



Academic Senate
for California Community Colleges

LEADERSHIP. EMPOWERMENT. VOICE.

Where Like Minds Gather: Building Meta Majors



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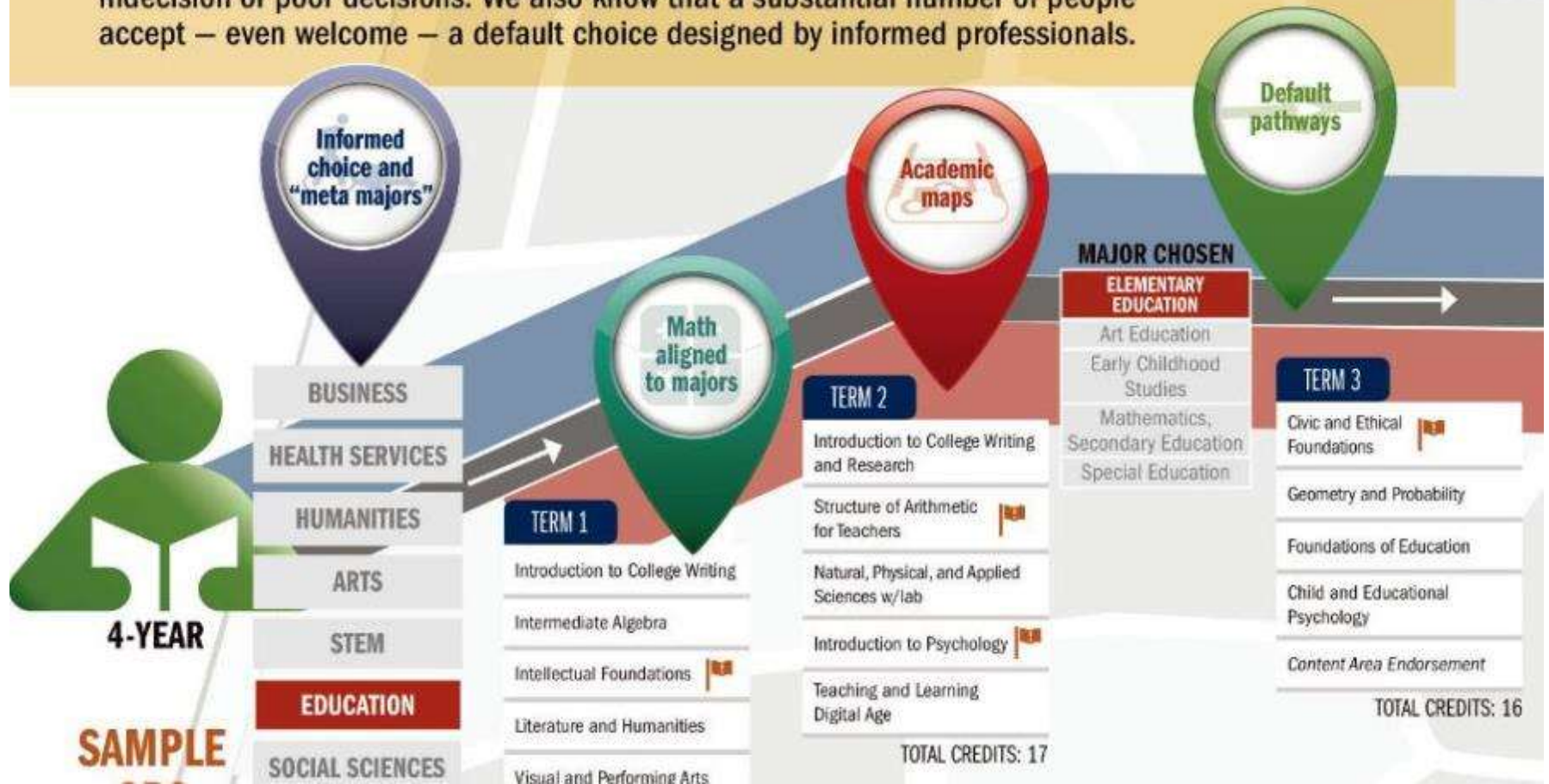
Overview

- What are Meta Majors?
- Developing Meta Majors
- Examples
- Digging in...
- Discussion...



Meta Majors with Program Mapping

Behavioral economics tells us that too much choice – especially uninformed choice – leads to indecision or poor decisions. We also know that a substantial number of people accept – even welcome – a default choice designed by informed professionals.



What are Meta Majors?

Definitions...

- **Meta Majors** are collections of academic majors that have related courses.
- **Meta Majors** cluster groups of degrees and certificates that are considered similar from a student's perspective.
- **Meta Majors** give incoming students an opportunity for early exploration within a cluster of academic and career choices while still making progress to graduation.
- **More...**

What are Meta Majors?

Other Titles for the Meta Major concept...

- Focus Area
- Cluster
- Major Pathways
- Clustering Majors
- Career and Academic Pathways
- Interest Areas
- Career Clusters
- Program Clusters
- Others???



City Colleges of Chicago

EXPLORE BY:

FOCUS AREA

student
guided pathways to success
gps

Student Guided Pathways to Success

A degree or certificate from City Colleges of Chicago can put you on the path to a rewarding career either right after graduation, or after successfully transferring to a four-year institution. Use our GPS navigation tool below to explore the options open to you at CCC.

Explore by Focus Area

Our degrees and certificates largely fall within one of our ten focus areas. Click on a focus area to learn more.



