LORAIN COUNTY COMMUNITY COLLEGE

Faculty Manual for Revision to Curriculum Guides (Guided Pathways)

Purpose:

A great deal of research supports the notion of students unable to navigate through the barriers of "too many choices, too little guidance".[1] In response to this research Lorain County Community College has begun the process of implementing the guided pathway philosophy which will allow students to make more focused decisions. This manual was created as a resource in creating default pathways that include relevant outcomes to meet further education requirements and/or the employment demands in today's market.

This manual includes the following tools:

- Check lists and timelines for revising or creating curriculum guides for applied and non-applied pathways. These lists included embedded hyperlinks to relevant information:
  - Resources that provide job and labor market information
  - LCCC meta-major courses
  - Steps for Creating Applied degree pathways
  - Steps for creating AA/AS pathways
  - ODHE General Education Guidelines
  - Ohio Department of Higher Ed/Higher Learning Commission /LCCC degree and certificate requirements
  - Community College Research Center (CCRC) studies on guided pathways and student success

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[1] CCRC "Redesigning Community Colleges for Student Success Overview of the Guided Pathways Approach"
Davis Jenkins, Community College Research Center, Teachers College, Columbia University, August 2014
Document in its entirety can be found at:
http://www.ct.edu/files/ssc/DavisJenkins_CCRC_Guided_Pathways_Overview_August_2014.pdf

Faculty (Applied Program) checklist and time line for revising Curriculum Guides:	√
To be completed during the month of September by faulty in the discipline.	
Is your Program relevant in the current job market ?	
Do the careers and/or transfer paths shown on the college website and/or curriculum guides correctly reflect the educational requirements and/or careers for that degree?	
If further education is needed for employment in this field is it indicated in the information you have available to students?	
Is there a University Partnership connected with your Program? If yes, for what institution. If no, do you know what schools most students in your program transfer to?	
Do the technical courses in your Program meet industry standards?	
Have you incorporated the meta-major courses into the first and/or second semesters of your program?	
Have you identified three recommended courses to fulfill the electives required in your Program?	
Do the general education courses, including math, in your Program meet the Ohio Board of Regents guidelines and/or the options available at LCCC and do these courses align with program outcomes including transfer or career objectives?	
Have you determined which course(s) will be the milestones in your program?	
Are there certificates embedded in your program? If so, does your pathway allow the opportunity to complete in the suggested time?	
Does your program fall within the 60-65 hour range?	
To be completed during the month of October by together with faculty across disciplines.	
Collaboration across divisions is essential to ensure a progression of outcomes that are consistent with learning objectives for academic transfer and/or careers. Have you met with other divisions regarding your general education selections?	
Have you determined if your program can be completed in a two year period? (Check class schedules, per semester, to eliminate overlapping days/times)	
To be completed by the beginning of November:	
Do you have Divisional approval for your proposed Curriculum Guide changes? (This would be done at the division meeting on November 2).	
Complete the process for taking changes to the November Curriculum Council meeting. Additional instructions for Curriculum Council procedures are located in Canvas. If you have any questions please meet with your Curriculum Council Division representative.	

Faculty (Non-Applied Program) checklist and time line for revising Curriculum Guides: This is the same as the applied list but will be modified so it is more suitable for non-applied degrees	√
To be completed during the month of September by faulty in the discipline.	
Is your Program relevant in the current job market ?	
Do the careers and/or transfer paths shown on the college website and/or curriculum guides correctly reflect the educational requirements and/or careers for that degree?	
If further education is needed for employment in this field is it indicated in the information you have available to students?	
Is there a University Partnership connected with your Program? If yes, for what institution. If no, do you know what schools most students in your program transfer to?	
Do the core content courses align with the bachelor and master degree pathways for your program?	
Have you incorporated the meta-major courses into the first and/or second semesters of your pathway?	
Have you identified three recommended courses to fulfill the electives required in your Program?	
Do the general education courses in your Program meet the Ohio Board of Regents guidelines and/or the options available at LCCC and do these courses align with program outcomes including transfer or career objectives?	
Have you determined which course(s) will be the milestones in your program?	
Are there certificates embedded in your program? If so, does your pathway allow the opportunity to complete in the suggested time?	
Does your program fall within the 60-65 hour range?	
To be completed during the month of October by together with faculty across disciplines.	
Collaboration across divisions is essential to ensure a progression of outcomes that are consistent with learning objectives for academic transfer and/or careers. Have you met with other divisions regarding your general education selections?	
Have you determined if your pathway can be completed in a two year period?	
To be completed by the beginning of November:	
Do you have divisional approval for your proposed Curriculum Guide changes? (This would be done at the division meeting on November 2).	
Complete the process for taking changes to the November Curriculum Council meeting.	

Relevant Courses/Programs:

State, Regional and Local LMI

1. Career Coach www.loraincccc.edu/careers Career Coach helps illustrate the connections between our programs and concrete, real-time, regional, labor market outcomes. Faculty can use this information to ensure that the course outcome align with industry expectation by reviewing job descriptions and labor market information. Here is a link to Career Coach. https://lorainccc.emsicareercoach.com . There is no need to create an account unless you want to save your searches etc. All the LMI info can be downloaded as a PDF too.
2. Ohio Means Jobs - www.ohiomeansjob.com Click on the In-Demand Careers tab at the bottom of the home page and then the link in the first paragraph. This link takes you to a list of Ohio in-demand occupations that can be sorted by degree, highest wages, most openings etc. OMJ also has developed "Career Pathways" for about 20 Occupations. These can provide some good information to help GUIDE a student to employment and maybe offer faculty some good information when creating stackable certificates etc. The tab for the Career Pathways is located at the bottom of the OMJ home page.

Detailed Occupational Information: NOTE: *The LMI information found in MyPlan and OOH is national verses regional/state, and often lagging (compiled from quarterly LMI information and census data) and therefore not as useful as information provided by Career Coach or OMJ.* However the Occupational Information is very robust.

3. MyPlan – http://www.loraincccc.edu/Employment+and+Career+Services/Choose+Career/myplan.htm Faculty can create an account in MyPlan. Once logged-in, click the Careers Tab at the top of the page. From here click on any of the icons to get detailed information about skills, abilities, knowledge, training requirements, related occupations, etc. For simplicity, I recommend Faculty Browse by Industry.
4. Occupational Outlook Handbook http://www.bls.gov/ooh/business-and-financial/home.htm . This government site provides detailed information about: the work performed within specific occupations (i.e. Accountants) typical work environment, career pathways, wages/salary, outlook, and related occupations.

This list was composed courtesy of Marcia Jones.

Metamajors represent a group of common courses that would be taken in any of a number of related degree programs. Four Metamajors have been identified in the associate degree programs at LCCC. They are listed below with the common courses. Tier I courses are common to all programs in the metamajor. Tier II programs are common to some (but not all) programs in the metamajor. The common courses should be scheduled into the program as early as possible, preferably in the first and second semester. This allows students to begin courses that will be useful to them no matter which of the program in the metamajor field.

Health AAS Metamajor

- Degrees: ALHN AAS degree programs (including Sports/Fitness)
- Tier I courses (all programs)
  - BIOG 115, 121/122, or 161
  - ENGL 161
  - PSYH or SOCY 151
  - MTHM _____
  - SDEV 101
- Tier II courses (some programs)
  - None

Services AAS Metamajor

- Degrees: Public service and Public safety AAS programs
- Tier I courses (all programs)
  - ENGL 161
  - MTHM _____
  - PSYH or SOCY 151
  - SDEV 101
- Tier II courses (some programs)
  - ENGL 162
  - PLSC 156

