MONTGOMERY
COMMUNITY COLLEGE

Career & College Promise

1011 Page Street Troy, NC 27371
910.898.9600 www.montgomery.edu

Montgomery Community College is an equal-opportunity institution.

2023-2024 Catalog

ACCREDITATION

Montgomery Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associates degress, diplomas, and certificates. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 3033-4097 or call 404-679-4500 for questions about the accreditation of Montgomery Community College. The Practical Nursing diploma program is approved by the North Carolina Board of Nursing; the Associate Degree Nursing program is approved through the North Carolina Board of Nursing. Graduates of the Basic Law Enforcement Training certificate program are qualified to take a certification examination mandated by the North Carolina Criminal Justice Education and Training Standards Commission and/or the North Carolina Sheriffs' Education Training Standards Commission. The Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs upon recommendation of the Medical Assisting Education Review Board (1361 Park Street, Clearwater, FL 33756; 727-210-2350); graduates are eligible to sit for the national certification exam given by the American Association of Medical Assisting. The Dental Assisting program is accredited by the Commission on Dental Accreditation (211 East Chicago Avenue, Chicago Illinois 60611; 312-440-4653; www.ada.org); graduates may be eligible to take the Dental Assisting National Board examination for Certified Dental Assistant. The Human Services Technology program is accredited by the Council for Standards in Human Services Education (3337 Duke Street, Alexandria, Va 22314; 571-257-3959)

MISSION AND GOALS

MISSION STATEMENT

Montgomery Community College provides life-long educational opportunities that prepare individuals for existing and emerging careers and personal growth.

COLLEGE GOALS

In accomplishing our mission, we commit our resources to serve our community in the successful achievement of its education goals through the implementation of these strategic college goals:

- Montgomery Community College employees will promote the College's services and programs through targeted marketing, increased community presence, and effective public communications.
- Montgomery Community College employees will develop a comprehensive approach to provide state of the art recruitment and retention services to students.
- Montgomery Community College employees will integrate the College's instructional disciplines to effectively and continually train individuals for existing and emerging careers and prepare them to be leaders within their communities.

COLLEGE VALUES

Collaboration: MCC values working together in a cooperative manner to accomplish our mission and goals.

Accessibility: MCC values providing quality education opportunities and support services to individuals in convenient, user-friendly modes.

Respect: MCC values a work environment characterized by mutual respect for others' views, culture, and/or abilities.

Excellence: MCC strives for excellence in educational, student support, business, and community services.

Scholarship: MCC supports formal and informal education opportunities for its students, faculty and staff.

NON-DISCRIMINATION STATEMENT

MCC has filed an Assurance of Compliance with all requirements imposed by or pursuant to Title VI of the Civil Rights Act of 1964. Under the Assurance, MCC has committed not to discriminate against any person on the grounds of race, creed, color, sex, age, handicap, or national origin in the admission policies and practices relating to the treatment of students and other individuals, including the provision of services, financial aid, and other benefits, and including the use of any building, structure, room, space, materials, equipment, facility or other property.

NC Career & College Promise: What is it?

The Career & College Promise (CCP) program offers motivated North Carolina high school students a clear, focused, and affordable path to future success, allowing them to get a head start on their career and college preparation. Through CCP pathways, qualified North Carolina high school students have the opportunity to enroll – tuition-free – in community college courses that lead to a certificate, diploma, or degree as well as provide entry-level job skills. Academic credits earned will enable students who continue into postsecondary education after high school graduation to complete a postsecondary credential in less time than would normally be required.

What are the CCP pathways available at Montgomery Community College?

- **College Transfer** – NC high school students who meet the specified requirements may apply to enroll in a College Transfer Pathway. College Transfer Pathways (CTP) requires the completion of at least 30 semester hours of transfer courses that can then be applied toward the full associate degree. MCC offers transfer pathways leading to the Associate in Arts, Associate Arts Teacher Preparation, Associate in Engineering, Associate in Fine Arts/Music, Associate in Science, and Associate in Science Teacher Preparation. The Associate Degree Nursing (ADN) pathway, which consists of 24 semester hours of credit, is designed for students who wish to begin their educational studies toward the ADN degree and a Baccalaureate degree in Nursing.

College Transfer Pathways Available to Eligible Students

Associate in Arts
Associate in Arts Teacher Preparation
Associate in Science
Associate Science Teacher Preparation
Associate in Engineering
Associate in Fine Arts/Music
Associate Degree in Nursing (ADN)

- **Career Technical Education** – Career Technical Education (CTE) pathways are aligned with high school career clusters and lead to a certificate or diploma in a technical career area. Career clusters refer to fields of employment or industries that lead to careers within a specific field or industry.