ADVANCED
MANUFACTURING



BUSINESS &
PROFESSIONAL SERVICES



CONSTRUCTION
TECHNOLOGY



CULINARY ARTS &
HOSPITALITY



EDUCATION



HEALTHCARE



INFORMATION
TECHNOLOGY



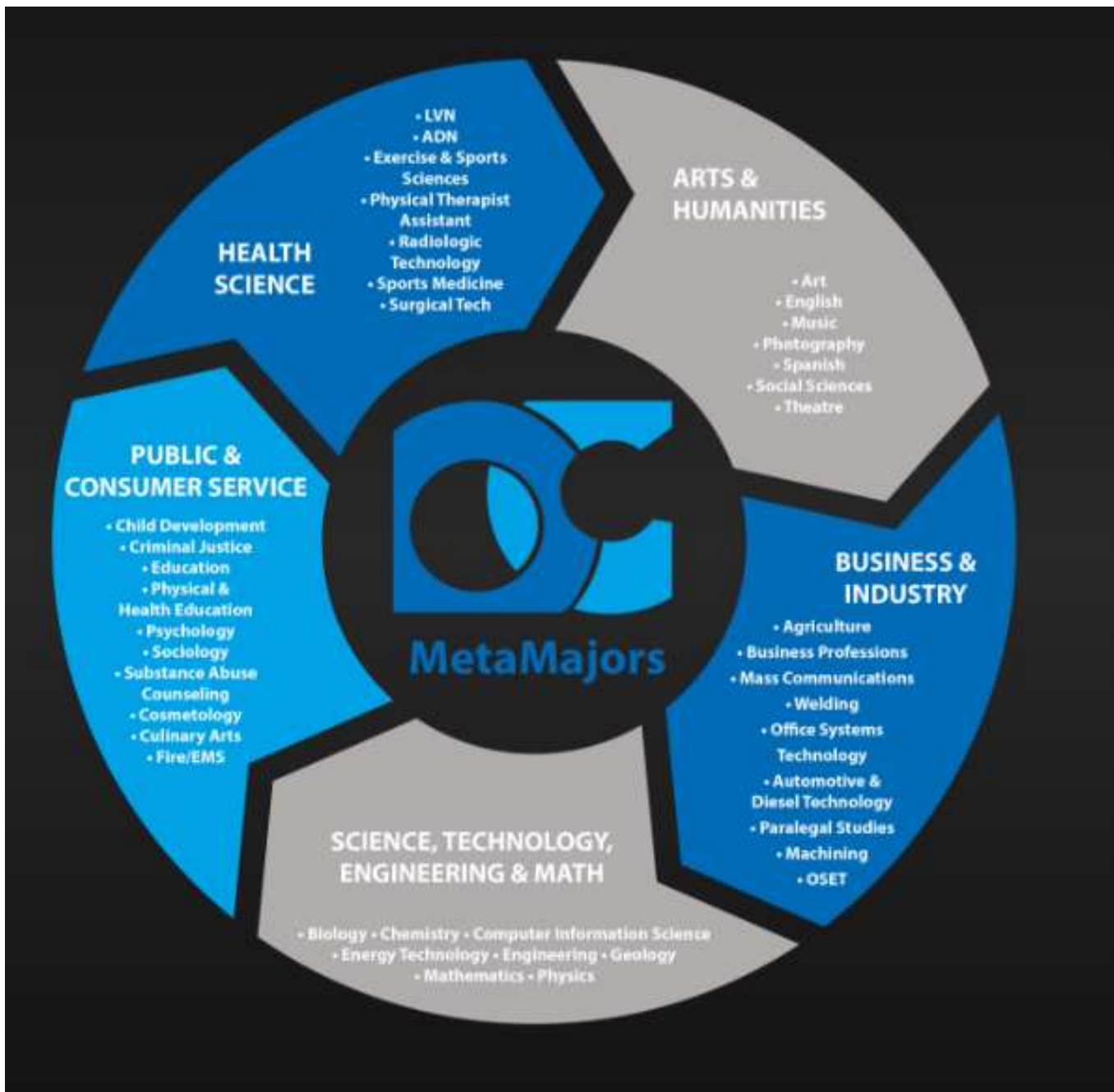
HUMAN SCIENCES



NATURAL SCIENCES



TRANSPORTATION,
DISTRIBUTION &
LOGISTICS



Arts,
Humanities, &
Communication

Public
Service

Healthcare

Science
& Math

Technical
Education

Business &
Computer
Science

Social &
Behavioral
Science

Education

General
Studies



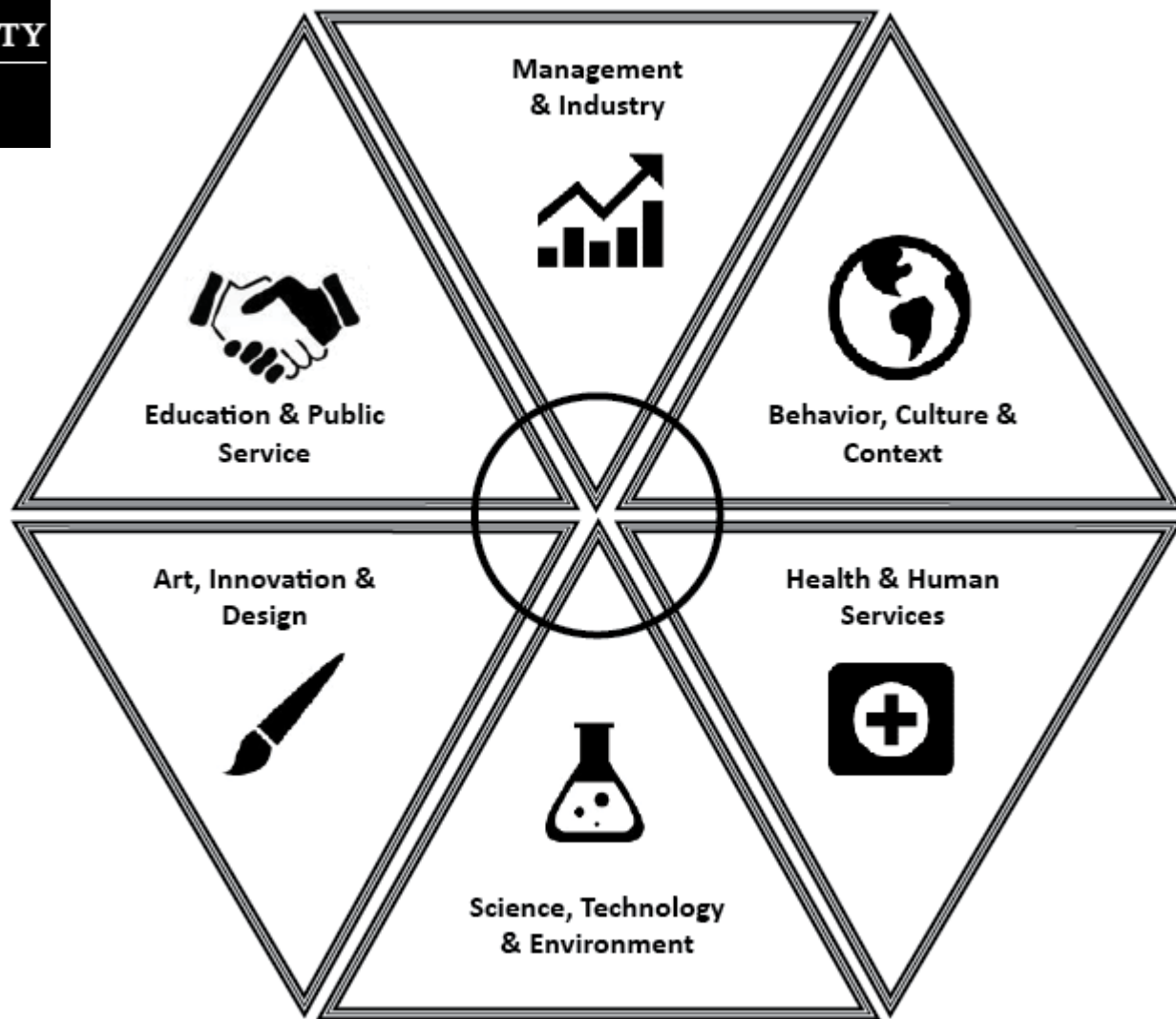
*Wharton County
Junior College*

Major Pathways

If you are wondering how you will narrow 200 majors into one, narrowing your options down into one or two meta-majors is a good place to start.

In Exploration, we concentrate on six broad areas where majors share similarities.

It is also important to note that no one college or school contains all the majors at Ohio State that are in a particular field of study.



Cabrillo College's Career and Academic Pathways (CAP)

Creative Arts & Design

Art History
Art Photography
Art Studio
Dance
Digital Media
Engineering Technology
Music
Music Technology & Recording Arts
Theatre Arts



Science, Technology, Engineering & Mathematics



Science Technology Engineering Mathematics

Astronomy
Biology
Chemistry
Computer Networking & System Administration
Computer Science
Computer Support
Engineering
Engineering Technology
Environmental Science
General Science
Geography (Physical)/Meteorology
Geology
Horticulture/Agricultural Plant Sciences
Math
Oceanography
Physics



Health and Public Service

Criminal Justice
Dental Hygiene
Fire Technology/Emergency Medical Technician
Health Science
Kinesiology
Medical Assisting
Nursing
Radiologic Technology



Entrepreneurship & Business

Accounting/Finance
Business
Computer Applications & Business Technology
Construction & Energy Management
Culinary Arts & Hospitality Management
Digital Media
Economics
Horticulture
Music Technology & Recording Arts
Welding



Global & Human Studies

Anthropology
Art History
Bilingual & Bicultural Studies
Communication Studies
Criminal Justice
Early Childhood Education
Economics
Elementary Teacher Education
English
Geography – Cultural
History
Human Services
Journalism
Latin American Studies
Philosophy
Political Science
Psychology
Sociology
Women's Studies
World Languages

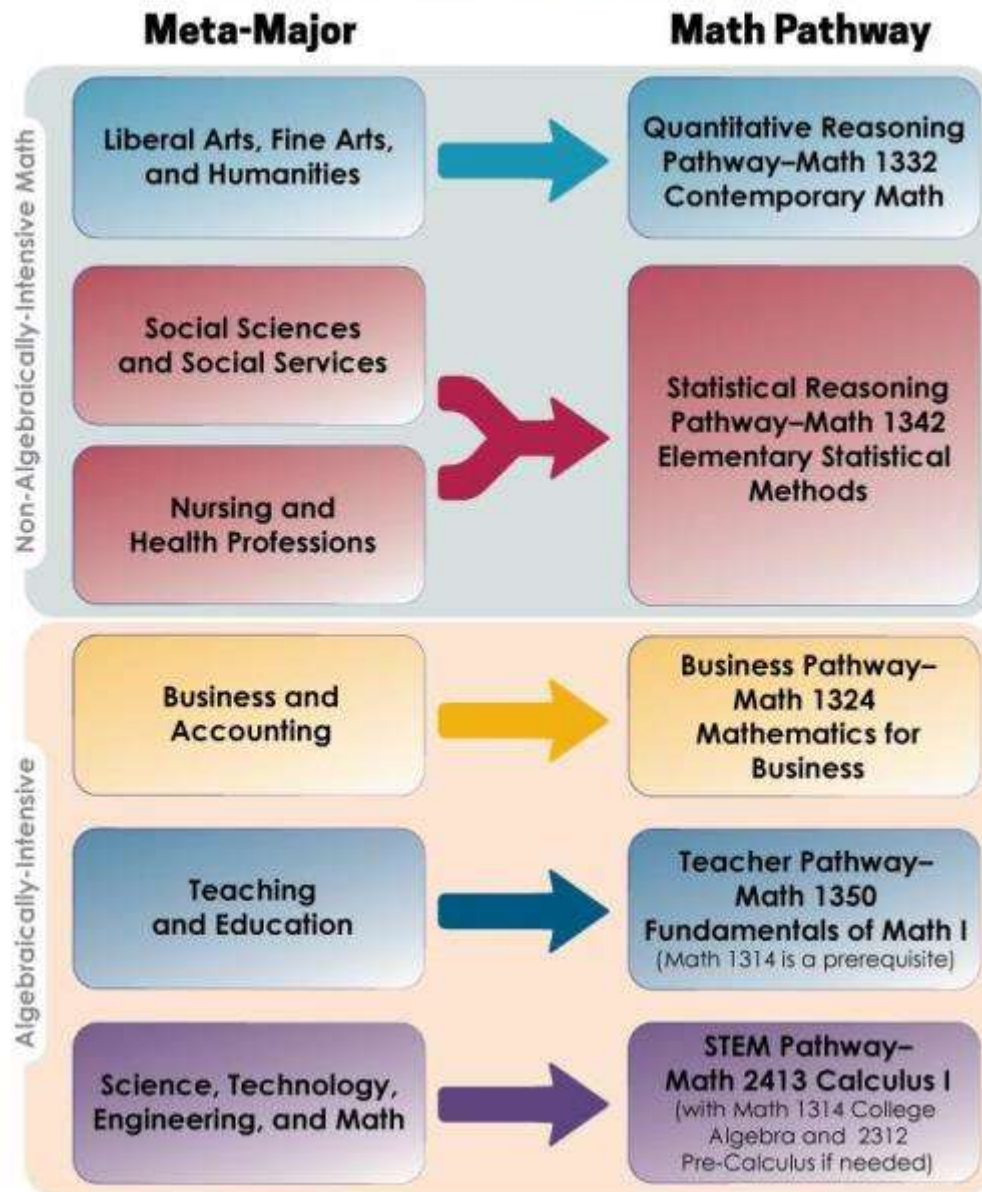
Common Elements of Meta Majors and Program Mapping:

- Each Meta Major is clearly mapped to programs and careers.
- Math/quantitative reasoning course is aligned with programs within the Meta Majors.
- General Education (GE) core courses are mapped with Meta Majors (some or more prescriptive , others are not, some are mixed depending upon the outcomes).
- Connections with GE courses and Meta Majors and majors are made clear.
- Sometimes electives are aligned with Meta Majors.
- Advising and student services are aligned with the student's Meta Major.
- Meta Majors may be aligned with local labor market demand.

The Dana Center Mathematics Pathways seeks to ensure that ALL students in higher education will be:

- **Prepared** to use mathematical and quantitative reasoning skills in their careers and personal lives;
- **Enabled** to make timely progress towards completion of a certificate or degree; and
- **Empowered** as mathematical learners.

Emerging Texas Math Pathways



Multiple Paths FORWARD: Diversifying Mathematics as a Strategy for College Success

HERE ARE EXAMPLES OF **HOW COLLEGES MIGHT ALIGN MAJORS AND PROGRAMS** WITH ENTRY-LEVEL MATH COURSES



Analysis to Support Creating Meta Majors and Program Mapping

- What is the full scope of programmatic offerings at the college?
- Do the college's programs align to the local labor market and/or university transfer partner?
- Which general education courses align best to each Meta Major?
- What are the common courses across all programs?
- What is the required core within this Meta Major that allows students to branch off into various majors without losing any credits?
- Which courses will introduce students to relevant faculty and career information early in their academic careers?
- Which courses might not be included, and who needs to be involved in that decision?

Graduating in Math at Bakersfield College

an unguided pathway research project

- Sample Pathways with Program Mapping

Summary of Math Graduate Academic Progress:

Period	FALL 1	SPRING 1	SUMMER 1	FALL 2	SPRING 2	FALL 3	SPRING 3	GRAD
Major	BIOL		BIOL		BIOL		MATH	
	MATH 28A	MATH 28B						
	BIOL 21A	COMM 22	ENGR 28A	MATH 28C	MATH 28D	CHEM 28E	ACCV 28E	
	ENGL 21A	MISC 22		CHEM 21A	MATH 28E	HST 21B	ANTH 22	
	LEA 285	PHIL 21		PHYS 28B	ASL 21	POLS 21	PHYS 24C	
	LEA 286	STEV 21			BIOL 23D	PSYC 21A		
	ART 21							

Period	SPRING 1	SUMMER 1	FALL 1	SPRING 2	SUMMER 2	FALL 2	SPRING 3	SUMMER 3	FALL 3	SPRING 4	SUMMER 4	FALL 4	SPRING 5	GRAD
Major	ENGR		ENGR		ENGR		ENGR		ENGR		ENGR		ENGR	
	MATH 28A	ACCV 28D	MATH 28B	MATH 28C	ACCV 28D	MATH 28C	MATH 28D	ANTH 21	CHEM 28A	MATH 28E	ACCV 28D	ENGR 28C	ENGR 28D	MATH
	COMM 21	HEED 21	COMM 22	COMM 21	HST 21A	COMM 25	MATH 28E	ENGR 28B	ENGR 28C	CHEM 21A	ART 22	ENGR 28E		
	ENGL 28D		ENGL 21A	MATH 28C		PHYS 24C	COMM 21		ENGR 28D	ENGR 21	ENGL 28E			
	ENED 28V1			PHYS 24A		PHYS 24C	PHED 28C1		POLS 21	ENGR 28F1				
							STEV 21			EDR 21B				
										EDR 21				
										ART 21				

Period	SPRING 1	FALL 1	SPRING 2	FALL 2	SPRING 3	SUMMER 3	FALL 3	SPRING 4	FALL 4	SPRING 5	GRAD	
Major	UNCE		UNCE		ENGR		ENGR		CHEM		CHEM	
	ENGL 21A	MATH 28A	MATH 28B	MATH 28C	MATH 28C	COMM 21	CHEM 28B	ENGR 28A	CHEM 28A	CHEM 28B		
	HST 21A	DISAD 25	ART 21B	COMM 21	MATH 28D	ENGR 28T	PHYS 24B	PHIL 21B	CHEM 28A	CHEM 28B		
	LEA 286	PHYS 24A	COMM 22	ENGR 28C	MATH 28E	COMM 25	POLS 21	PHYS 24C	ENGR 28A	CHEM 28B		
	ENGL 28D		PHYS 24B	PHIL 21B	CHEM 21A	COMM 25	PHYS 24A	THEA 21B				
	PHIL 21		STEV 22	PHIL 21	INOR 28A		PHYS 24A					

Period	FALL 1	SPRING 1	SUMMER 1	FALL 2	SPRING 2	SUMMER 2	FALL 3	SPRING 3	FALL 4	SPRING 4	GRAD	
Major	ENGR		ENGR		ENGR		ENGR		ENGR		PHYS	
	MATH 28A	MATH 28B	BIOL 21B	MATH 28A	MATH 28B	PHYS 24A	MATH 28C	MATH 28D	GEOS 21	FOPE 22		
	COMM 21	ACCV 28D		CHEM 21A	CHEM 28B		ENGR 28B	HST 28B	EDR 21B	EDR 28A		
	ENGL 21A	BIOL 21B		HST 21A	MUSIC 22		MUSIC 22T	MATH 28E		PHIL 21B		
	ENGR 28T	ENGL 28B					PHYS 24B	PHYS 24C				
	LEA 285	PSYC 21A										
	LEA 286											
	LEA 285											
	LEA 286											

Period	FALL 1	SPRING 1	SUMMER 1	FALL 2	SPRING 2	FALL 3	SPRING 3	FALL 4	SPRING 4	FALL 5	SPRING 5	SUMMER 5	FALL 6	SPRING 6	SUMMER 6	FALL 7	SPRING 7	GRAD
Major	MUSIC		MUSIC		MUSIC		MUSIC		ENGR		ENGR		ENGR		ENGR		ENGR	
	MATH 22C	ASTR 22	POLS 21	BIOL 21B	MATH 28C	ASTR 22	BIOL 21B	MUSIC 22	ENGR 28T	MATH 21A	MATH 28B	MATH 28A	MATH 28B	MATH 28C	EDR 28	MATH 28D	MATH 28E	
	ENGL 21A	CHET 28A		MUSIC 22A	MUSIC 21A	HEED 21			SPAN 28A		ACCV 28D		CHEM 21A	CHEM 28B		ENGR 28B	ENGR 28C	
	MUSIC 22	HST 21A		MUSIC 28B	MUSIC 28B	PHIL 28A					CHEM 28A			CHEM 28C		ENGR 28E	ENGR 28F	
		MUSIC 28A		PHIL 21										PHYS 24A		PHYS 24B	PHYS 24C	
		STEV 21																

Period	FALL 1	SPRING 1	SUMMER 1	FALL 2	SPRING 2	GRAD
Major	MATH		MATH		MATH	
	MATH 28B	MATH 28C		MATH 28D	MATH 28E	
	ACCV 28D	ASL 21	PHYS 24A	PHIL 21B	PHYS 24C	
	ACCV 285	COMM 21		PHYS 24B	PSYC 28E	
	EDCOJ 21	ENGL 21A		POLS 21		
	HST 21			THEA 21		

Biological Sciences AS - Cell and Molecular Track

Program Description

Biological Sciences covers all aspects of the scientific study of life and emphasizes both the unity and diversity of living things. The structure, function, and behavior of organisms are studied at the molecular, cellular, organismal and environmental levels. The biology program serves three areas of: a broad background of studies for the biology major preparing for transfer to a four-year institution; support courses in human anatomy, human physiology, and general microbiology, which may be used to satisfy prerequisites for nursing programs and other allied-health fields; and courses in natural sciences to fulfill general education requirements. The Associate in Science Degree requires the completion of 32.0 units.

