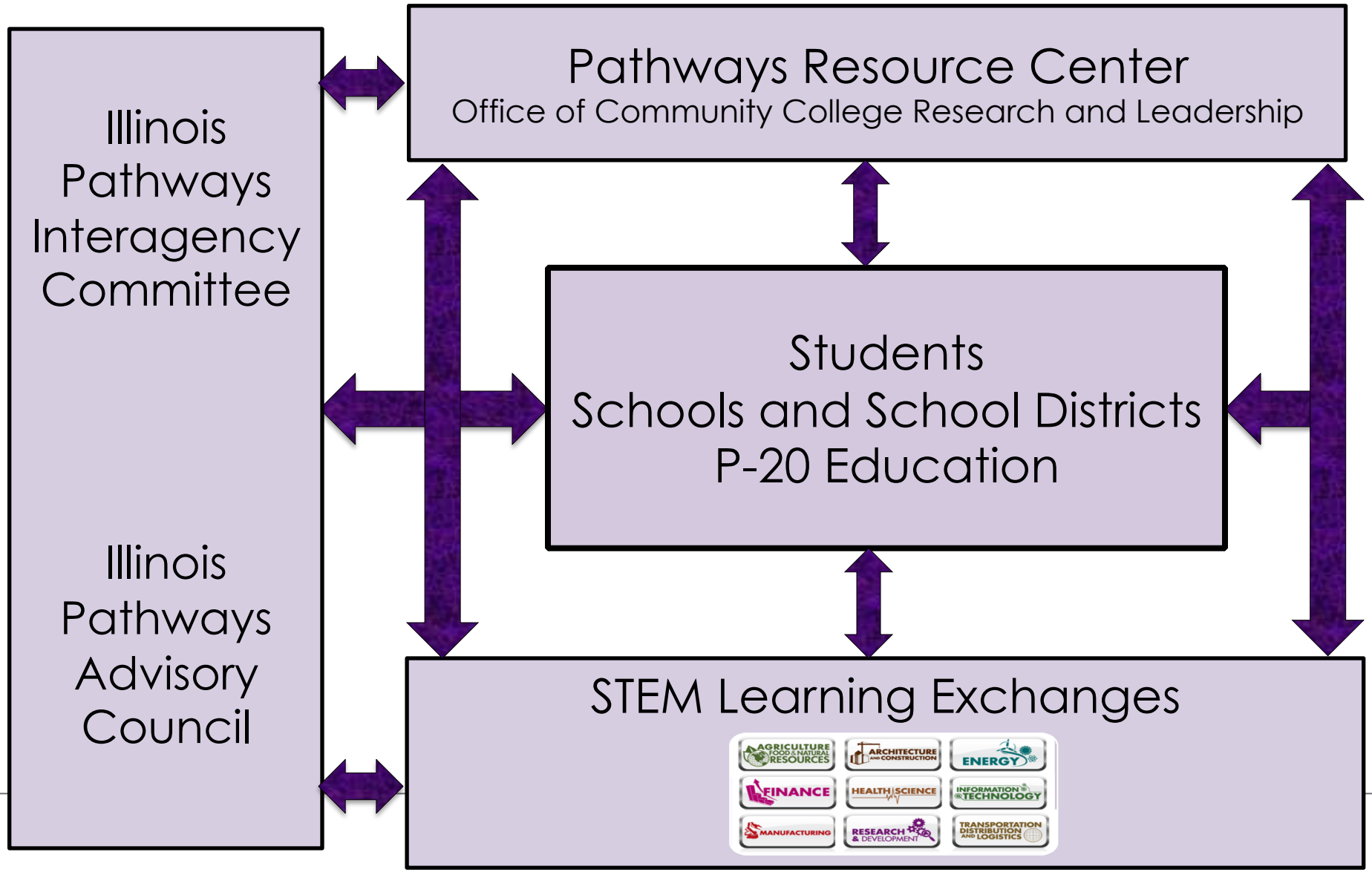
Overview of Programs of Study

Pathways Resource Center

January 30, 2013