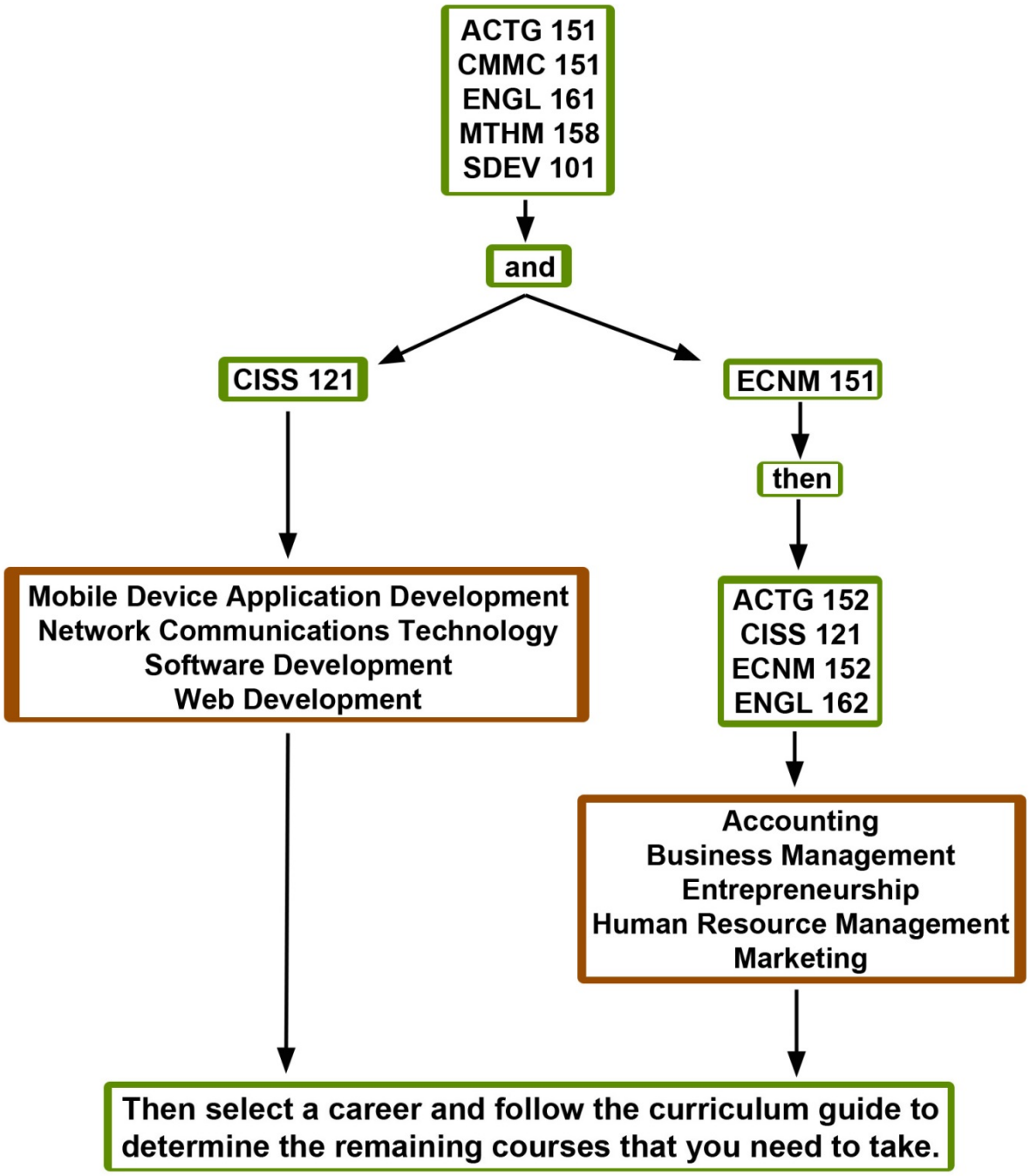
Business AAB Metamajor

- Degrees: All AAB (non-IT) programs
- Tier I courses (all programs)
  - ACTG 151
  - ENGL 161
  - ENCM or CMMC 151
  - MTHM _____
  - SDEV 101
- Tier II courses (some programs)
  - ACTG 152
  - ENGL 162
  - CISS 121
  - ECNM 152
  - BADM 165
  - MRKG 251
  - SOCY or PSYH 151

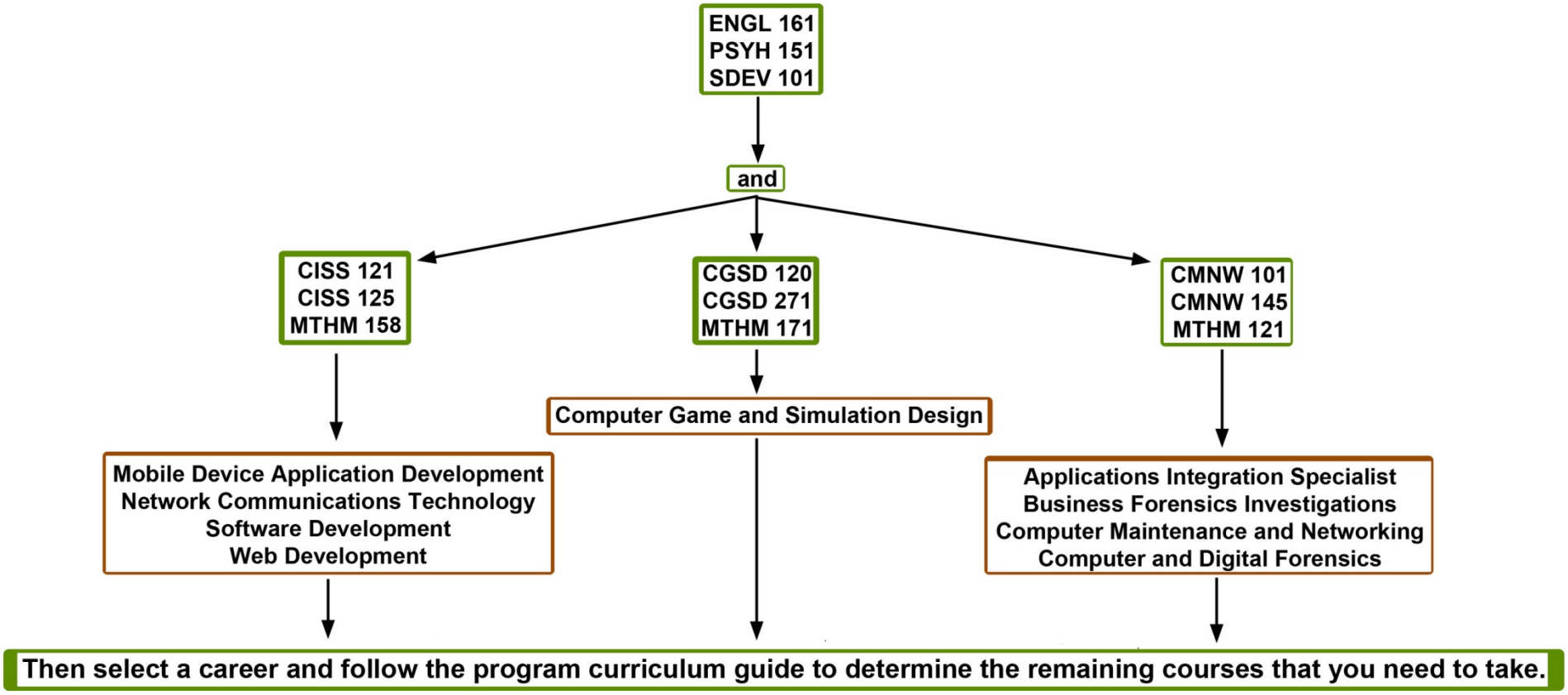
STEM Metamajor

- Degrees: Engineering (AAS) and Information (AAB) Technology programs
- Tier I courses (all programs)
  - ENGL 161
  - ENGL 162 or 164
  - MTHM 121/122 or 151
  - SDEV 101
- Tier II courses (some programs)
  - ACTG 151
  - BADM 171
  - CISS 121, 125, 145, and 160
  - CMMC 151
  - PHYC 150
  - PSYH or SOCY 151

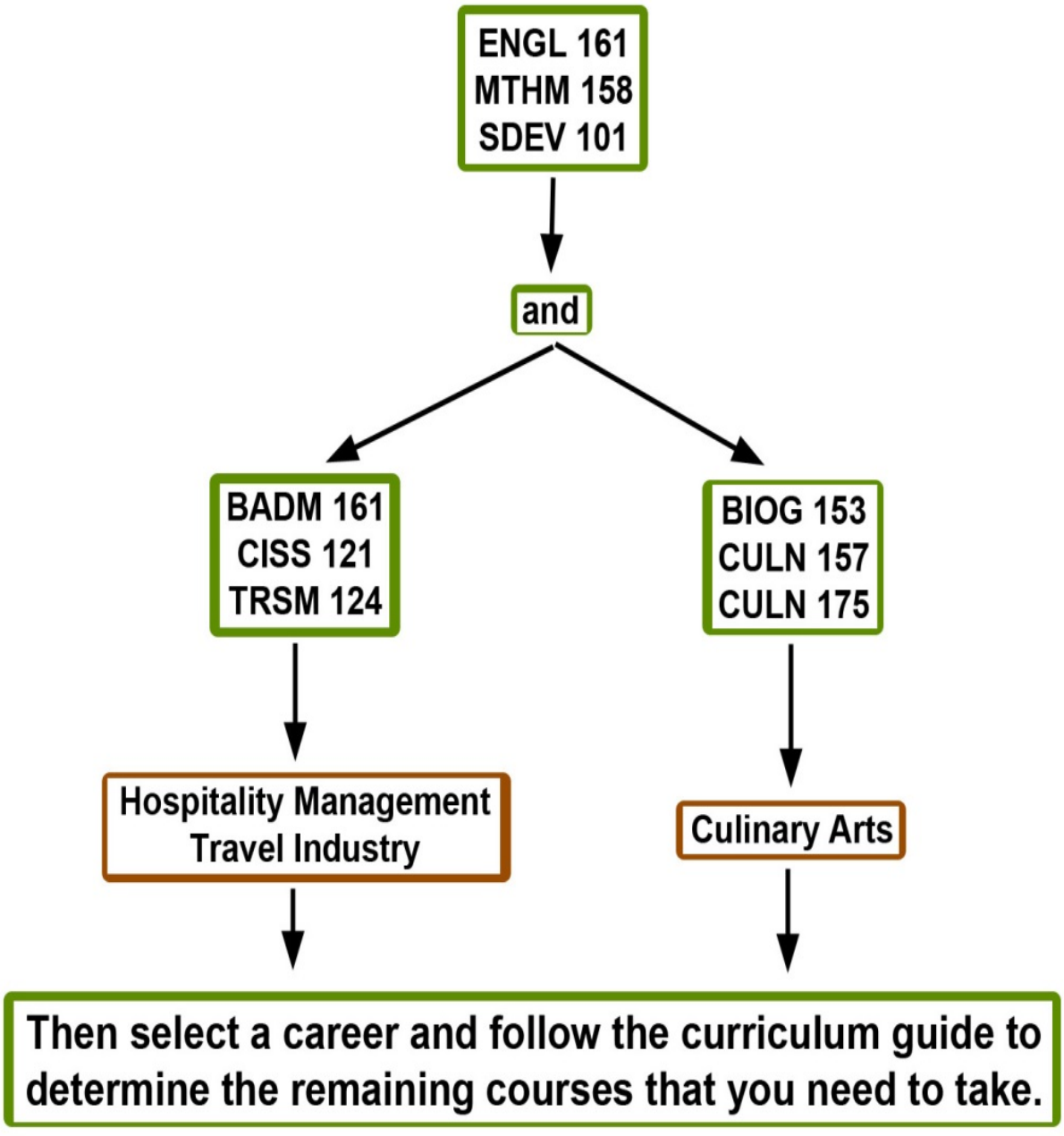
Not sure which Business/Entrepreneurship career to pursue?
Begin with these classes