Student Learning Outcome

Interpret, analyze, and evaluate Biological knowledge using the scientific method.

Recommended Course Sequence

Fall Semester			
Course	Title	Units	GE Area
MATH 070	Intermediate Algebra	5.0	Pre-requisite / Language & Rationality
ENGL 101	English Composition	3.0	Language & Rationality / CSU GE
CHEM 151	Preparatory General Chemistry	4.0	Major
HIST 111 OR 112 OR HIST 120	US History I OR US History II OR The Role of Women in the History of the United States	3.0	American Institutions

Spring Semester			
Course	Title	Units	GE Area
BIOSCI 106	Organismal & Environmental Biology	4.0	Major / Natural Sciences
CHEM 201	General Chemistry I	6.0	Major
MATH 083	Geometry	5.0	Pre-requisite
ENGL 103	Critical Reading, Writing and Thinking	3.0	Transfer Prep

Fall Semester			
Course	Title	Units	GE Area
BIOSCI 107	Molecular and Cellular Biology	4.0	Major
CHEM 202	General Chemistry II	5.0	Major
MATH 102	Trigonometry	3.0	Pre-requisite
COMS 105	Fundamentals of Public Speaking	3.0	Humanities
HLHSCI 100	Health Education	3.0	PE & Wellness

Spring Semester			
Course	Title	Units	GE Area
BIOSCI 180 OR 140 OR BIOSCI 130 OR BIOSCI 132	Biology of Cancer OR Principles of Human Genetics OR Contemporary Issues in Environmental Biology OR Concepts of Evolution	3.0	Elective
BIOSCI 240	Molecular Genetics	4.0	Major
MATH 104	Pre-Calculus	5.0	Pre-requisite / Major
DANCE 100 OR CINEMA 120 OR MUSIC 100 OR 105	Dance Appreciation OR Film Aesthetics OR Fundamentals of Music OR Music Appreciation	3.0	Humanities / CSU GE Area C-1

College of
the
Canyons—
Program map
for biology
major transfer
to UC

Biology Prep for Transfer Academic Program Plan for Full-Time Students

All Plans can be modified to fit the needs of part-time students by adding more semesters

This is an example of a course sequence and does not represent a contract or a guarantee of course availability.

- This plan includes general education satisfying Plan C (IGETC) for CSU and UC.
- This plan assumes student placed into transfer level Math and English.
- This plan assumes student has completed two years of high school coursework in a language other than English with a C or better or has equivalent language skills.

YEAR 1	FALL	UNITS	SPRING	UNITS	SUMMER	UNITS
	ENG 100	4	ENGL 201 or 202	4	MATH 150	5
BIO 110	4	MATH 131	4	Area 4: Social and Behavioral Sciences	3	
MATH 126	4	CHEM 110	5			
CHEM 108	4	BIO 202	4			
Total Units Fall	16	Total Units Spring	17	Total Units Summer	8	
Total Units for Year 1					41	
YEAR 2	FALL	UNITS	SPRING	UNITS	SUMMER	UNITS
	MATH 155	4	MATH 260	4	Area 3A: Arts	3
	CHEM 111	5	CHEM 210	5	Area 3B: Humanities	3
	Area 4: Social and Behavioral Sciences	3	PHYS 151	4		
	BIO 204	4	Area 4: Social and Behavioral Sciences	3		
Total Units Fall	16	Total Units Spring	16	Total Units Summer	6	
Total Units for Year 2					38	
YEAR 3	FALL	UNITS	SPRING	UNITS	SUMMER	UNITS
	MATH 265 OR 270	4	MATH 265 OR 270	4		
	PHYS 152	4	PHYS 253	4		
	CHEM 211	5	Area 3A: Arts or 3B: Humanities	3-4		
	Area 3A: Arts or 3B: Humanities	3	Area 1C: Oral Communication	3		
Total Units Fall	16	Total Units Spring	14-15	Total Units Summer		
Total Units for Year 3					30-31	
Total Units on Plan: 109-110						

Note: All CSU campuses have a graduation requirement of History, Constitution and American Ideals. Students may be certified as completing this requirement by completing one course from Group I and one course from Group II; or by completing the course in Group III.

Group I (select one): HIST 110, 116, 141, or 145 **And** Group II (select one): HIST 111, 117, 142, 146, or 165 **Or** Group III: PLSC 102

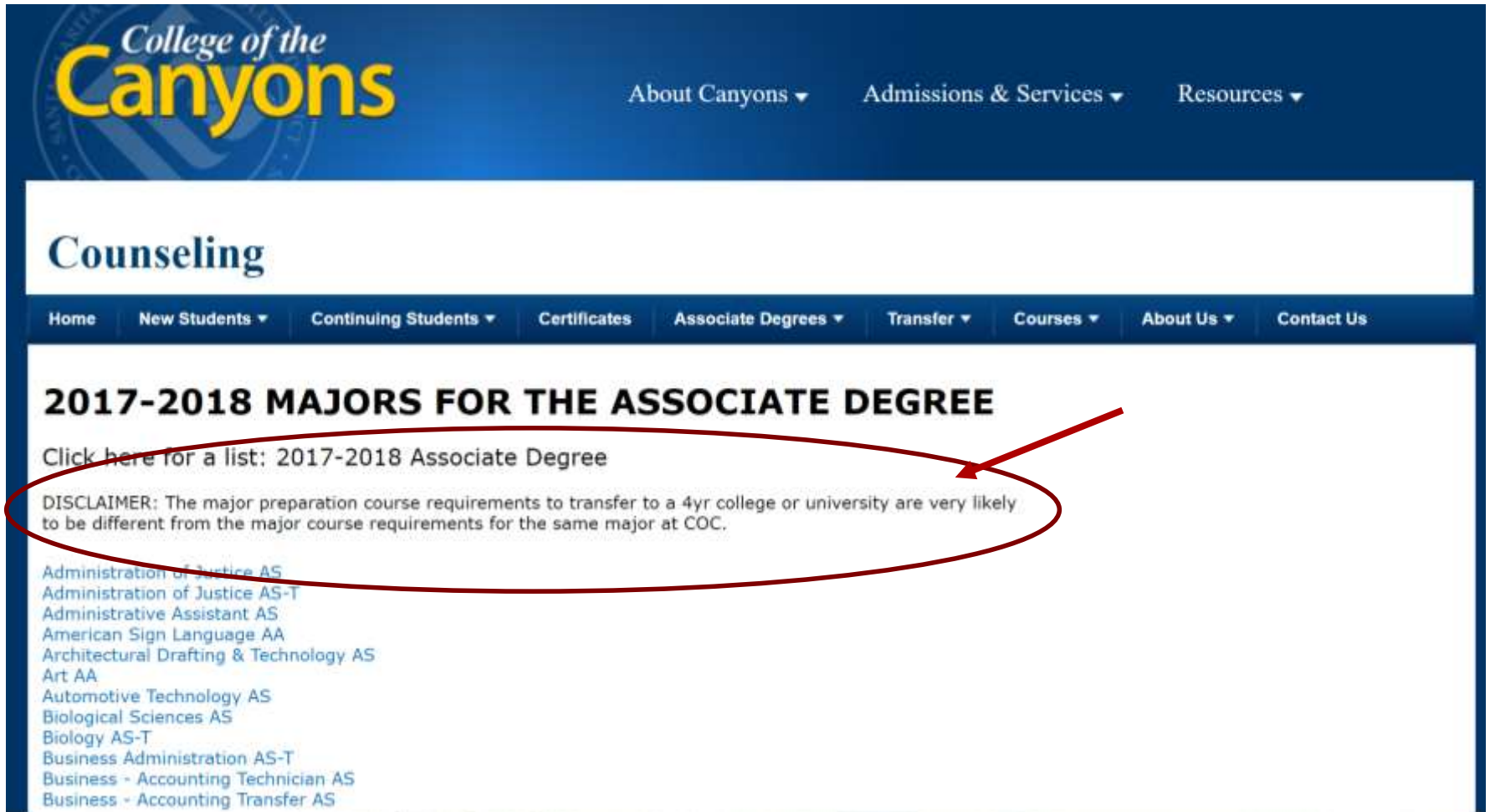
Developing Meta Majors

- Effective practices ("reverse engineering" from program outcomes)
- Curricular considerations (overlap)
- Facilitating the conversation between faculty from different disciplines and services
- Student voice!
- What about program mapping—which should be done first?