illinois.edu

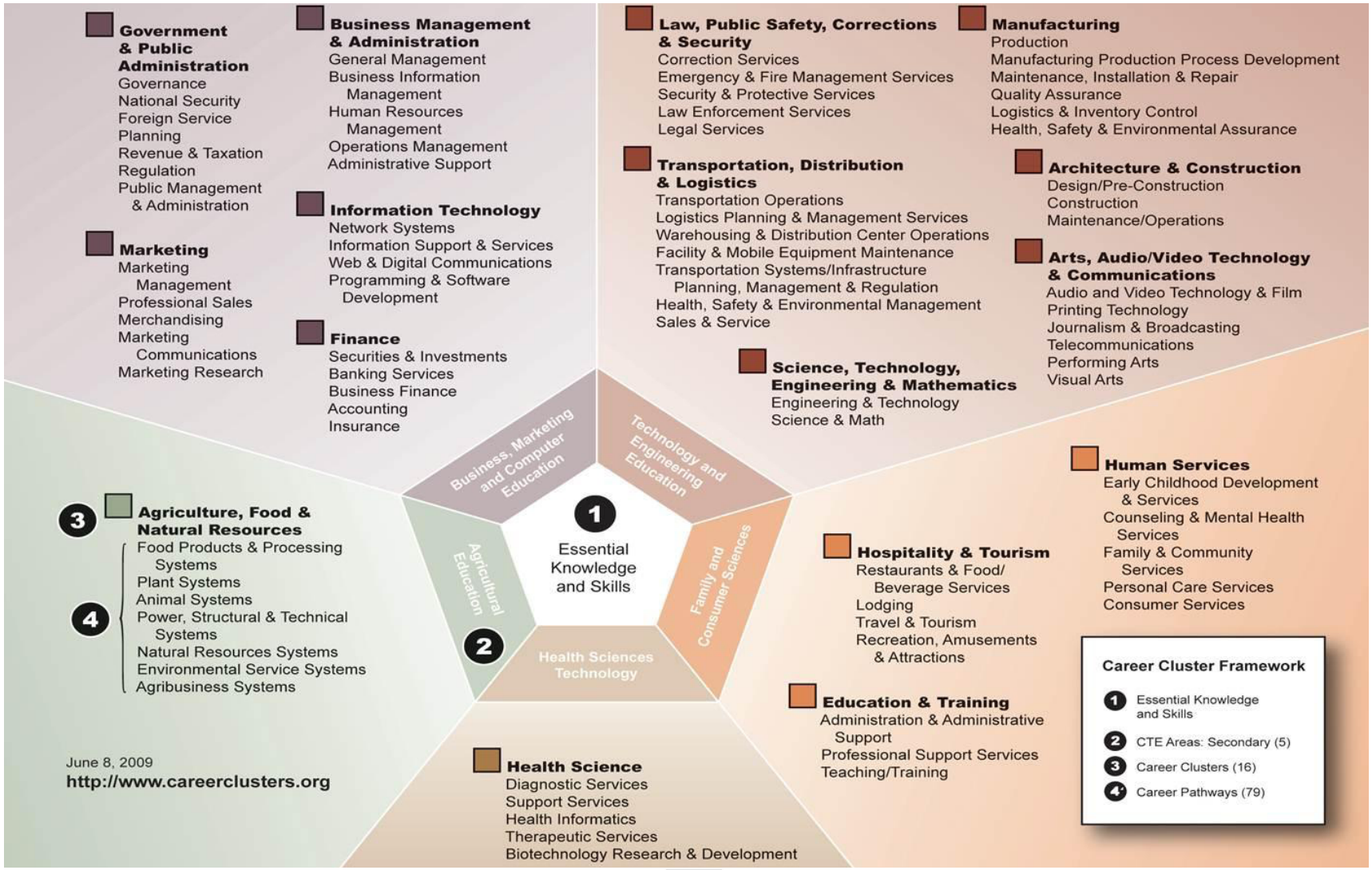
Illinois Pathways Initiative: *Model of Support*