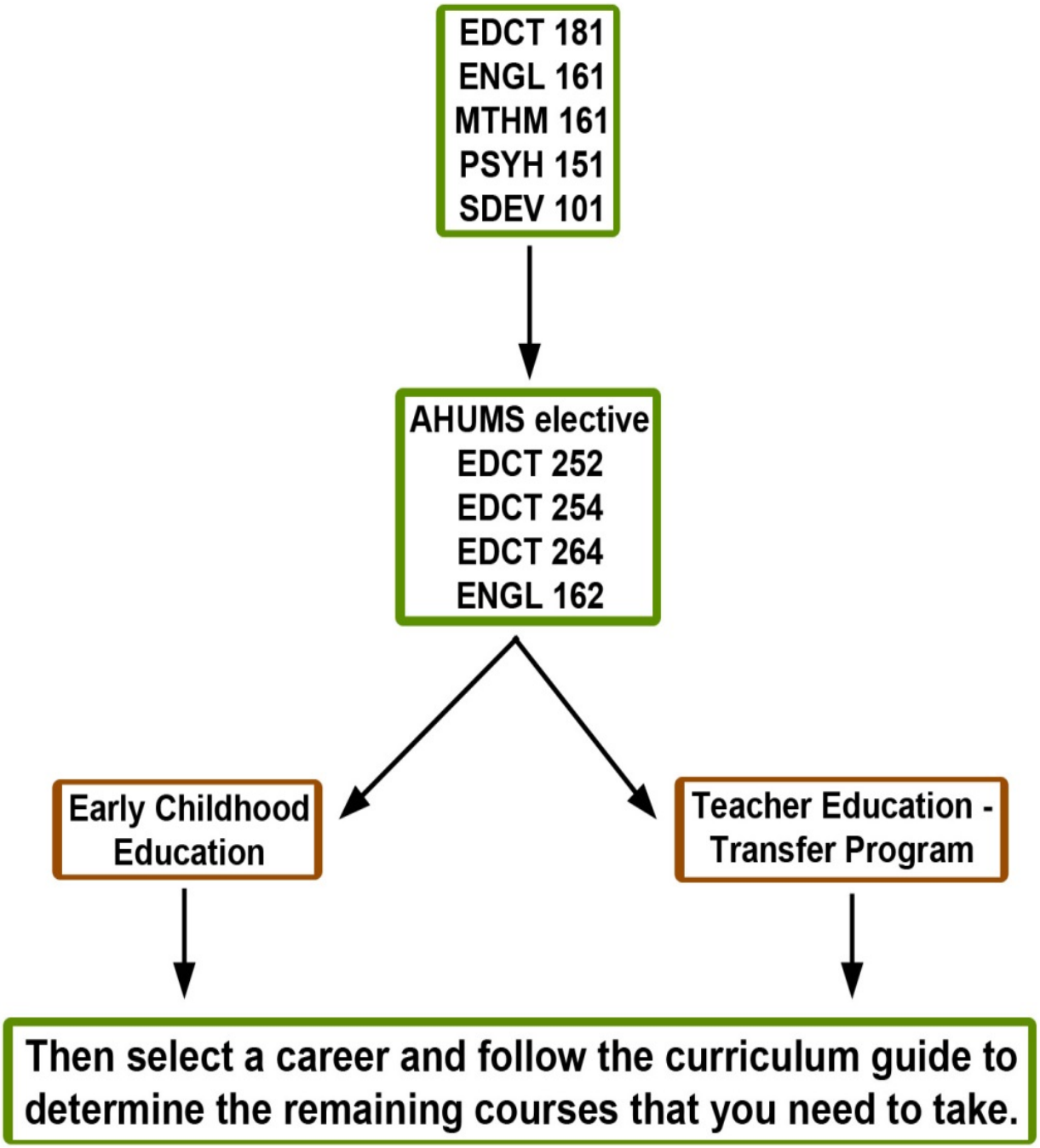
Not sure which Computer/IT career to pursue?
Begin with these classes