Observation:

List of Majors with a *Disclaimer*



The screenshot shows the College of the Canyons website. The top navigation bar includes "About Canyons", "Admissions & Services", and "Resources". Below this is a "Counseling" section with a sub-navigation bar for "Home", "New Students", "Continuing Students", "Certificates", "Associate Degrees", "Transfer", "Courses", "About Us", and "Contact Us". The main content area is titled "2017-2018 MAJORS FOR THE ASSOCIATE DEGREE". A red circle highlights the text "Click here for a list: 2017-2018 Associate Degree" and the "DISCLAIMER" text below it. A red arrow points to the "Click here" link. The disclaimer states: "DISCLAIMER: The major preparation course requirements to transfer to a 4yr college or university are very likely to be different from the major course requirements for the same major at COC." Below the disclaimer is a list of majors.

College of the
Canyons

About Canyons ▾ Admissions & Services ▾ Resources ▾

Counseling

Home New Students ▾ Continuing Students ▾ Certificates Associate Degrees ▾ Transfer ▾ Courses ▾ About Us ▾ Contact Us

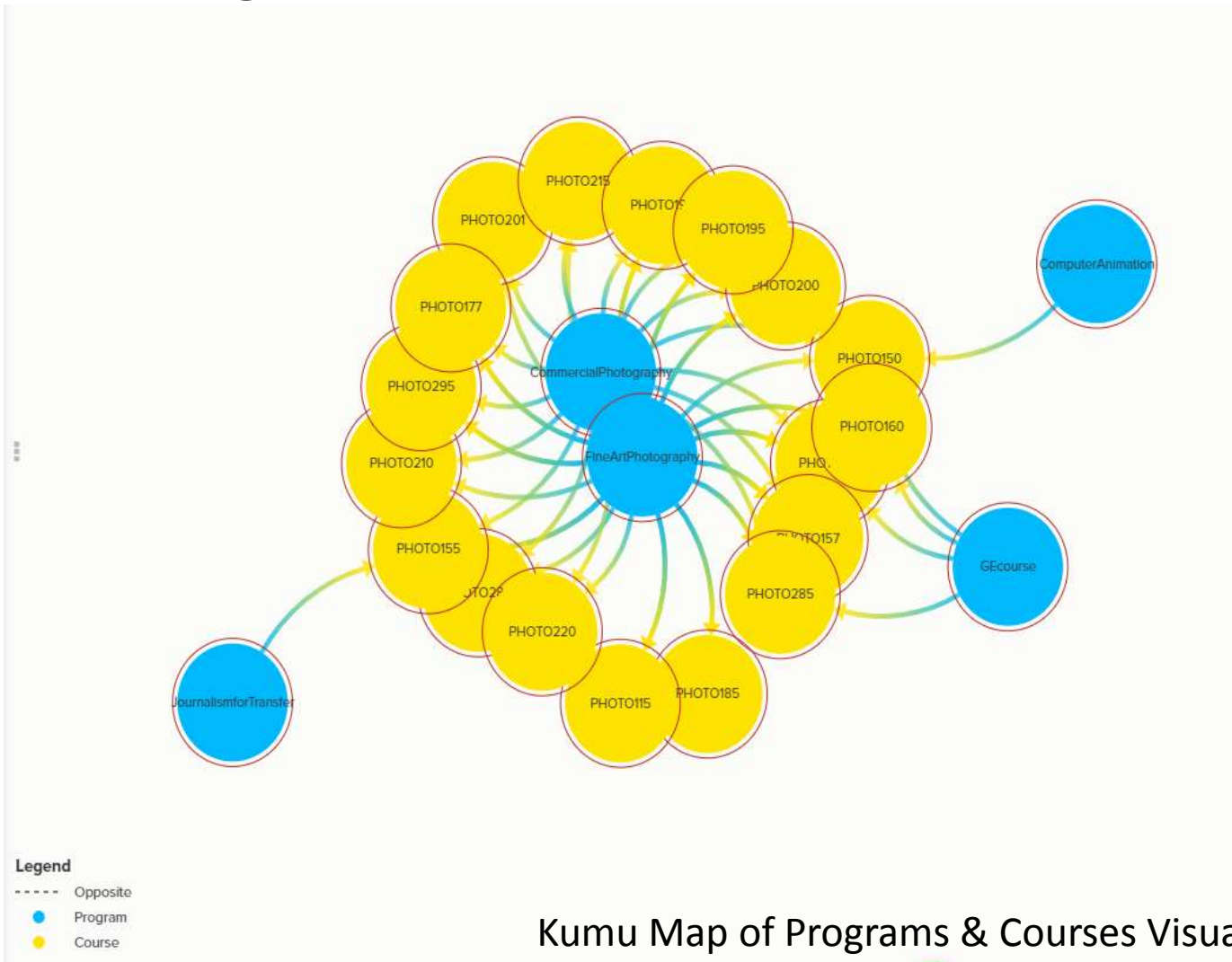
2017-2018 MAJORS FOR THE ASSOCIATE DEGREE

[Click here for a list: 2017-2018 Associate Degree](#)

DISCLAIMER: The major preparation course requirements to transfer to a 4yr college or university are very likely to be different from the major course requirements for the same major at COC.

- Administration of Justice AS
- Administration of Justice AS-T
- Administrative Assistant AS
- American Sign Language AA
- Architectural Drafting & Technology AS
- Art AA
- Automotive Technology AS
- Biological Sciences AS
- Biology AS-T
- Business Administration AS-T
- Business - Accounting Technician AS
- Business - Accounting Transfer AS

Programs that Require Photography Courses for Degree, Certificate, and/or Transfer



Kumu Map of Programs & Courses Visualization

Student Course Taking Behavior

Program Name	Students Completing at Least 1 Photography Course (N)	% of students who completed at least 1 photography course
Filmaking (N = 14)	6	42.86%
Graphic and Multi Media Design (N = 26)	11	42.31%
Art (N=34)	11	32.35%
Administrative Assistant (N = 13)	4	30.77%
Computer Applications (N = 14)	4	28.57%
Computer Networking (N = 12)	3	25.00%
Physical Education & Kinesiology (N = 35)	7	20.00%
Interior Design (N = 16)	3	18.75%
Fire Technology Pre-Service (N = 47)	8	17.02%
American Sign Language (N=18)	3	16.67%

Programs with the Greatest Percentage of its Students Successfully Completing Photography Courses who are **not** Fine Art Photography program completers

Meta Majors

Education



Social and Behavioral
Sciences and
Human Services



Industry/Manufacturing
and Construction



Health Sciences



Public Safety



Business



Science, Technology,
Engineering and Math



Arts, Humanities,
Communication,
and Design



Florida College System



Source: "Higher Education Pays: Measuring the Economic Security of Florida's Postsecondary Graduates" a study created through a partnership with the State of Florida and College Trustees, 2014.

Economic Modeling, Inc. Analyzed sources for the employment information, 2014

Begin



Meta
Majors



with the End in Mind

Determine an Area of Interest



Arts & Humanities



Business



Education



Health Science



Manufacturing



Public Safety



Science & Technology



Social Science

The Florida System aligns with K-12 pathways with the college and university 8 pathways as exemplified by this district, St Lucie Public Schools in Port St, Lucie, FL

Observation: First Screen of Majors

The screenshot shows a web browser window with the URL <https://www.opencccapply.net/vfportal/render.usa>. The page title is "Step 1: Apply To Attend | Bakersfield College". The browser's address bar shows "CCCApply". The page header includes the Bakersfield College logo and the slogan "HOME OF THE RENEGADES".

On the left side, there is a navigation menu with the following items:

- Introduction
- Enrollment Information
- Account/Making Information
- Personal Information
- Education
- Citizenship/Military
- Residency
- Needs & Interests
- Supplemental

The main content area displays a list of majors and education patterns. A dropdown menu is open, showing the following options:

- Select
- AA Accounting with BC General Education Pattern
- AA Accounting with CSU General Education Pattern (CSUGE)
- AA Accounting with UC General Education Pattern (IGETC)
- AA Administrative Office Assistant with BC General Education Pattern
- AA Administrative Office Assistant with CSU General Education Pattern (CSUGE)
- AA Administrative Office Assistant with UC General Education Pattern (IGETC)
- AS-T Administration of Justice with CSU General Education Pattern (CSUGE)
- AS-T Administration of Justice with UC General Education Pattern (IGETC)
- AA Agriculture Business Management with BC General Education Pattern
- AA Agriculture Business Management with CSU General Education Pattern (CSUGE)
- AA Agriculture Business Management with UC General Education Pattern (IGETC)
- AS Agriculture Business Management with BC General Education Pattern
- AS Agriculture Business Management with CSU General Education Pattern (CSUGE)
- AS Agriculture Business Management with UC General Education Pattern (IGETC)
- Agriculture Business Management Certificate of Achievement
- AA American Sign Language with BC General Education Pattern
- AA American Sign Language with CSU General Education Pattern (CSUGE)
- AA American Sign Language with UC General Education Pattern (IGETC)
- AA Animal Science with BC General Education Pattern
- AA Animal Science with CSU General Education Pattern (CSUGE)
- AA Animal Science with UC General Education Pattern (IGETC)
- AS Animal Science with BC General Education Pattern
- AS Animal Science with CSU General Education Pattern (CSUGE)
- AS Animal Science with UC General Education Pattern (IGETC)
- Animal Science Certificate of Achievement
- AA-T Anthropology with UC General Education Pattern (IGETC)
- AA-T Anthropology with CSU General Education Pattern (CSUGE)
- AS Architecture Drafting with CSU General Education Pattern (CSUGE)
- AS Architecture Drafting with BC General Education Pattern

On the right side, there are buttons for "Applications | Help", "Cambiar A Español", and "Continue". The page is zoomed in at 100%.