Pathways Resource Center: Goals

- Position the PRC as a strategic vehicle for P-20 change
  - Coordinate communication among stakeholders
  - Support STEM programs of study
- Develop the capacity of the local school districts to promote college and career success among students
  - Career clusters, career pathways, programs of study
- Develop a resource bank of evidence-based materials
  - School districts
  - STEM Learning Exchanges
  - Partners
- Support the sustainability of the STEM programs of study

Illinois Career Clusters Framework



http://iccbdbsrv.iccb.org/programsofstudy/images/ClusterModel.jpg

Illinois Career Cluster Terminology

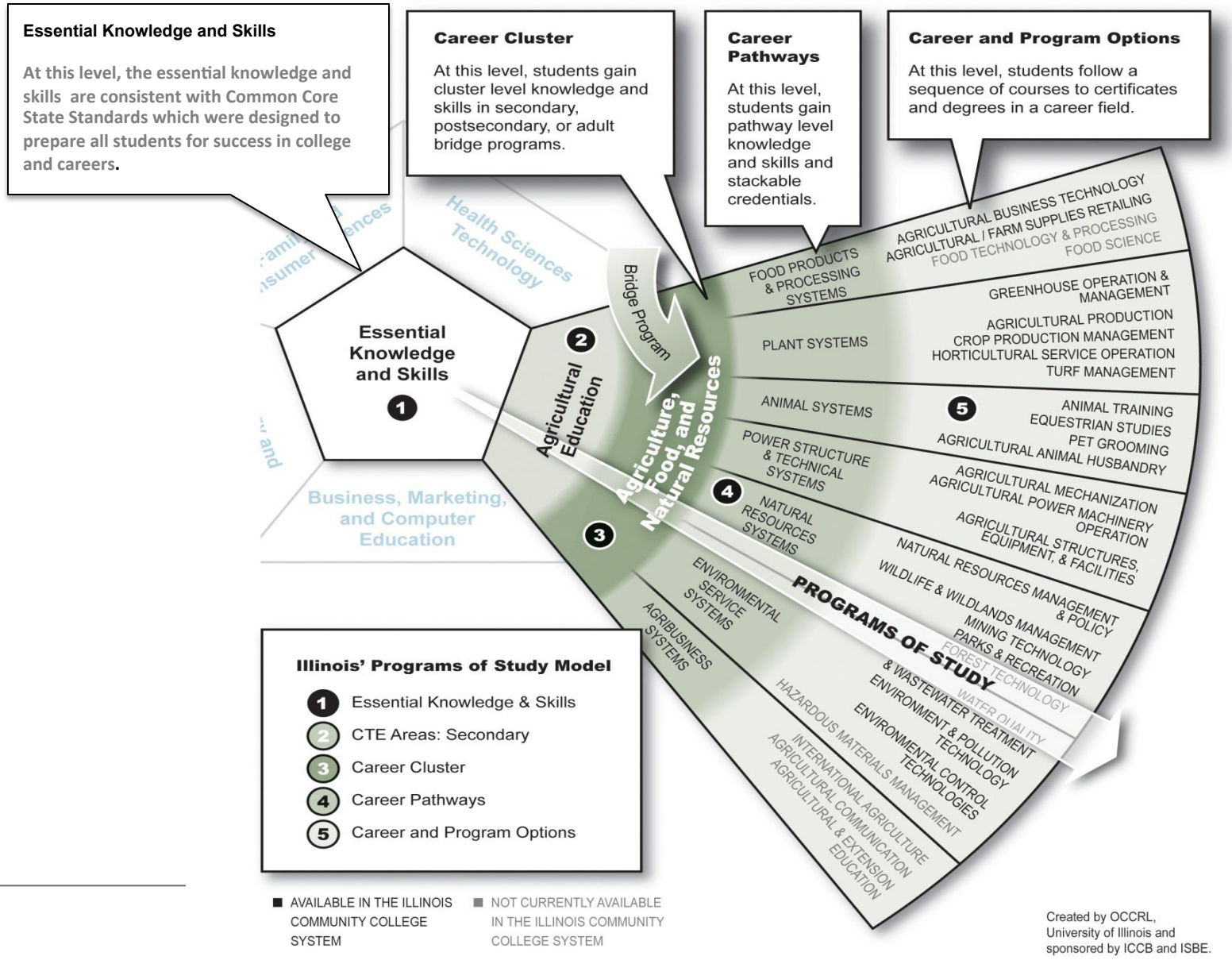
- Essential Knowledge and Skills
- CTE Areas
- Career Clusters
- Career Pathways
- Programs of Study