CTE Pathways Available to Eligible Freshmen and Sophomores

Automotive Systems Tech
Computer-Integrated Machining
Facility Maintenance Tech/Carpentry
Facility Maintenance Tech/Horticulture
Facility Maintenance Tech/Masonry
Facility Maintenance Tech/Plumbing
Industrial Systems Technology
Mechatronics Engineering Tech
Sustainable Agriculture
Basic Welding
Intermediate Welding

CTE Pathways Available to Eligible Juniors and Seniors

Air Conditioning, Heating, & Refrigeration Technology
Automotive Systems Technology
Business Administration
Computer-Integrated Machining
Criminal Justice Technology
Culinary Arts
Early Childhood Education
Electrical Systems Technology
Facility Maintenance Tech/Carpentry
Facility Maintenance Tech/Horticulture
Facility Maintenance Tech/Masonry
Facility Maintenance Tech/Plumbing
Forest Management Technology
Human Services Technology
Hunting/Shooting Sports Management
Industrial Systems Technology
Information Technology
Mechatronics Engineering Tech
Medical Assisting
Medical Office Administration
Nurse Aide
Office Administration
Office Administration: Microsoft Office Apps
Phlebotomy
Sustainable Agriculture
Taxidermy: Birds
Taxidermy: Fish
Taxidermy: Mammals
Basic Welding
Intermediate Welding

What are the costs?

Tuition is waived for all CCP students. A $25 textbook fee per course will be charged to all students, in and out of Montgomery County. For Montgomery County Schools students, the textbook fee is waived.

Who can enroll in a CCP pathway?

College Transfer – NC high school students who meet the following requirements may apply to enroll in a College Transfer Pathway.

Freshmen and Sophomores

The freshman or sophomore (a) must be determined to be academically gifted; (b) must have a demonstrated readiness for the course material; and (c) must have the maturity to justify admission to the community college. These eligibility determinations must be made by the community college president, the high school principal or equivalent administrator, and the academically gifted program coordinator, if one is employed by the high school or local school administrative unit. The student must participate in academic advising focused on the implications of being admitted to college early with representatives from the high school and the community college. The student's parent or guardian must give consent for the student to participate.

Juniors and Seniors

The student must be a junior or senior as designated by the high school; and must have a minimum unweighted high school GPA of 2.8 **or** must have demonstrated college readiness in English, reading, and math by meeting required scores on approved assessment tests.

Career Technical Education – NC high school students who meet the following requirements may apply to enroll in a Career Technical Education pathway. Colleges may only enroll eligible freshmen and sophomores in industrial technologies, engineering technologies, agriculture and natural resources, and transportation programs.

Freshmen and Sophomores

Option 1 – The student must have (a) passed Math I with a grade of "C" or better; (b) an EOC score of 3, 4, or 5 for Math I; (c) an EOG score of 3, 4, or 5 for 8th grade ELA assessment; (d) the recommendation of the high school Principal or his/her designee; and (e) the recommendation of MCC's VP of Instruction or VP of Student Services.

Option 2 – The student must (a) demonstrate college readiness on approved assessment tests in English, reading, and math; (b) have the recommendation of the high school Principal/designee, and (c) have the recommendation of MCC's VP of Instruction or VP of Student Services.

Option 3 – The student must have (a) passed Math I with a grade of P or better; (b) a score of 3, 4, or 5 on the 7th or 8th grade End of Grade ELA assessment; (c) the recommendation of the high school principal or his/her designee (assessment scores should be considered); and (d) have the recommendation of the college's Chief Academic Officer or Chief Student Development Administrator.

Freshmen and Sophomores may **not** enroll in CTE pathways containing UGETC (Universal General Education Transfer Component) courses.

Juniors and Seniors

The junior or senior must have an unweighted high school GPA of at least 2.8 or demonstrate college readiness on approved assessment tests in English, reading, and math.

Juniors and seniors who do not meet the GPA requirement and whose scores do not meet the required minimum scores on the assessment tests may request a recommendation of the high school Principal/designee and MCC's VP of Instruction and Student Services to waive the GPA requirement. The recommendation of the Principal/designee shall include a rationale for why the GPA requirement was waived. CTE pathways that include UGETC (Universal General Education Transfer Component) courses will not be eligible for the Principal/designee waiver for entry into the CCP program.