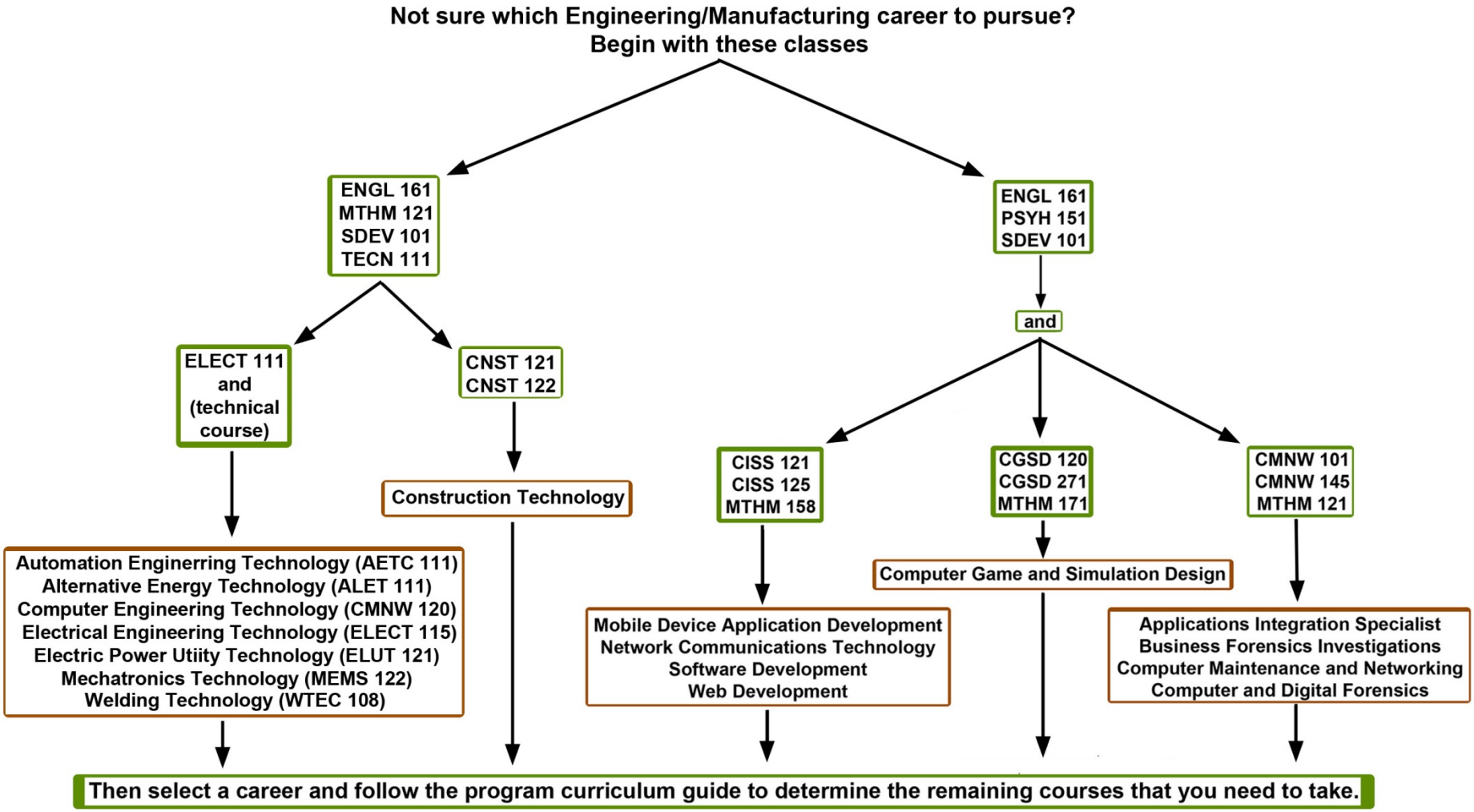


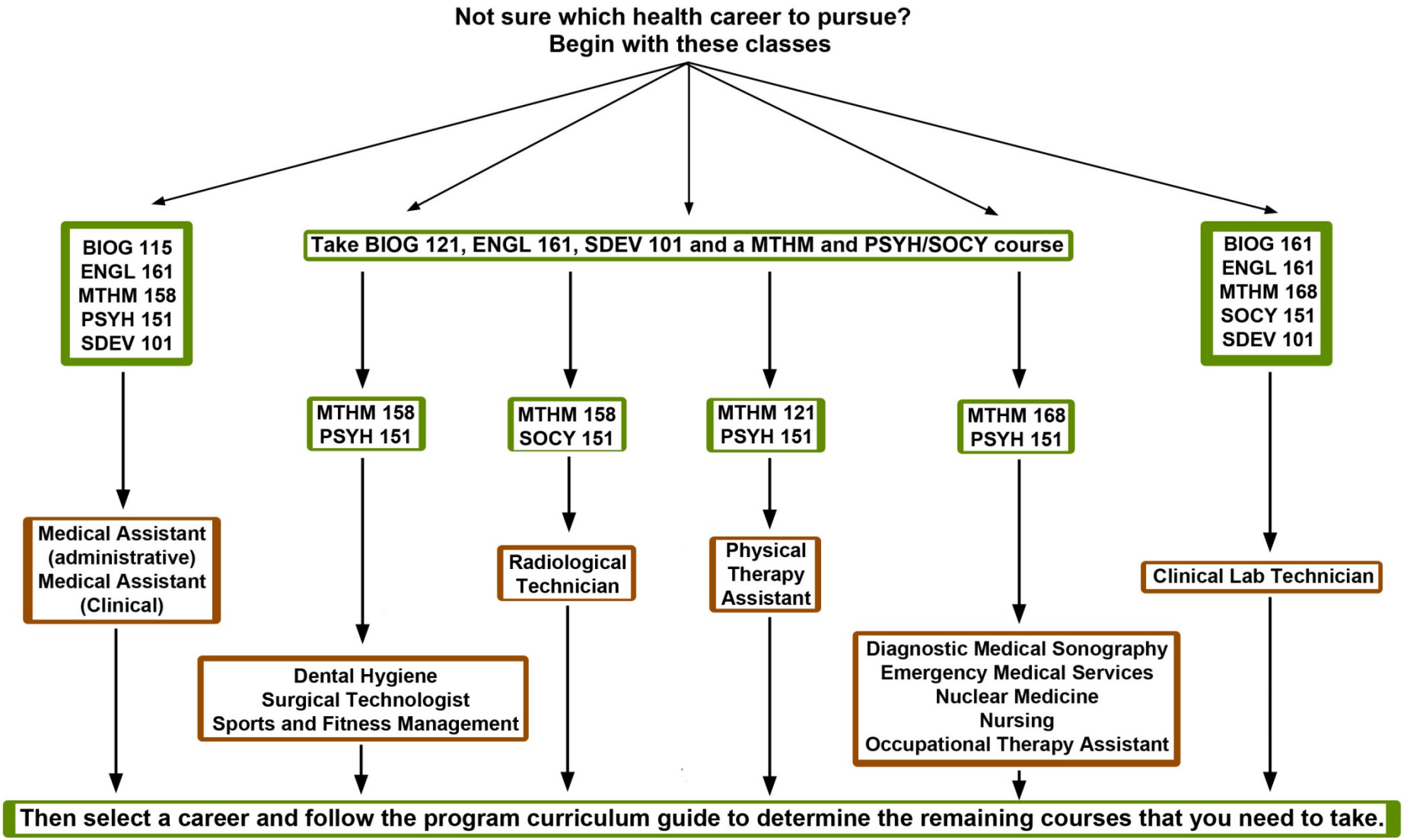
Not sure which Culinary/Hospitality career to pursue?
Begin with these classes



Not sure which Education career to pursue?
Begin with these classes



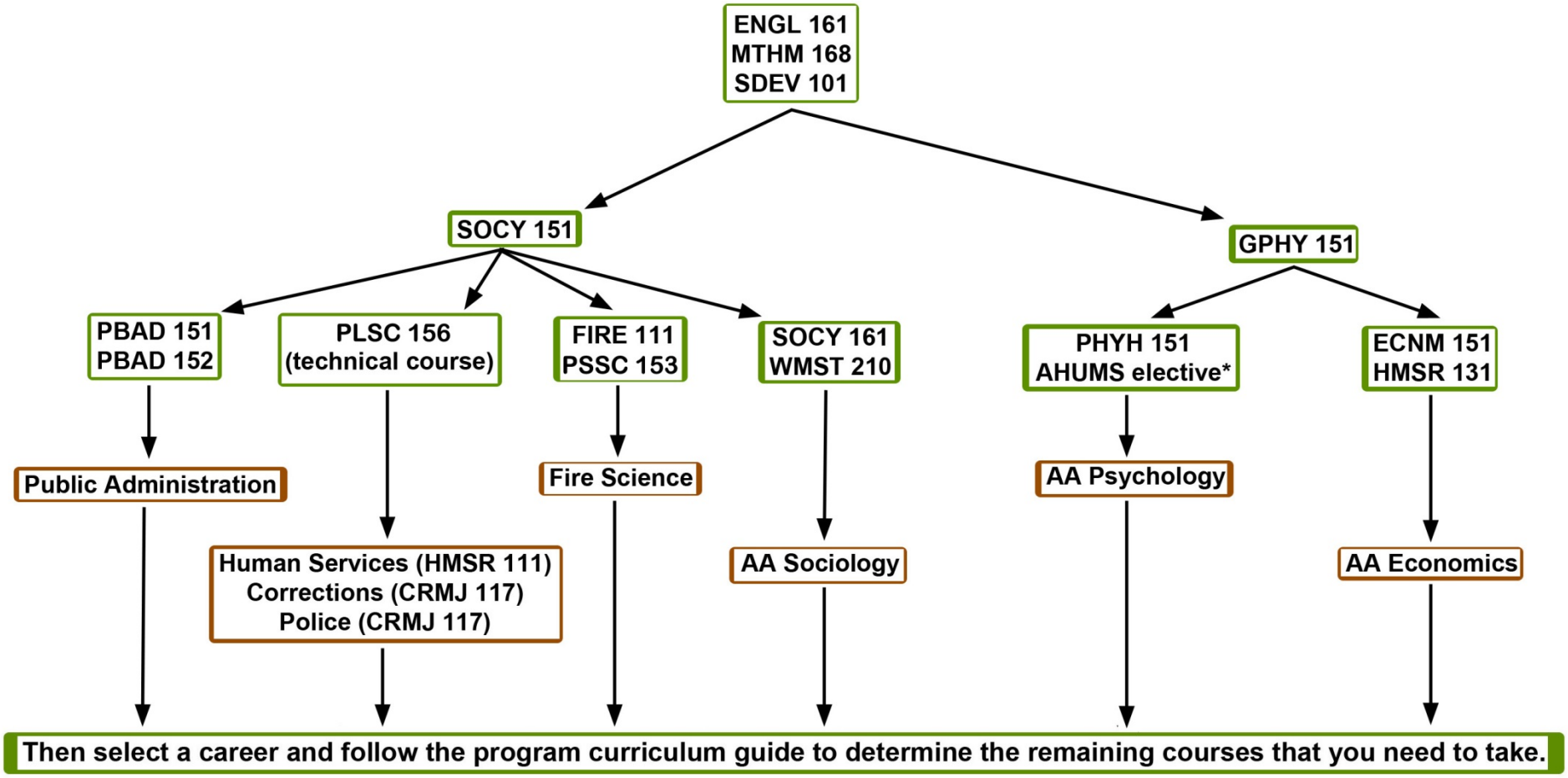

Not sure which Engineering/Manufacturing career to pursue?
Begin with these classes
ENGL 161
MTHM 121
SDEV 101
TECN 111
ENGL 161
PSYH 151
SDEV 101
and
ELECT 111
and
(technical
course)
CNST 121
CNST 122
CISS 121
CISS 125
MTHM 158
CGSD 120
CGSD 271
MTHM 171
CMNW 101
CMNW 145
MTHM 121
Construction Technology
Automation Enginerring Technology (AETC 111)
Alternative Energy Technology (ALET 111)
Computer Engineering Technology (CMNW 120)
Electrical Engineering Technology (ELECT 115)
Electric Power Utiity Technology (ELUT 121)
Mechatronics Technology (MEMS 122)
Welding Technology (WTEC 108)
Mobile Device Application Development
Network Communications Technology
Software Development
Web Development
Computer Game and Simulation Design
Applications Integration Specialist
Business Forensics Investigations
Computer Maintenance and Networking
Computer and Digital Forensics
Then select a career and follow the program curriculum guide to determine the remaining courses that you need to take.


Not sure which health career to pursue?
Begin with these classes
BIOG 115
ENGL 161
MTHM 158
PSYH 151
SDEV 101
Medical Assistant
(administrative)
Medical Assistant
(Clinical)
Take BIOG 121, ENGL 161, SDEV 101 and a MTHM and PSYH/SOCY course
MTHM 158
PSYH 151
Dental Hygiene
Surgical Technologist
Sports and Fitness Management
MTHM 158
SOCY 151
Radiological
Technician
MTHM 121
PSYH 151
Physical
Therapy
Assistant
MTHM 168
PSYH 151
Diagnostic Medical Sonography
Emergency Medical Services
Nuclear Medicine
Nursing
Occupational Therapy Assistant
BIOG 161
ENGL 161
MTHM 168
SOCY 151
SDEV 101
Clinical Lab Technician
Then select a career and follow the program curriculum guide to determine the remaining courses that you need to take.