Observation: Ninth Screen of Majors

BAKERSFIELD COLLEGE HOME OF THE RENEGADES

Enr

- Introduction ✓
- Enrollment Information 🌙
- Account/Mailing Information
- Personal Information
- Education
- Citizenship/Military
- Residency
- Needs & Interests
- Supplemental

Human Services Job Skills Certificate
Nurse Assistant Job Skills Certificate
Office Assistant Job Skills Certificate
Principles of Fluoroscopy Job Skills Certificate
Principles of Venipuncture Job Skills Certificate
Registered Veterinary Tech Job Skills Certificate
Shielded Metal Arc Welding Job Skills Certificate
Welding Job Skills Certificate
Wildland Firefighting
Woodworking/Cabinetmaking Job Skills Certificate
AS Paramedic Program with CSU General Education Pattern (CSUGE)
AS Paramedic Program with UC General Education Pattern (IGETC)
AS Paramedic Program with BC General Education Pattern
AS Industrial Technology, Automotive Option with UC General Education Pattern (IGETC)
CompTIA Certificate of Achievement
Photography Certificate of Achievement
Paramedic Program Certificate of Achievement
Graphic Design Certificate of Achievement
AS-T Biology with CSU General Education Pattern (CSUGE)
AS-T Biology with UC General Education Pattern (IGETC)
AS Plant Science Horticulture Emphasis with UC General Education Pattern (IGETC)
AS Plant Science Horticulture Emphasis with CSU General Education Pattern (CSUGE)
AS Plant Science Horticulture Emphasis with BC General Education Pattern
AA Plant Science Horticulture Emphasis with BC General Education Pattern
AA Plant Science Horticulture Emphasis with CSU General Education Pattern (CSUGE)
AA Plant Science Horticulture Emphasis with UC General Education Pattern (IGETC)
AS-T Agriculture Business with CSU General Education Pattern (CSUGE)
AS-T Agriculture Business with UC General Education Pattern (IGETC)
AS-T Animal Science with UC General Education Pattern (IGETC)
AS-T Animal Science with CSU General Education Pattern (CSUGE)

RENEGADE ROAD MAP

HEALTH SCIENCES

Majors of Study

- Registered Nursing
- Vocational Nursing
- Nurse Assistant
- Public Health Sciences
- Radiology Technology
- Kinesiology
- Health Information Technology

Highest Ranked Jobs in Kern County

- Registered Nurses \$38.87/hr.
- Licensed Vocational Nurses \$28.66/hr.
- Nurse Assistant \$11.40/hr.
- Physical Therapist Assistant \$32.33/hr.
- Radiology Technologists \$31.17/hr.

BUSINESS/ COMPUTER SCIENCES

Majors of Study

- Accounting
- Admin Office Assistant
- Bookkeeping
- General Business
- Retail Management
- Computer Science

Highest Ranked Jobs in Kern County

- Business Operation Specialist \$35.13/hr.
- Accountants/Auditors \$29.33/hr.
- Human Resource Specialist \$26.83/hr.
- Purchasing Agents \$35.44/hr.
- Financial Specialist \$32.58/hr.

AGRICULTURE

Majors of Study

- Ag Business
- Animal Science
- Horticulture
- Forestry
- Plant Science
- Pre Veterinary
- Medicine
- Vet Tech

Highest Ranked Jobs in Kern County

- Agriculture Equipment Operators \$13.34/hr.
- Agriculture Inspectors \$21.15/hr.
- Forest/Conservation Workers \$9.87/hr.
- Agriculture Workers \$16.10/hr.
- Forestry Workers \$20.98/hr.

PUBLIC SAFETY

Majors of Study

- Fire Tech
- Paramedic
- EMT
- Criminal Justice
- Correctional Administration
- Administration of Justice

Highest Ranked Jobs in Kern County

- Corrections Officers \$37.24/hr.
- Police/Sheriff Officers \$33.84/hr.
- Firefighter's \$30.20/hr.
- EMT/Paramedics \$17.96/hr.
- Security Guards \$11.24/hr.

INDUSTRIAL TECH

Majors of Study

- Automotive
- Electronics
- Engineering
- Welding
- Woodworking
- Industrial Drawing
- Architecture
- Construction
- Manufacturing

Highest Ranked Jobs in Kern County

- Welders' \$25.56/hr.
- Production Workers \$11.20/hr.
- Construction Labors \$16.28/hr.
- Industrial Engineers \$53.70/hr.
- Electrical Engineers \$42.02/hr.

MATH/SCIENCE

Majors of Study

- Math
- Biology
- Chemistry
- Physics

Highest Ranked Jobs in Kern County

- Statisticians' \$41.36/hr.
- Database Administrator \$37.24/hr.
- Mathematicians' \$41.99/hr.
- Environmental Scientist/Specialist \$42.89/hr.
- Geological & Petroleum Technicians \$29.06/hr.

SOCIAL/BEHAVIORAL & HUMAN SERVICES

Majors of Study

- Child Development
- Human Services
- Culinary Arts

Highest Ranked Jobs in Kern County

- Social & Human Services Assistants \$17.51/hr.
- Child, Family & School Social Workers \$26.07/hr.
- Rehabilitation Counselors \$11.47/hr.
- Child Care Workers \$10.88/hr.
- Restaurant Cooks \$11.66/hr.

ARTS/HUMANITIES/ COMMUNICATION

Majors of Study

- Studio Arts
- Graphic Design
- Photography
- Communication

Highest Ranked Jobs in Kern County

- Graphic Designers' \$21.59/hr.
- Photographers' \$12.66/hr.
- Technical Writers \$30.85/hr.
- Media & Communication Workers \$18.21/hr.
- Public Relation Specialist \$23.16/hr.

Renegade Road Learning & Career Pathways



Destination



Start Here

Health Sciences

Majors of Study

- Biology – Human Biology
- Health Information Technology
- Kinesiology
- Paramedic
- Public Health Sciences
- Radiology Technology
- Registered Nursing
- Vocational Nursing

Business

Majors of Study

- Accounting
- Administrative Assistant
- Bookkeeping
- Business Administration
- Communication
- Economics
- Office Assistant
- Retail Management

Agriculture, Nutrition & Culinary Arts

Majors of Study

- Ag Business
- Agriculture Plant Sciences
- Culinary Arts
- Animal Science
- Dietetic Services Supervisor Program
- Environmental Horticulture
- Food Service Management Option
- Forestry
- Plant Science
- Plant Science – Horticulture Emphasis
- Plant Science – Crops Emphasis

Science, Technology & Engineering, Math (STEM)

Majors of Study

- Biology – General Biology
- Chemistry
- COMP TIA
- Computer Science
- Engineering
- Geology
- Math
- Physics

Public Safety & Emergency Management

Majors of Study

- Administration of Justice
- Chief Fire Officer
- Correctional Administration
- Criminal Justice
- Fire Officer
- Fire Technology
- Paramedic
- Wildland Fire Technology

Social Sciences, Behavioral Sciences & Human Services

Majors of Study

- Administration of Justice
- Anthropology
- Communication
- Criminal Justice
- Economics
- English
- History
- Human Services
- Philosophy
- Political Science
- Psychology
- Sociology

Industrial & Transportation Technology

Majors of Study

- Architectural Drafting
- Bachelor of Science, Industrial Automation
- Brakes
- Cabinet making
- Construction
- Engine Overhaul
- Engineering Technology
- Industrial Drawing
- Industrial Technology – Automotive
- Industrial Technology – Electronics
- Industrial Technology – Industrial Drawing
- Industrial Technology – Manufacturing
- Industrial Technology – Welding
- Industrial Technology – Woodworking and Cabinetmaking
- Industrial Technology- General
- Powertrain
- Tune Up Emissions

Education (Early Childhood / k-8)