Transcripts

State Board Code (1D SBCCC 400.11) requires the submission of a high school transcript verifying student eligibility for a Career and College Promise College Transfer pathway and/or Career and Technical Education pathway. High school transcripts must include the following: (a) student grade level (9th, 10th, 11th, and/or 12th grade); (b) high school courses completed and in progress; and (c) unweighted high school GPA.

The total number of credits on the high school transcript does not replace the requirement of the student's grade level to be listed on the high school transcript. Additional high school transcripts must be provided to the college to verify the student is still enrolled in high school and making progress towards high school graduation for each term they are enrolled in CCP.

Approved Assessment Tests

Subject	PSAT 10 and PSAT/NMSQT 2015 & future	SAT March 2016 & future	Pre-ACT or ACT	NC DAP	RISE Placement Test
English	26 or a composite score of 460 for Evidence-Based Reading & Writing	Evidenced-Based Reading & Writing 480	18	Composite score of 151 or higher	70 or higher on Tier 1 ***and*** Tier 2
Reading	26 or a composite score of 460 for Evidence-Based Reading & Writing		22		
Math	24.5 or 510	Mathematics 530	22	7 on each assessment for DMA 010 – DMA 060	70 or higher on Tier 1 ***and*** Tier 2 ***and*** Tier 3

Advanced Placement (AP) Score of 3 or higher	**International Baccalaureate (IB)** Score of 4 or higher	**Cambridge International Exams** Grade of C or higher
English, Language & Composition English, Literature & Composition Calculus AB Calculus BC	IB English A (Standard or Higher Level) IB Mathematics (Higher Level) IB Advanced Mathematics (Higher Level) IB Mathematical Studies (Standard Level)	AS Level English Language A Level English Language AS Level Language/Literature in English AS Level Math A Level Math A Level Mathematics -Further

Montgomery Community College offers a variety of Career Technical Education (CTE) pathways.

CTE pathways available to eligible Freshmen and Sophomores

- Automotive Systems Technology
- Computer-Integrated Machining
- Facility Maintenance Technology/Carpentry
- Facility Maintenance Technology/Horticulture
- Facility Maintenance Technology/Masonry Facility Maintenance Technology/Plumbing
- Industrial Systems Technology
- Mechatronics-Engineering Technology
- Sustainable Agriculture
- Basic Welding
- Intermediate Welding

CTE pathways available to eligible Juniors and Seniors

- Air Conditioning, Heating, & Refrigeration Technology
- Automotive Systems Technology
- Business Administration
- Computer-Integrated Machining
- Criminal Justice Technology
- Culinary Arts
- Early Childhood Education
- Electrical Systems Technology
- Facility Maintenance Technology/Carpentry
- Facility Maintenance Technology/Horticulture
- Facility Maintenance Technology/Masonry
- Facility Maintenance Technology/Plumbing
- Forest Management Technology
- Human Services Technology
- Hunting/Shooting Sports Management
- Industrial Systems Technology
- Information Technology
- Mechatronics Engineering Technology
- Medical Assisting
- Medical Office Administration
- Nurse Aide
- Office Administration
- Office Administration: Microsoft Office Apps
- Phlebotomy
- Sustainable Agriculture
- Taxidermy: Birds
- Taxidermy: Fish
- Taxidermy: Mammals
- Basic Welding
- Intermediate Welding

Freshmen and Sophomores

To be eligible for enrollment in Career Technical Education pathways, a high school freshman or sophomore must have (Option 1) (1a) passed Math I with a grade of "C" or better; (1b) an EOC score of 3, 4, or 5 for Math I; (1c) an EOG score of 3, 4, or 5 for 8th grade ELA assessment; and (1d) the recommendation of the high school Principal/designee and the recommendation of MCC's VP of Instruction or VP of Student Services OR must (Option2) (2a) demonstrate college readiness on approved assessment tests in English, reading, and math; (2b) have the recommendation of the high school Principal/designee; and (2c) have the recommendation of MCC's VP of Instruction or VP of Student Services. (Option 3) - (3a) The student must have (a) passed Math I with a grade of P or better; (3b) a score of 3, 4, or 5 on the 7th or 8th grade End of Grade ELA assessment; (3c) the recommendation of the high school principal or his/her designee (assessment scores should be considered); and (3d) have the recommendation of the college's Chief Academic Officer or Chief Student Development Administrator.

College CTE courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, the college will grant articulated credit based on the local or state North Carolina High School to Community College articulation agreement. To maintain eligibility for continued enrollment, the student must (a) continue to make progress toward high school graduation and (b) maintain at least a 2.0 GPA in college coursework after completing two courses. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.