*Select Arts/Humanities (AHUMS) elective from list of Transfer Module courses

Not sure which Services/Safety career to pursue? Begin with these classes

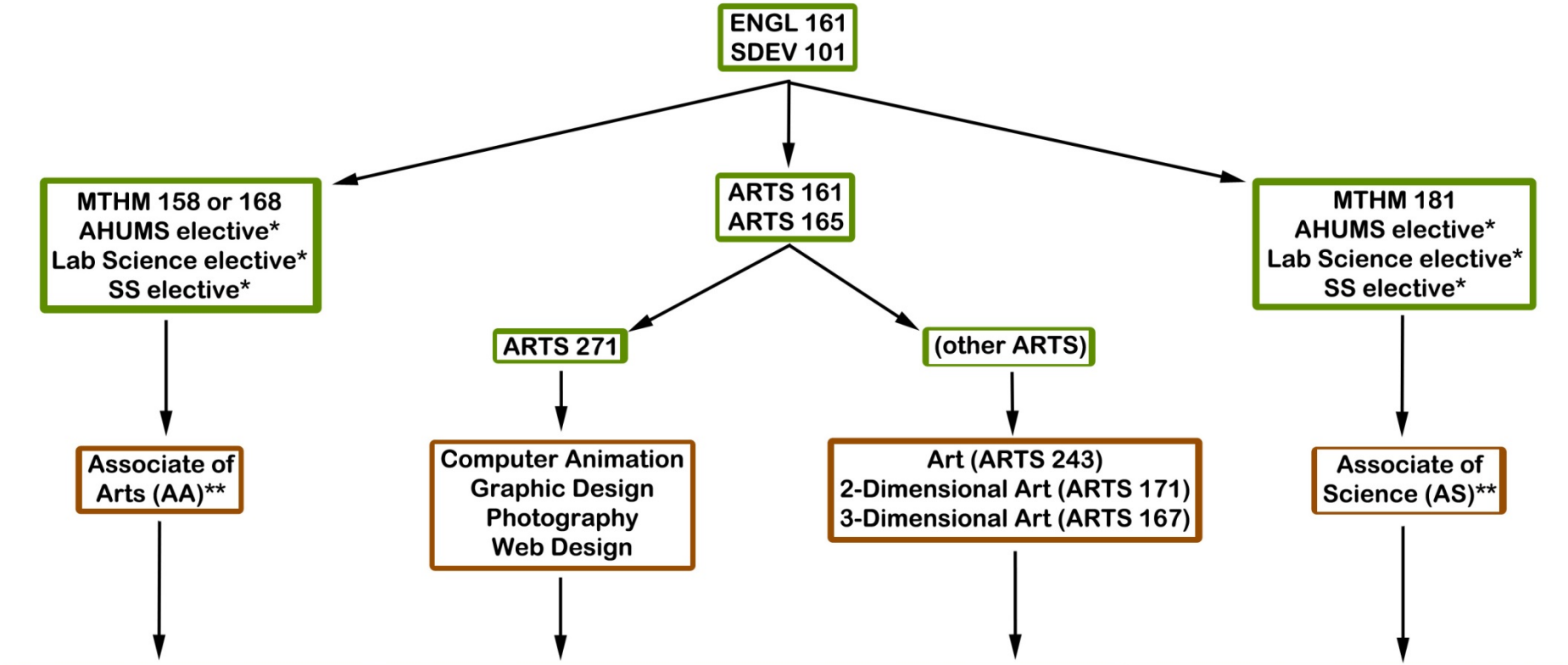
The Associate of Arts (AA) degree is typically used for transfer to a 4-year institution towards completion of BA/BS



*Select Lab Science, Social Science (SS), and Arts/ Humanities(AHUMS) electives from list of Transfer Module courses

Not sure which Liberal/Creative Arts career to pursue?
Begin with these classes

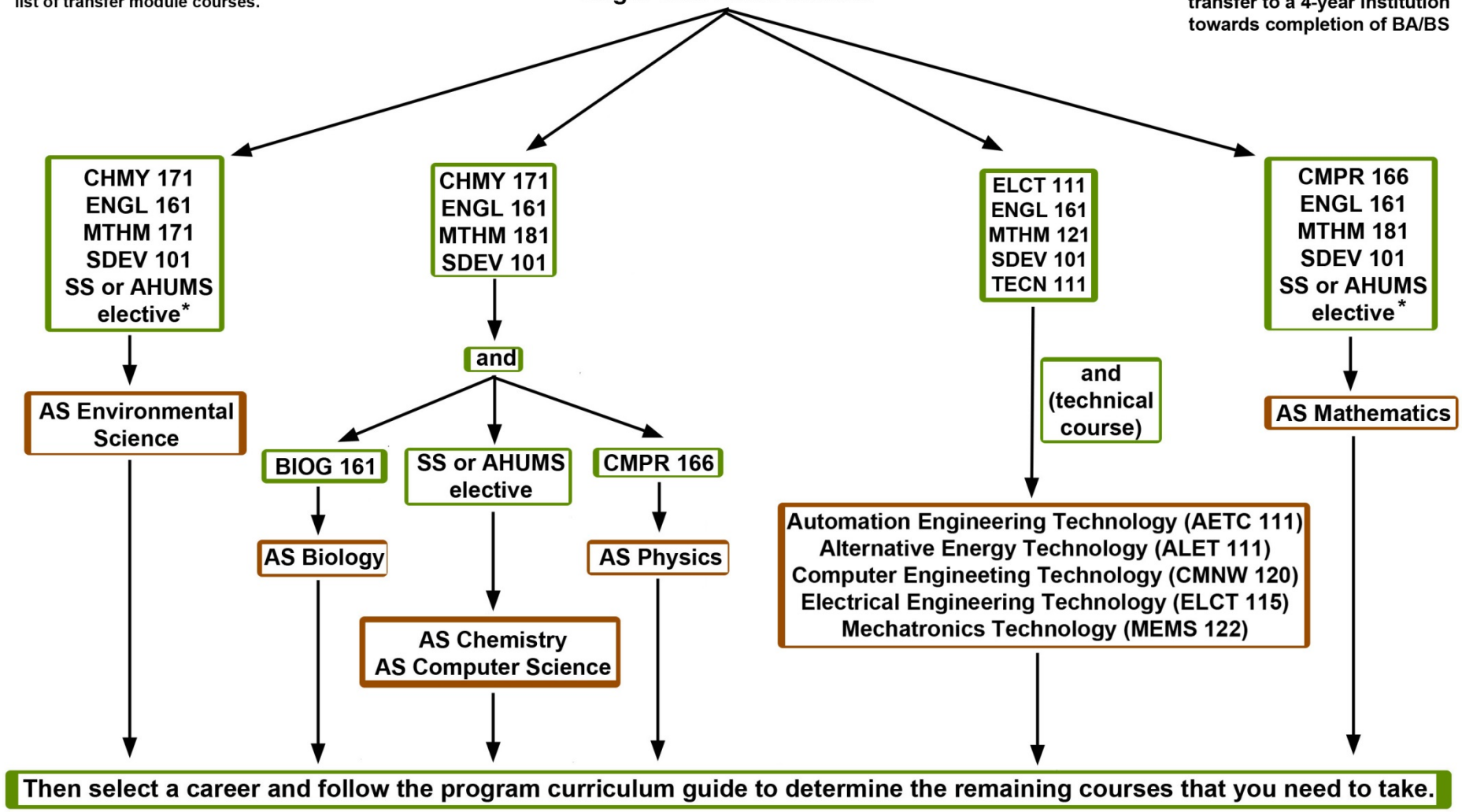
**The Associate of Arts (AA) and Associate of Science (AS) degrees are typicall use for transfer to a 4-year institution towards comletion of BA/BS



*Choose Arts/Humanities (AHUMS) or Social Science (SS) elective from list of transfer module courses.

Not sure which STEM career to pursue? Begin with these classes

The Associate of Science (AS) degree is typically used for transfer to a 4-year institution towards completion of BA/BS



“The milestones identify critical courses for timely progress and the last semester in which they can be completed for on-time graduation. May include the grade as a critical indicator.”

Complete College America PPT Guided Pathways to Success (GPS)

Process for Creating Pathways for
AAS, AAB, or AATE Degrees

Step 1: Pathways must be built using the following guidelines:

All programs MUST have a math and English Composition (ENGL 161) course in the curriculum and at least 2 of the following 3 gen ed courses: Social Science, Humanities, Science (state mandate). This will fulfill the core GEO requirement for LCCC, as well. All programs must also address the five infused GEO. General Education Courses need to be selected from the following lists. Refer to the Gen Ed section of Curriculum Council Information Site in Canvas for details about the GEO and the Gen Ed by Course and Program list to determine the GEO addressed by each course.