Majors of Study

- Child Development Master Teacher- Infant Toddler
- Child Development Master Teacher-Special Education
- Child development Teacher
- Early Childhood Education
- Elementary Teacher Education

Arts, Humanities & Design

Majors of Study

- American Sign Language
- Commercial Music
- Communication
- English
- Graphic Design
- History
- Journalism
- Media Art
- Music
- Philosophy
- Photography
- Spanish
- Studio Art
- Theater Arts

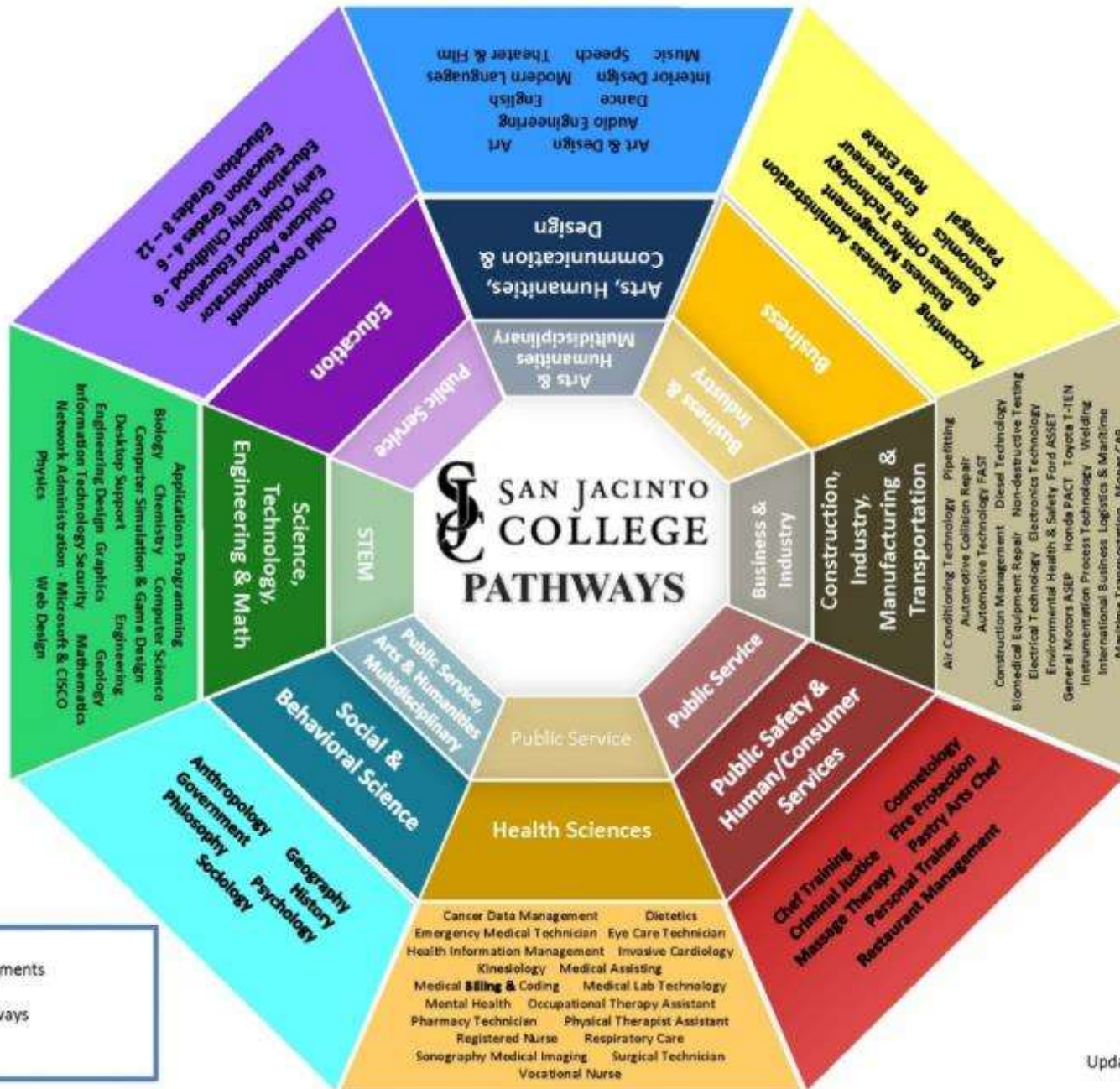
Personal & Career Exploration

Majors of Study

For the undeclared student and those exploring a variety of potential careers

Career Pathways

Arts, Humanities, Communication and Design	Business	Education	Public Safety and Human/Consumer Services
Art Audio-Engineering Dance Design Graphics English Foreign Language Graphic Design Humanities Interior Design Music Speech Theatre and Film Visual Graphics	Accounting Agriculture Business Administration Business Office Technology Economics International Business Logistics Management Maritime Paralegal Real Estate	Childcare Associate Early Childhood Elementary Education Secondary Education	Cosmetology Criminal Justice Culinary Arts Fire Science Massage Therapy Personal Training Restaurant Management
Construction, Industry, Manufacturing and Transportation	Health Sciences	STEM	Social and Behavioral Science
Air-conditioning Technology Automotive Collision Repair Automotive Technology Aviation Biomedical Equipment Repair Construction Technology Construction Management Diesel Technology Electrical Technology Electronics Technology	Cancer Data Management Dental Assistant Emergency Medical Technician Eye Care Technology Long Term Care Medical Assisting Medical Coding and Billing Medical Lab Tech Medical Radiography Mental Health	Biology Chemistry Computer Science Computer Programming Computer Simulation (gaming) Computer Information Technology Engineering Design Graphics Engineering Environmental Science Geology	Anthropology Geography Government History Philosophy Psychology Sociology



Inner Ring:
High School Endorsements

Middle Ring:
San Jac Career Pathways

Outer Ring:
San Jac MAPs

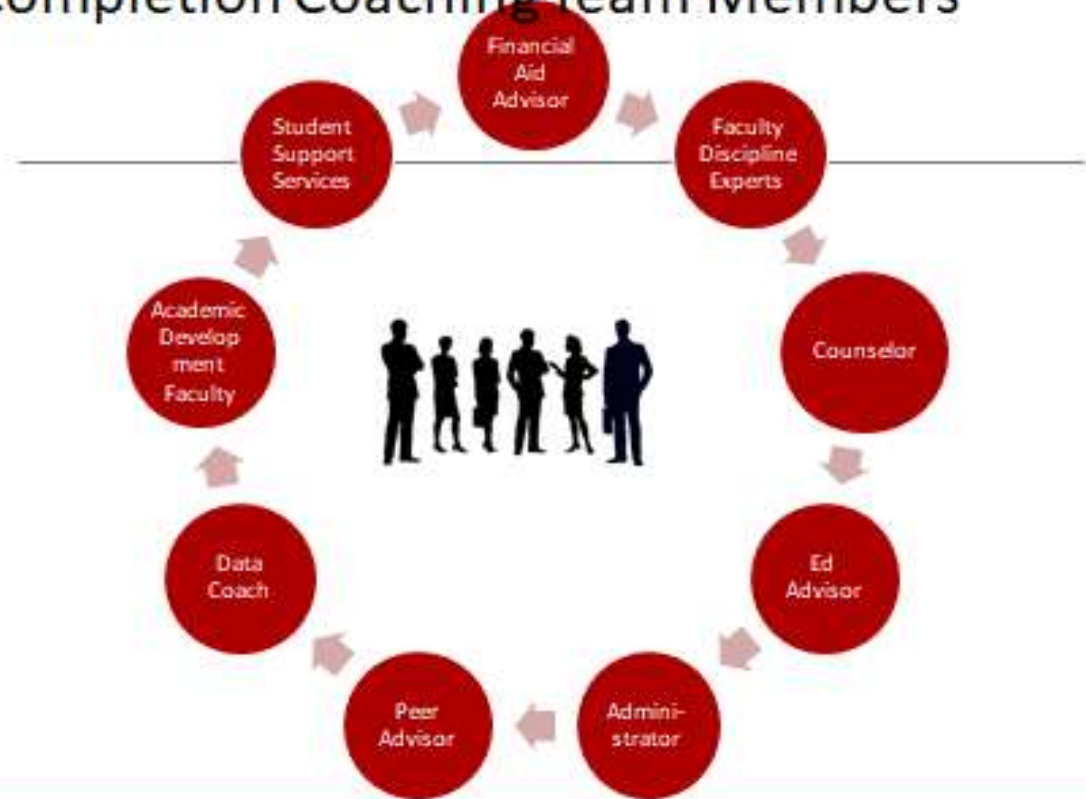
Additional Curricular Considerations

- How does the college communicate Meta Majors to prospective students?
- How does the college help students make informed choices about Meta Majors?
- How does Meta Majors placement align with English, math and ESL placement?
- Do orientations, first-year experience courses, and student success courses align to the Meta Major?
- Will mapped pathways be presented to students as their default registration?
- How will you incorporate the Golden 4 and other transfer requirements?
- Will these organizational strategies have any unintended consequences on equity?