The student may change his/her pathway major with approval of the high school Principal/designee and MCC's VP of Instruction and Student Services. The VP shall approve a change in pathway based on

verification provided by the student that the program change allows the student to meet their newly chosen career path. Verification could include (but is not limited to) a bachelor degree plan published by the university, a career pathway plan, career information published in the Occupational Outlook Handbook, and/or information published in the North Carolina Career Cluster Guide, etc.

The student may concurrently enroll in two CTE pathways in allowable program areas provided the exception has been approved by MCC's VP of Instruction and Student Services. The two concurrent pathways must be aligned to the student's career pathway interest and career goals.

When a student has completed a CTE certificate or diploma, the student may then continue in courses required for the Associate in Applied Science degree with the same program code as long as they are still eligible for CCP. For example, if a student completes course requirements for the CTE certificate in Business Administration, the student can then enroll in other courses required for the AAS degree in Business Administration. Continuation in the program must be approved before enrollment in the additional courses by the high school Principal/designee and MCC's VP of Instruction and Student Services. A student may be awarded a certificate, diploma, or degree before high school graduation.

Juniors and Seniors

To be eligible for enrollment in CTE pathways, a high school junior or senior must have an unweighted high school GPA of at least 2.8 or demonstrate college readiness on approved assessment tests in English, reading, and math.

Juniors and seniors who do not meet the GPA requirement and whose scores do not meet the required minimum scores on the assessment tests may request a recommendation of the high school Principal/designee and MCC's VP of Instruction and Student Services to waive the GPA requirement. The recommendation of the Principal/designee shall include a rationale for why the GPA requirement was waived. CTE pathways that include UGETC (Universal General Education Transfer Component) courses *will not be eligible* for the Principal/designee waiver for entry into the pathway. The completed GPA waiver form must be on file at MCC.

College CTE courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, the college will grant articulated credit based on the local or state North Carolina High School to Community College articulation agreement. To maintain eligibility for continued enrollment, the student must (a) continue to make progress toward high school graduation and (b) maintain at least a 2.0 GPA in college coursework after completing two courses. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.
The student may change his/her pathway major with approval of the high school Principal/designee and MCC's VP of Instruction and Student Services. The VP shall approve a change in pathway based on verification provided by the student that the program change allows the student to meet their newly chosen career path. Verification could include (but is not limited to) a bachelor degree plan published by the university, a career pathway plan, career information published in the Occupational Outlook Handbook, and/or information published in the North Carolina Career Cluster Guide, etc.

With the approval of the high school Principal/designee and MCC's VP of Instruction and Student Services, a Career Technical Education Junior or Senior may concurrently enroll in two Career and Technical Education Pathways or one College Transfer Pathway and one Career Technical Education Pathway.

When a student has completed a CTE certificate or diploma, the student may then continue in courses required for the Associate in Applied Science degree with the same program code as long as they are still eligible for CCP. For example, if a student completes course requirements for the CTE certificate in Business Administration, the student can then enroll in other courses required for the AAS degree in Business Administration. Continuation in the program must be approved by the high school Principal/designee and MCC's VP of Instruction and Student Services. Approval is contingent upon documentation that the credits

beyond the initial program allow the student to support the student's chosen career path (i.e. a career pathway plan). A student may be awarded a certificate, diploma, or degree before high school graduation.

Colleges are responsible for adhering to external agency guidelines that may restrict CCP students from enrolling in specific programs. For example, students interested in the Nurse Aide pathway must be at least 16.5 years old on or before the first day of the term to be enrolled in the NAS 101 Nurse Aide I course. Students interested in the Phlebotomy pathway must at least 18 years old on or before the first day of the term to be enrolled in the PBT 101 Phlebotomy Practicum course.

CCP students **may not** enroll in developmental courses but may enroll in supplemental courses. CCP students may not audit courses. Students enrolled in Adult Basic Education or Adult Secondary Education are not eligible for Career & College Promise.

Instruction at MCC may be delivered through these instructional methods: (1) Online – course instruction takes place online; (2) Seated (or face-to-face) – course instruction takes place in a traditional classroom setting; and (3) Hybrid – course instruction takes place through a combination of online and classroom instruction. Many seated/face-to-face courses include supplemental instructional materials that are maintained on Blackboard, MCC's online learning management system, so online access may be necessary for many of your classes.