Approved Social Science

ARCH 155
ECNM 151, 152
GPHY 151, 152
HSTR 151, 152, 161, 162, 171, 252, 267
PLSC 151, 155, 156, 157
PSYH 151, 251, 253, 254, 255, 257, 261, 263, 273, 275
SOCY 151, 155, 161, 255, 256, 265, 276
URBS 155, 161, 210
WMST 210

Approved Arts and Humanities

ARTS 243, 244, 245, 246, 254
ENGL 251, 252, 253, 254, 255, 257, 259, 262, 262, 265, 266, 267, 269
HUMS 151, 161, 261, 262, 263, 271, 274, 281
MUSC 261, 262
PHYL 151, 161, 165, 171, 174, 262, 271, 281
RELG 181, 182, 251, 261, 262, 281
THTR 151, 185

Approved Math^

MTHM 121, 150, 151, 162, 168, 171, 172, 175, 181, 182, 270, 280, 281, 283

^MTHM 158 – a revised version of MTHM 151 will be added to the curriculum for fall 2016 and may be a good option for many applied associate degree programs.

Approved Science

ASTY 151, 152
BIOG 121, 122, 151, 152, 159, 161, 162, 163, 164, 165, 251, 252, 260, 268, 275
CHMY 155, 161, 162, 171, 172, 271, 272
PHYC 151, 152, 251, 252
PSSC 153, 156, 157, 158, 160, 161

Step 2: Review current curriculum guide

- Review current program curriculum guide to determine if the program meets the above stated requirements for associate degree programs.
- Determine if current courses are the most appropriate options for the program and any potential future educational aspirations of the students (e.g. pursing Baccalaureate degree), especially if there is an associated University Partnership program.
- New state regulations regarding curricula may require some significant changes to the program curriculum guide:
    - All programs are now required to have Math.
    - The ratio of "non-program" to "program" course credits has changed. It is recommended that you consult with faculty from the "service" divisions (i.e. AHUMS, SS, SCIM) to assist you in determining what "non-program" courses might help your program to cover the content with fewer "program" course credits.
    - Creative revamping of courses to include a credit of "lab" (2-3 hours/credit) or "clinical" (3-6 hours/credit) to replace a credit of "lecture" (1 hour/credit) can create additional contact minutes without increasing credits in the course.
    - Programs need to reduce overall credits for degree attainment.
- Programs have been divided up into Metamajors based upon common courses in the curriculum. Refer to the Metamajors Summary document for the listing of metamajors, programs, and common courses.
    - All programs should include the **bolded** courses in the listing on this document for their metamajor.
    - Programs should include as many of the *italicized* courses in this listing as are appropriate.
    - English Comp, math, and SDEV 101 should be included in the first semester of the curriculum.
    - The metamajors courses should be included in the first two semesters of the curriculum.
- Each semester of the program should include a minimum of 15 credits and not more than 19 credits to allow the student to achieve the degree in a timely fashion.

Step 3: Electives

- If electives are present in the curriculum:
    - Choose a course that the student should take or 2-3 options for the student to select from to fulfill that requirement.
    - Include the most appropriate courses that you believe would benefit the student in his/her future career. For example, a biology student pursuing a medical career might benefit more from a course in Bioethics than a course in Shakespearian Literature to fulfill the Humanities requirement.
    - If there is a University Partnership program associated with the tract, consider some of the additional requirements that the partner might have (e.g. cultural diversity, fine arts, international perspective, etc.) and choose elective options that might also meet that requirement for the student.

- It is recommended that you consult with faculty from the "service" divisions (i.e. AHUMS, SS, SCIM) to assist you in determining what elective courses might be most appropriate for your students.

Step 4: Revise the program curriculum guide

- Build the curriculum guide within the most recent version of the Associate Degree Curriculum Guide template that can be found on the Curriculum Council Information site on Canvas.
- If your major has an associated 3+1 UP program, create a list of an additional 30 LCCC credits that the student should take towards that UP degree. This information will be incorporated into the website that will house this information to guide students to their degrees in the shortest period of time.
- Present finished product to division by November for approval and Curriculum Council by January for implementation in Fall 2016.

Process for Creating Pathways for
"Majors" Within the AA or AS Degree

Step 1: Pathways must be built using the following guidelines:

Associate of Arts Requirements

- ENGL 161
- 1 MTHM course*
- 3 Social Science courses*
- 3 Arts/Humanities courses*
- 2 Science courses (one with lab)*
- Plus discipline specific credits for total of 60 credits^

* Courses must be selected from approved list of Transfer Module (TM) courses
^ The discipline-specific credits should represent core curricular selections that would apply towards a BA/BS degree in that major

Associate of Science Requirements

- ENGL 161
- 1 MTHM course*
- 2 Social Science courses*
- 2 Arts/Humanities courses*
- 2 Science courses (one with lab)*
- 2 Science/Math Sequences*
- Plus discipline specific credits for total of 60 credits^

* Courses must be selected from approved list of Transfer Module (TM) courses
^ The discipline-specific credits should represent core curricular selections that would apply towards a BA/BS degree in that major

Approved Social Science

ARCH 155
ECNM 151, 152
GPHY 151, 152
HSTR 151, 152, 161, 162, 171, 252, 267
PLSC 151, 155, 156, 157
PSYH 151, 251, 253, 254, 255, 257, 261, 263, 273, 275
SOCY 151, 155, 161, 255, 256, 265, 276
URBS 155, 161, 210
WMST 210

Approved Arts and Humanities

ARTS 243, 244, 245, 246, 254
ENGL 251, 252, 253, 254, 255, 257, 259, 262, 262, 265, 266, 267, 269
HUMS 151, 161, 261, 262, 263, 271, 274, 281
MUSC 261, 262
PHYL 151, 161, 165, 171, 174, 262, 271, 281
RELG 181, 182, 251, 261, 262, 281
THTR 151, 185

Approved Math

MTHM 150, 151, 162, 168, 171, 172, 175, 181, 182, 270, 280, 281, 283

Approved Science (one with lab)

ASTY 151, 152
BIOG 121, 122, 151, 152, 159, 161, 162, 163, 164, 165, 251, 252, 260, 268, 275
CHMY 155, 161, 162, 171, 172, 271, 272
PHYC 151, 152, 251, 252
PSSC 153, 156, 157, 158, 160, 161

Approved AS sequences**

BIOG 121/122, 161/162, 164/165
CHMY 161/162, 171/172, 271/272
MTHM 181/182, 280/281/283
PHYC 151/152, 251/252

**Others by SCIM division approval

- All AA and AS degree programs must meet all 5 Core General Education Outcomes (GEO) and all 5 infused GEO in the course selections.

Step 2: Convene meeting of discipline faculty

- Within a particular discipline, there may be several pathways for students to pursue depending upon their selected career. For example, within the field of biology there are actually three different career tracts, with very different coursework requirements (i.e. medical, research, general biology).
- Determine if there will be a single majors pathway or multiple pathways within the discipline.
- If there are multiple tracts, determine if the discipline faculty should be divided up into teams, based upon expertise, to develop each of the different tract pathways.

Step 3: Identify a list of careers associated with major

- Create a list of careers that would utilize this educational pathway.
- If there are multiple tracts, identify a separate list of careers for each tract.

Step 4: Select courses that would be appropriate for student pursuing the degree pathway

- Discipline faculty determine the most appropriate courses a student should take when pursuing that major, keeping transferability of the credits in mind. Transfer Module courses are much more likely to transfer to other institutions for credit as the course (rather than general credit) than non-TM courses.
- If there is a University Partnership program associated with this major, be sure that course selections align with the partner's program requirements.
- Ensure that the guidelines on the first page are followed when making selections of the 60 credits for the degree pathway, including the GEO requirements. Refer to the Gen Ed by Course and Program list on Curriculum Council Information Site in Canvas for details about GEO addressed by each course.
- Be aware of any necessary college-level pre-requisites for courses, as these pre-requisites must be included in the listing of the 60 credits.
- For electives (e.g. in a biology pathway, students would have SS or AHUMS electives; students in English would have SS or Science electives):
    - Choose 2 or 3 courses for the student to select from. If the student will need to select two such electives, a list of 4-6 for the pair would be acceptable.
    - Include the most appropriate courses that you believe would benefit the student in his/her future career. For example, a biology student pursuing a medical career might benefit more from a course in Bioethics than a course in Shakespearian Literature to fulfill the Humanities requirement.
    - If there is a University Partnership program associated with the tract, consider some of the additional requirements that the partner might have (e.g. cultural diversity, fine arts, international perspective, etc.) and choose elective options that might also meet that requirement for the student.
- It is recommended that you include the following statement related to electives in the curriculum guide that you will create to help further guide students:

LCCC strongly recommends consulting with a counselor or advisor and/or your future transfer institution when making your course selections to ensure that all courses will transfer toward your major.

- Once list is created, share list with Transfer and Applied Team (for their work).