Visit http://occrl.illinois.edu/projects/pos/ for more information on the Illinois Career Clusters model

Programs of Study defined…

Programs of Study (POS) are sequences of courses that incorporate a non-duplicative progression of secondary and postsecondary elements which include both academic and career and technical education content. Programs of study should start no later than the ninth grade and continue through at least two years of postsecondary education. Programs of study include opportunities to earn college credit (dual credit) in high school, an industry-recognized credential or certificate at the secondary/postsecondary level, and an associate or baccalaureate degree.

Career Cluster Fan: *Agriculture, Food & Natural Resources*



Illinois Career Clusters	RTTT STEM Cluster Areas
Agriculture, Food & Natural Resources	Agriculture, Food & Natural Resources*
Architecture & Construction	Architecture & Construction
Finance	Finance*
Health Science	Health Science*
Information Technology	Information Technology*
Manufacturing	Manufacturing*
Science, Technology, Engineering & Mathematics	Research and Development*
Transportation, Distribution & Logistics	Transportation, Distribution & Logistics*
	Energy*
Arts, Audio/Video Technology & Communications	
Business Management & Administration	
Education & Training	
Government and Public Administration	
Hospitality & Tourism	
Human Services	
Law, Public Safety, Corrections & Security	
Marketing	

*STEM Learning Exchange

STEM Learning Exchanges*

Implementation Organizations

Illinois Foundation for Future Farmers of America
Jess Smithers / 217-893-0091 / jsmithers@agriculturaleducation.org

University of Illinois at Chicago
Dr. Bruce C. Neimeyer / 312-996-8820 / neimeyer@uic.edu

CompTIA Workforce Development LLC
Gretchen Koch / 630-678-8425 / gkoch@comptia.org

Illinois Manufacturers Association Education Foundation
Jim Nelson / 217-522-1240 ext. 3023 / jnelson@ima-net.org

Illinois Science and Technology Institute
Erin Lane / 312-239-0326 / elane@istcoalition.org

Planning Organizations

Illinois State University
David Loomis / 309-438-7979 / dloomis@ilstu.edu

Illinois Chamber of Commerce Foundation
Douglas L. Whitley / 312-983-7103 / dwhitley@ilchamber.org

*Finance Learning Exchange to be named

LEA Requirements for POS

- Research **two RTTT STEM areas** for developing/ refining
- Assemble a team of partners
- Develop curriculum for **two selected programs of study**
  - Curriculum mapping
  - Curriculum development/revision (Common Core, CTE Curriculum Revitalization, STEM Learning Exchange, other resources)
  - Curriculum implementation
- Evaluate and refine the programs of study

Considerations for Selecting and Refining Programs of Study

- Labor market and employment demand (regional, national, global)
- Student interest
- District capacity
- Partnership capacity (community colleges, colleges, business/industry)
- Data collection capacity
- Curriculum development
- Student support capacity

RTTT POS Requirement

RTTT districts are **required** to develop **two programs of study** (POS).

- The two POS may be within one or two RTTT STEM career cluster area(s). STEM Learning Exchanges are being funded in 8 of 9 RTTT career cluster areas, but not in Architecture and Construction. Although your district may elect to develop a POS within Architecture and Construction, you will not have Learning Exchange support in this cluster. Therefore, it is recommended that you select Programs of Study that can receive resource support from a STEM Learning Exchange.