What are the Outcomes?

- Program clarity
- Sequencing clarity
- Specific data for nudges
- Targeted messaging
- Clear contacts for student questions
- A village to lead the student to the outcome

Completion Coaching Team Members



Community College ⚡	Degree Title ⚡	Degree Type ⚡	CSU Campus ⚡	CSU Major ⚡	CSU Major Emphasis or Concentration ⚡	CSU Degree Type ⚡	Instruction Delivery Format ⚡	Program Effective Term* ⚡
Bakersfield College	Sociology	AA-T	Bakersfield	Sociology	Ethnic Studies	BA	Campus	Fall 2011
Bakersfield College	Sociology	AA-T	Bakersfield	Sociology	General	BA	Campus	Fall 2011
Bakersfield College	Sociology	AA-T	Bakersfield	Sociology	Human Services	BA	Campus	Fall 2012
Bakersfield College	Sociology	AA-T	Fresno	Sociology	Sociology	BA	Campus	Fall 2011
Bakersfield College	Sociology	AA-T	Stanislaus	Sociology	Criminology and Society	BA	Campus	Fall 2011
Bakersfield College	Sociology	AA-T	Stanislaus	Sociology	General	BA	Campus	Fall 2011
Bakersfield College	Sociology	AA-T	Stanislaus	Sociology	Human Services	BA	Campus	Fall 2011
Bakersfield College	Sociology	AA-T	Stanislaus	Sociology	Social Justice	BA	Campus	Fall 2011

The Finish in 4 Pathway provides a roadmap for completing this academic program and general education at Bakersfield College and California State University, Bakersfield in 4 years. Students should use this plan in conjunction with other academic planning resources.

- Your educational plan may vary depending on course level placement and/or waivers.
- Students should use this plan in conjunction with other academic planning resources.
- Completion is based upon students completing 30 units a year and may include summer.
- This is a suggested sequence: Students may change course timing to accommodate open classes and personal schedules.

NOTE : This guide is designed for those students wishing to transfer to CSUB. In addition to following this roadmap, all other admissions and academic requirements of this major and general education as listed in the BC and CSUB campus catalog must be adhered to.

GE = General Education; Major = Program of Study

Complete at Bakersfield College

Year	Fall Schedule			Spring Schedule		
	Course	Major GE	Units	Course	Major GE	Units
1	PSYC B1A General Psychology	Core D9	3	PSYC B1B Biological Psychology	List A B2	3
	ENGL B1A Expository Composition	A2	3	PSYC B5 Elementary Statistics for the Behavioral	Core B4	4
	Oral Communication course - either COMM B1, B4, B8	A1	3	Social Sciences course	D	3
	Either PSYC B20 Social Psychology or PSYC B40	List B D9	3	Either PSYC B30 Human Sexuality or PSYC B33	List C D9	3
	HIST 17A, 17B, 20A, 20B, 30A, 30B, or 36	D6/AI	3	Arts and Humanities course	C1 or C2	3
			15			16

Year	Fall Schedule			Spring Schedule		
	Course	Major GE	Units	Course	Major GE	Units
2	ENGL B1b, B2, B3 PHIL B7, B9 COMM B5	A3	3	PSYC B6 Research Methods for the Behavioral & Social	Core	4
	Arts and Humanities course	C1 or C2	3	Arts and Humanities course	C1 or	3
	Either PSYC B20 or PSYC B33 or PSYC B40 or PSYC	List B/C D9	3	POLS B1	D8	3
	Physical Sciences w/Lab	B1 & B3	4	Transferable Elective course		3
	Transferable Elective course		3	Transferable Elective course		3
			15			16

A Finish in 4 Pathway provides a roadmap for completing this academic program and general education at Bakersfield College and California State University, Bakersfield in 4 years. In order to be considered for admissions to CSUB, students must meet the following requirements:

- Complete the Associate Degree for Transfer requirements as outlined in the BC catalog
- Apply for graduation from Bakersfield College by the posted deadline date
- Apply for admissions to California State University, Bakersfield during the priority filing period

NOTE : This guide is designed for those students transferring from Bakersfield College. In addition to following this roadmap, all other admissions and academic requirements of this major and general education as listed in the BC and CSUB campus catalog must be adhered to.

Complete at CSU Bakersfield

Year	Fall Schedule			Spring Schedule		
	Course	Category	Units	Course	Category	Units
3	PSYCH 3110: Research Methods II	M	3	Upper Division General Education	UB	3
	PSYCH 2020: Psychology as a Profession	M	3	PSYCH Foundation Course Area B (See list)	M	3
	PSYCH 2030: Interpersonal and Group Process Skills	M	3	PSYCH Upper Division Elective #1	M	3
	PSYCH Foundation Course Area A (See list)	M	3	PSYCH Upper Division Elective #2	M	3
	Junior Year Diversity Reflection (JDYR)	JYDR	3	Free Elective		3
			15			15

Year	Fall Schedule			Spring Schedule		
	Course	Category	Units	Course	Category	Units
4	Upper Division General Education	UD	3	Psych 4900: Senior Seminar or Psych 4910: Senior Thesis	M	3
	Applied Experience Lab course (linked to previously completed course)	M	3	Capstone	M	1
	PSYCH Upper Division Elective #3	M	3	Free Elective		3
	Graduation Writing Assessment Requirement	GWAR	3	Free Elective		3
			15	Elective		2
						15

Tracking Data by Meta Majors is manageable and makes a difference!

Meta-Majors	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Agriculture, Nutrition & Culinary Arts	5.5%	3.6%	4.1%	4.3%	6.0%	6.3%
Arts, Humanities & Design	8.9%	10.1%	9.6%	9.1%	10.2%	14.5%
Business	7.9%	8.9%	8.7%	9.7%	9.5%	8.5%
Education	5.0%	7.3%	8.0%	9.0%	7.6%	7.1%
Health Sciences	14.1%	17.1%	18.8%	20.9%	20.9%	18.5%
Industrial & Transportation Technology	6.0%	7.3%	6.9%	6.4%	6.8%	6.0%
Personal & Career Exploration	21.2%	13.0%	9.0%	7.0%	6.2%	5.7%
Public Safety	3.0%	2.5%	2.6%	2.2%	3.8%	6.0%
Social, Behavioral, & Human Services	15.8%	17.4%	19.1%	18.4%	17.7%	15.1%
STEM	10.3%	11.5%	11.9%	12.1%	11.2%	11.2%
Unknown	2.4%	1.3%	1.3%	0.9%	0.0%	1.1%

Facilitating the Conversation

- How much of a degree is within a particular department?
- How do you incorporate representation from other disciplines?
- Where do under-prepared or undecided students go and who plans for them?
- How do you consider transfer requirements?
- Where do conversations with high school faculty fit in?
- Where do conversations with the students fit in?

If a dog wore pants would he wear them
like this or like this?



Let's give it a try!

Activities (select one) in groups of 4-5:

- A. Overall organization:** What guiding principles would you include in the development of Meta Majors (i.e. incorporation of GE and specificity, development or discontinuance of programs/courses, who should be involved in the discussion and final decisions)
- B. Specifics:** Use this list of majors and simple program outcomes to identify all the local college stakeholders that should be involved in identifying the Meta Majors, what steps need to take place to begin the process, and how will each Meta Major be integrated into the college pathways plan as a whole.
- C. Alternative Activity:** For those from colleges that have already developed Meta Majors...what would you do differently, if you could start all over again?

Follow-up Discussion and Q&A

- What aspect of Meta Major development do you think will work best at your college?
- What aspect will be the most challenging?
- For those that have already begun Meta Major development, what worked well, and what didn't?



Additional Resources

Meta-Majors: An Essential First Step on the Path to College Completion (JFF)

<http://www.jff.org/publications/meta-majors-essential-first-step-path-college-completion>

How meta-majors guide students toward on-time graduation (EAB)

<https://www.eab.com/daily-briefing/2016/07/26/how-meta-majors-guide-students-toward-on-time-graduation>

- Key Meta-Major Questions to Consider

<https://jfforg-prod-prime.s3.amazonaws.com/media/documents/Meta-Majors-Key-Questions-071816.pdf>

- Multiple Paths FORWARD: Diversifying Mathematics as a Strategy for College Success

<https://www.wested.org/wp-content/uploads/2018/05/Multiple-Paths-Forward-Booth.pdf>

- Quantitative Reasoning the Next “Across the Curriculum” Movement by (AACU) Susan Elrod, 2014

<https://www.aacu.org/peerreview/2014/summer/elrod>

- The Dana Center Mathematics Pathways: The Right Math for the Right Student at the Right Time

<https://dcmathpathways.org/dcmp/dcmp-model>



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