Step 5: Create the pathway curriculum guide

- Divide up the list of courses up into 4 semesters worth of classes. English Comp, math, and SDEV 101 should be included in the first semester of the curriculum.
- Each semester should include a minimum of 15 credits and not more than 19 credits to allow the student to achieve the 60 credits for the AA or AS degree. You may find that your "pathway" may include a few more credits than the required 60 – this is okay as long as you don't get too much above.
- Pre-requisite courses must be completed in the semester(s) prior to taking the course that has that pre-requisite, so plan the schedule accordingly.
- Below is an example of what such a pathway might look like (Biology – Medical tract):

First Semester 1st Year:

BIOG 161	Principles of Biology I (4)
CHMY 171	General Chemistry I (5)
ENGL 161	College Composition I (3)
MTHM 175	College Algebra and Precalculus (5)
SDEV 101	College 101 (1)

Second Semester 1st Year:

>BIOG 162	Principles of Biology II (4)
>BIOG 275	Genetics (4)
>CHMY 172	General Chemistry II (5)
Social Science Elective~ (3)	

First Semester 2nd Year:

BIOG 121	Anatomy and Physiology I (4)
>CHMY 271	Organic Chemistry I (5)
Arts and Humanities elective^ (3)	
Social Science Elective~ (3)	

Second Semester 2nd Year:

>BIOG 122	Anatomy and Physiology II (4)
>BIOG 252	Microbiology (5)
>CHMY 272	Organic Chemistry II (5)
Arts and Humanities elective^ (3)	

> Indicates that this course has a college level prerequisite
~ Select Social Science elective from: ECNM 151/152, PSYH 151/251, or SOCY 151/276
^ Select Arts/Hums elective from: HUMS 151, PHYL 161/165, RELG 181/182

- Build the curriculum guide within the Associate Degree Curriculum Guide template that can be found on the Curriculum Council Information site on Canvas.

- If your major has an associated 3+1 UP program, create a list of an additional 30 LCCC credits that the student should take towards that UP degree. This information will be incorporated into the website that will house this information to guide students to their degrees in the shortest period of time.
- Present finished product to division by November for approval, and as informational item to Curriculum Council by January.
- Submit copy of finished curriculum guide to Transfer and Applied team (for their work).

Appendix C: General Education Guidelines

The guidelines for general education are divided into two sections—one for public institutions and one for private institutions. Although the general education credit hour expectations and breadth of experience are the same for public and private institutions, the general education requirements are more specific for public institutions because they must align their general education curriculum with the Ohio Transfer Module (OTM) and with Ohio's Articulation and Transfer Policy[22].

Throughout the document, the following definitions are used:

General Education Courses: Those courses in written and oral communication, quantitative principles, biological and physical sciences, social and behavior sciences and the arts and humanities that provide the foundation and common experience expected among individuals holding associate and baccalaureate degrees. These courses, along with courses within a major, provide opportunities for critical thinking, problem solving and analytic skills.

Applied General Education (Basic Education) Courses: Those courses within applied associate degrees that emphasize the application of general education to an occupational or technical area. Courses such as technical communication, business mathematics, calculations for health professionals, study skills, applied computing, and practical psychology are examples that fall in this category. Applied general education coursework cannot be counted toward meeting the minimum requirements for general education courses in associate or baccalaureate degrees (i.e., 15 semester hours in applied associate degree programs and 36 semester hours in associate of arts, associate of science and bachelor's degrees).

General Education Courses in the Arts: Courses in this category do not include "performance" courses such as painting, sculpting or dance, but may include courses in the history of art, dance, film or theater.

General Education Courses in Technology and Innovation: Courses in this area are related to the analysis and understanding of how discovery and invention impact society.
Note: Developmental (remedial) courses cannot be counted toward meeting the minimum requirements general education courses in associate or baccalaureate degrees.

22 https://www.ohiohighered.org/transfer/policy

General Education Guidelines: Ohio Public Institutions

Applied Associate Degrees

Applied associate degrees (Associate of Applied Business, Associate of Applied Science, Associate of Technical Studies, and Associate of Individualized Studies), must include at least 30 semester hours of non-technical coursework, which includes both general education and applied general education (i.e., "basic") courses. The general education portion of the non-technical coursework must include at least 15 semester credit hours. A minimum of six semester hours must be found in the following two categories:

- At least one course (three semester credit hours) in the English Composition and Oral Communication area (e.g., First Writing, Second Writing, Public Speaking)
- At least one course (three semester credit hours) in the Mathematics, Statistics and Logic area (e.g., Algebra, Trigonometry, Calculus, Statistics, Formal/Symbolic Logic)

A minimum of six semester hours must come from the following three categories, and at least two of the three categories must be represented.

- At least one course (three semester credit hours) in the Arts and Humanities area (e.g., Art History, Ethics, History, Literature, Philosophy, Religion, Ethnic or Gender Studies)
- At least one course (three semester credit hours) in the Social and Behavioral Sciences area (e.g., , Communication, History, Economics, Political Science, Psychology, Sociology)
- At least one course (three semester credit hours) in the Natural Sciences area (e.g., Anatomy, Biology, Chemistry, Environmental Science, Physics, Physiology)

In order to assure maximum transferability, institutions are strongly encouraged to implement general education programs that include coursework in all five general education categories and to use a three semester hour First Writing course to fulfill the minimum requirement in the English composition and oral communication area.

Institutions are expected to use approved Ohio Transfer Module (OTM) courses and follow applicable Transfer Assurance Guides (TAGs) when developing general education requirements for their applied associate degrees. However, recognizing that the skills needed for some OTM courses in the mathematics and science areas exceed the skills needed for the successful completion of some applied degrees, OTM-approved courses are not required to fulfill the mathematics and science requirements.

Associate of Arts (AA) and Associate of Science (AS) Degrees

Consistent with the belief that the AA and AS degrees serve as the first two years of a bachelor's degree and to provide maximum transferability of courses from the associate level to the bachelor's level, the general education component of the A.A. and the AS degrees at Ohio's public institutions must fulfill the institution's Ohio Transfer Module (OTM).

Ohio Transfer Module (OTM)[23]

The Ohio Transfer Module contains 36-40 semester hours of coursework in general education. It is a subset or the complete set of general education requirements at each college or university. In order for general education courses to be a part of an institution's transfer module, all coursework is subject to a review by the statewide transfer module panels against the Ohio Transfer Module Guidelines and learning outcomes.

Each transfer module must include a minimum of 24 semester hours of approved OTM courses as outlined below:

- At least three semester credit hours in English Composition and Oral Communication (e.g., First Writing, Second Writing, Public Speaking)
- At least three semester credit hours in Mathematics, Statistics and Logic (e.g., College Algebra, Pre-Calculus, Trigonometry, Calculus, Statistics, Formal/Symbolic Logic)
- At least six semester credit hours in Arts and Humanities (e.g., Art History, Ethics, American History, Literature, Philosophy, Religion, Ethnic or Gender Studies)
- At least six semester credit hours in Social and Behavioral Sciences (e.g., Anthropology, Economics, Geography, Political Science, Psychology, Sociology)
- At least six semester credit hours in Natural Sciences (e.g., Astronomy, Biology, Chemistry, Environmental Science, Geology, Physical Geography, Physics)

The additional 12-16 semester credit hours needed to complete the OTM are distributed[24] among the same five categories but may be distributed differently in the Associate of Arts and the Associate of Science degrees. Typically an Associate of Arts degree would include more credit hours in the oral and written communication and arts and humanities areas, while an Associate of Science degree would include more credit hours in the mathematics and science areas.

23 The Ohio Transfer Module requirements are available on the Articulation and Transfer Policy website at http://regents.ohio.gov/transfer/policy/transfer_policy_d2aa.php

24 The distributive model outlined above is not meant to discourage institutions from experimenting with thematically clustered or multidisciplinary general education courses, particularly when those courses are approved as OTM or TAG courses.

OBR/HLC/LCCC DEGREE AND CERTIFICATE REQUIREMENTS AND GUIDELINES 2015

ASSOCIATE OF ARTS/ASSOCIATE OF SCIENCE DEGREES

- Minimum / Maximum 60-65 semester hours.
- LCCC General Education Outcomes: All 5 core and infused outcomes.
- Transfer Module embedded into AA/AS

ASSOCIATE OF APPLIED BUSINESS/ APPLIED SCIENCE / TECHNICAL / INDIVIDUAL STUDIES

- Minimum / Maximum 60-65 semester hours.
    - Every program a minimum of 30 non-technical courses (which includes both general education and applied general education courses) General Education portion at least 15 semester credit hours & must include English Composition or Oral Communications; a Mathematics, Statistics and/or Logic course; and a minimum of six semester hours must come from the following three categories, and at least two of the three categories must be represented: Arts and Humanities, Social and Behavioral Sciences and Natural Sciences
- LCCC General Education Outcomes: 4 of the 5 Core outcomes (Core 1 & 2 required) and all infused outcomes.

ONE YEAR TECHNICAL CERTIFICATES

- Minimum / Maximum 30-37 semester credit hours:
    - No less than 18 semester credits and no more than 22 semester credits are technical courses.
- LCCC General Education Outcomes: 2 of the 5 Core outcomes and all infused outcomes.

SHORT-TERM TECHNICAL CERTIFICATES - This certificate is designed for a specific employment situation.

- Minimum / Maximum 16-29 semester credit hours
- LCCC General Education Outcomes: All infused outcomes encouraged but not required.

COMPLETION CERTIFICATES

- Less than 16 semester credit hours

COLLEGE ACCELERATION TRANSFER (CAT) CERTIFICATES – For CC+ Students Only

- 15 semester credit hours

LCCC GENERAL EDUCATION OUTCOMES LCCC required outcomes include:

- Associate of Arts and Associate of Science Degrees: 5 core course areas.
- Associate of Applied Business and Associate of Applied Science Degrees: 4 of the core course areas – **C1 and C2 are required**.
- One Year Technical Certificates: 2 of the core course areas.
- All Degrees and One Year Technical Certificates must contain all five infused General Education Outcomes.