RTTT POS Recommendations

It is **recommended** that:

- Districts select at least two RTTT STEM career cluster areas.
- Districts identify Programs of Study that need to be developed or revised. You may select an established POS and work to make it more rigorous and to improve the quality.
- Districts fully engage with at least two STEM Learning Exchanges (as well as postsecondary, business/industry partners).
- Districts develop as many Programs of Study as they determine are necessary for their students within their identified career cluster areas.
- Districts access the resources of the STEM Learning Exchanges and Pathways Resource Center.

Program of Study Template

Program of Study

Name of Cluster:_____ **Name of Pathway:**_____ **Program of Study**_____

Education Levels	Grade	English	Math	Science	Social Studies/ Sciences	Other Required Courses, Recommended Electives, and Learner Activities	Career & Technical Courses and/or Degree Major Courses	SAMPLE Occupations Relating to this Pathway
Interest Inventory Administered								
Secondary	9					All plans of study need to meet **local and state** high school graduation requirements as well as college entrance requirements.		
	10							
	11							
	12							
Articulation/Dual Credit Transcripted								
Postsecondary	Year 13					All plans of study need to meet learners' career goals with regard to required degrees, licenses, certifications or journey worker status.		
	Year 14							
	Year 15							
	Year 16							

Sample POS: *Building Construction Technician*

Program of Study Curriculum: Lake Land College

Name of Cluster: Architecture & Construction Name of Pathway: Construction Program of Study: Building Construction Technician

Education Levels	Grade	English	Math	Science	Social Studies/ Sciences	Other Required Courses, Recommended Electives, and Learner Activities	Career & Technical Courses and/or Degree Major Courses	SAMPLE Occupations Relating to this Pathway
Interest Inventory Administered: ICP								
Secondary	9	English	Algebra	Earth or Life or Physical Science	Social Science	All plans of study need to meet **local and state** high school graduation requirements as well as college entrance requirements.	Technology Orientation	► Carpenter ► Code Official ► Concrete Finisher ► Construction Engine ► Construction Forem ► Construction Inspec ► Contractor ► Design Builder ► Drywall Installer ► Electrician ► Electronic Systems ► Equipment and Mat ► General Contractor/ ► Heating, Ventilation Conditioning and R Mechanic ► Mason ► Painter ► Paperhanger ► Plumber ► Project Estimator ► Project Inspector ► Project Manager ► Roofer ► Safety Director ► Sheet Metal Worker ► Specialty Contracto ► Superintendent ► Tile and Marble Set
	10	English	Geometry	Biology	Social Science		CAD	
	11	English	Algebra II	Physical Lab Science	American History		Construction Skills **	
	12	English	Construction math or statistics		consumer ed requirement psychology**		Construction Skills **	
Dual Credit Transcripted when appropriate**								
Postsecondary	Year 13	Communications or Composition * ***BS transfer requirement**				All plans of study need to meet learners' career goals with regard to required degrees, licenses, certifications or journey worker status.	Plans and specifications Intro to drafting, CAD 1 & 2 Architectural Drafting II Construction Materials Tech math 1, 2, 3, 4 Construction Management Survey I Complete OSHA Safety certification	
	Year 14	Intro to Speech Communications *			Responding to Emergencies Human Relations American Economy		Analytical Mechanics Survey II Strength of materials Architectural Drafting III Construction Estimating PC Concrete Theory 2 electives from: practical software applications, CAD systems, asphalt theory, survey III	
	Year 15	Continue courses in area of specialization to attain career goal						
	Year 16							

Pathways Resource Center: *Contact Information*

Co-Directors:

- Debra Bragg (dbragg@illinois.edu)
- Don Hackmann (dghack@illinois.edu)

Project Coordinator: Stacy Moore (samoore5@illinois.edu)

Research Specialist: Joy Mordica (jmordica@illinois.edu)

129 Children's Research Center
51 W. Gerty Drive
University of Illinois at Urbana-Champaign
Champaign, IL 61821
Phone: 217-244-9390
http://pathways.illinois.edu