STUDENT COMPLETION PRINCIPLES

- ENGL/MTHM/ at least 1 Core Course in first or second semester
- SDEV 101 Course in first semester
- Limit options and "OR" statements
- Remove Hidden and Non-enforceable prerequisites
- Alignment of any courses or sequences that could benefit students

ASSOCIATE OF ARTS/ASSOCIATE OF SCIENCE DEGREES

- Minimum / Maximum 62-65 semester hours.
- LCCC General Education Outcomes: All 5 core and infused outcomes.
- Transfer Module embedded into AA/AS

Ohio Board of Regents *Guidelines & Procedures for Academic Program Review* (November 2014)

- At a minimum, general education comprises no fewer than 36 semester hours for baccalaureate degrees and associate of arts and associate of science degrees (pg 6)
- **Associate of Arts** and **Associate of Science** degrees are designed for students wishing to complete the first two years of a bachelor's degree, as well as those desiring two years of a liberal arts education.(pg 56)
- Consistent with the belief that the AA and AS degrees serve as the first two years of a bachelor's degree and to provide maximum transferability of courses from the associate level to the bachelor's level, the general education component of the A.A. and the AS degrees at Ohio's public institutions must fulfill the institution's Ohio Transfer Module (OTM). (pg 61)

Associate of Arts (AA) and Associate of Science (AS) Degrees (pg 63)
A.A. and A.S. degrees must include a minimum of 36 semester hours of general education coursework. Each A.A. and A.S. degree must utilize 15 of the required 36 semester credit hours as follows:

• At least one course (three semester credit hours) in **Oral and Written Communication** (English Composition, Public Speaking)

• At least one course (three semester credit hours) in **Mathematics, Statistics and Logic** (College Algebra, Pre-Calculus, Trigonometry, Calculus, Statistics, Formal/Symbolic Logic)

• At least one course (three semester credit hours) in **Arts, Humanities, Culture and Diversity** (e.g., History of Art, Dance, Film, Music, or Theater, Ethics, History, Literature, Philosophy, Religion, Ethnic or Gender Studies)

• At least one course (three semester credit hours) in **Social and Behavioral Sciences** (e.g., Communication, Economics, Political Science, Psychology, Sociology)

• At least one course (three semester credit hours) in **Natural Sciences, Technology and Innovation** (e.g., Anatomy, Biology, Chemistry, Environmental Science, Physics, Physiology)

The additional 21 semester credit hours needed to complete the 36 semester credit hour requirement may be distributed[25] differently in the A.A. and A.S. degrees. Typically an A.A. degree would include more credit hours in the oral and written communication and arts and humanities areas, while an A.S. degree would include more credit hours in the mathematics and science areas.

ASSOCIATE OF APPLIED ARTS/ APPLIED SCIENCE DEGREES / TECHNICAL / INDIVIDUAL STUDIES

- Minimum / Maximum 60-65 semester hours.
- Every program a minimum of 30 non-technical courses (which includes both general education and applied general education courses) General Education portion at least 15 semester credit hours & must include English Composition or Oral Communications; a Mathematics, Statistics and/or Logic course; and a minimum of six semester hours must come from the following three categories, and at least two of the three categories must be represented: Arts and Humanities, Social and Behavioral Sciences and Natural Sciences
- LCCC General Education Outcomes: 4 of the 5 Core outcomes (Core 1 & 2 required) and all infused outcomes.

Ohio Board of Regents *Guidelines & Procedures for Academic Program Review* (November 2014)

- At a minimum, general education comprises no fewer than 36 semester hours for baccalaureate degrees and associate of arts and associate of science degrees and no fewer than 15 semester hours for applied associate degrees (pg 6)
- Technical Major: That portion of an applied associate degree that includes at least 12 semester credit hours (18 quarter hours) of coursework and constitutes an area of specialization. (pg 54)
- **Associate of Applied Business** and **Associate of Applied Science** degrees are awarded in recognition of successful completion of career technical education programs and prepare student for immediate employment upon graduation. The curricula for applied associate degree programs are described in terms of technical and non-technical studies. Non-technical studies include general education and courses that serve as a base for the technical field (sometimes referred to as "applied general education" or "basic" coursework). Non-technical studies should make up 50% of the curriculum. (pg 56)
- **Applied General Education (Basic Education) Courses**: Those courses within applied associate degrees that emphasize the application of general education to an occupational or technical area
    - Courses such as technical communication, business mathematics, calculations for health professionals, study skills, applied computing, and practical psychology are examples that fall in this category. Applied general education coursework cannot be counted toward meeting the minimum requirements for general education courses in associate or baccalaureate degrees. (pg 59)

General Education Guidelines: Applied Associate Degrees (pg 60)

Applied associate degrees (Associate of Applied Business, Associate of Applied Science, Associate of Technical Studies, and Associate of Individualized Studies), must include at least 30 semester hours of non-technical coursework, which includes both general education and applied general education (i.e., "basic") courses. The general education portion of the non-technical coursework must include at least 15 semester credit hours. A minimum of six semester hours must be found in the following two categories:

• At least one course (three semester credit hours) in the **English Composition and Oral Communication** area (e.g., First Writing, Second Writing, Public Speaking)

• At least one course (three semester credit hours) in the **Mathematics, Statistics and Logic** area (e.g., Algebra, Trigonometry, Calculus, Statistics, Formal/Symbolic Logic)

A minimum of six semester hours must come from the following three categories, and at least two of the three categories must be represented.

• At least one course (three semester credit hours) in the **Arts and Humanities** area (e.g., Art History, Ethics, History, Literature, Philosophy, Religion, Ethnic or Gender Studies)

• At least one course (three semester credit hours) in the **Social and Behavioral Sciences** area (e.g., , Communication, History, Economics, Political Science, Psychology, Sociology)

• At least one course (three semester credit hours) in the **Natural Sciences** area (e.g., Anatomy, Biology, Chemistry, Environmental Science, Physics, Physiology)

In order to assure maximum transferability, institutions are strongly encouraged to implement general education programs that include coursework in all five general education categories and to use a three semester hour First Writing course to fulfill the minimum requirement in the English composition and oral communication area. Institutions are expected to use approved Ohio Transfer Module (OTM) courses and follow applicable Transfer Assurance Guides (TAGs) when developing general education requirements for their applied associate degrees. However, recognizing that the skills needed for some OTM courses in the mathematics and science areas exceed the skills needed for the successful completion of some applied degrees, OTM-approved courses are not required to fulfill the mathematics and science requirements.

BACHELOR OF APPLIED STUDIES DEGREES

- Minimum / Maximum 120-126 semester hours.
- LCCC General Education Outcomes: All 5 core and infused outcomes.
- Transfer Module embedded into AA/AS/Bachelor's Degree

Ohio Board of Regents *Guidelines & Procedures for Academic Program Review* (November 2014)

- At a minimum, general education comprises no fewer than 36 semester hours for baccalaureate degrees and associate of arts and associate of science degrees and no fewer than 15 semester hours for applied associate degrees (pg 6)

- **Bachelor's Degree**: An award that requires completion of 120 semester credit hours (or 180 quarter credit hours); bachelor's degree programs should not exceed 126 semester credit hours unless it can be shown that the additional coursework is required to meet professional accreditation or licensing requirements. Bachelor's degrees may be awarded for general areas of study, such as those recognized by the Bachelor of Arts and the Bachelor of Science degrees or in specialized professional and technical fields such as these recognized by the Bachelor of Fine Arts, the Bachelor of Science in Nursing, the Bachelor of Education, and so on. Although bachelor's degrees require completion of a specified number of credit hours, the length of the program can vary. For instance, bachelor's degrees may be conferred for a five-year cooperative (work-study plan) program, which provides for alternate class attendance and employment in business, industry or government. They may also be conferred in instances where the full complement of credits is obtained in three years.(57)

- **Associate of Arts (AA) and Associate of Science (AS) Degrees** Consistent with the belief that the AA and AS degrees serve as the first two years of a bachelor's degree and to provide maximum transferability of courses from the associate level to the bachelor's level, the general education component of the A.A. and the AS degrees at Ohio's public institutions must fulfill the institution's Ohio Transfer Module (OTM).(pg 61)

- **Applied General Education (Basic Education) Courses**: Those courses within applied associate degrees that emphasize the application of general education to an occupational or technical area
  - Courses such as technical communication, business mathematics, calculations for health professionals, study skills, applied computing, and practical psychology are examples that fall in this category. Applied general education coursework cannot be counted toward meeting the minimum requirements for general education courses in associate or baccalaureate degrees. (pg 59)
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- **Baccalaureate Degrees** For bachelor's degrees (e.g., Bachelor of Arts—BA, Bachelor of Fine Arts—BFA, Bachelor of Music—BM, Bachelor of Science—BS, or Bachelor of Applied Studies—BAS), the minimum general education requirements are the same as for the academic associate degrees. However, many baccalaureate programs require general education coursework beyond those minimum expectations, and students may be required to complete additional general education requirements beyond the minimum upon transfer. (pg 62 & 63)

- Longitudinal data demonstrating the need for a higher-level degree (e.g., a proven associate degree leading to a bachelor's degree) (pg 13)