Transcripts

State Board Code (1D SBCCC 400.11) requires the submission of a high school transcript verifying student eligibility for a Career and College Promise College Transfer pathway and/or Career and Technical Education pathway. High school transcripts must include the following: (a) student grade level (9th, 10th, 11th, and/or 12th grade); (b) high school courses completed and in progress; and (c) unweighted high school GPA.

The total number of credits on the high school transcript does not replace the requirement of the student's grade level to be listed on the high school transcript. Additional high school transcripts must be provided to the college to verify the student is still enrolled in high school and making progress towards high school graduation for each term they are enrolled in CCP.

Family Educational Rights & Privacy Act

Unlike high school classes, colleges do not typically allow parents/guardians access to student records. The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 123g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. CCP students must sign a waiver that allows parents/guardians to discuss college academics with CCP Staff and/or have access to student records. This form can be found on the college's webpage. www.montgomery.edu

Grading System & GPA Calculation

Montgomery Community College operates on a required-subject grade point system in the curriculum areas. All subjects must be completed with satisfactory grades if the student is to be awarded a certificate of completion, diploma, or degree. This grade system is followed for all subjects in curriculum areas.

A cumulative grade point average is maintained which includes all courses taken. If a course is re-taken, only the highest grade will be averaged in the cumulative grade point average; however, both grades will be recorded on the transcript.

Letter Grade	Meaning	Quality Points (Per Credit Hour)
A (90-100)	Excellent	4
B (80-89)	Above Average	3
C (70-79)	Average	2
D (60-69)	Below Average	1
F (59 & under)	Failure	0

Career Technical Education Pathways

		Career Technical Education Pathway – available to eligible Jr, Sr Air Conditioning, Heating, & Refrigeration Technology (C35100H)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	AHR	110	Intro to Refrigeration	5			☐	
	AHR	113	Comfort Cooling	4			☐	
*	AHR	114	Heat Pump Technology	4	AHR 110 or AHR 113		☐	
	AHR	151	HVAC Duct Systems I	2			☐	
	AHR	160	Refrigerant Certification	1			☐	

Total Semester Hours Required in Air Conditioning, Heating, & Refrigeration certificate program: 16

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Automotive Systems Technology (C60160BH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	AUT	141	Suspension & Steering Systems	3			✓	
*	AUT	141A	Suspension & Steering Lab	1	AUT 141		✓	
	AUT	151	Brake Systems	3			✓	
*	AUT	151A	Brake Systems Lab	1	AUT 151		✓	
	TRN	110	Intro to Transport Tech	2			✓	
	TRN	120	Basic Transport Electricity	5			✓	

Total Semester Hours Required in Automotive Systems certificate program: 15

		Career Technical Education Pathway – available to eligible Jr, Sr Business Administration (C25120H)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	ACC	120	Principles of Financial Accounting	4		✓	✓	
	BUS	110	Intro to Business	3		✓	✓	
	BUS	115	Business Law I	3		✓	✓	
	CIS	110	Intro to Computers	3		✓	✓	

Total Semester Hours Required in Business Administration certificate program: 13

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Computer-Integrated Machining Certificate (C50210H)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
+	MAC	111AB	Machining Technology I (Part A)	5		To be determined		
+	MAC	111BB	Machining Technology I (Part B)	1				
+	MAC	112AB	Machining Technology II (Part A)	2				
+	MAC	112BB	Machining Technology II (Part B)	4				

Total Semester Hours Required in Computer-Integrated Machining certificate program: 12

+ Both segments (AB + BB) of each course must be completed to receive credit for the course.

		Career Technical Education Pathway – available to eligible Jr, Sr Criminal Justice Technology Certificate (C55180H)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	CJC	111	Intro to Criminal Justice	3		✓	✓	
	CJC	121	Law Enforcement Operations	3		✓	✓	
	CJC	131	Criminal Law	3		✓	✓	
	CJC	221	Investigative Principles	4		✓	✓	

Total Semester Hours Required in Criminal Justice Technology certificate program: 13

		Career Technical Education Pathway – available to eligible Jr, Sr Culinary Arts Certificate (C55150H)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	CUL	110	Sanitation & Safety	2		To be determined		
*	CUL	140	Culinary Skills I	5	CUL 110			
*	CUL	160	Baking I	3	CUL 110			
*	CUL	170	Garde Manger I	3	CUL 110			
+*	CUL	240AB	Culinary Skills II (Part A)	2.5	CUL 110 and CUL 140			
+*	CUL	240BB	Culinary Skills II (Part B)	2.5				

Total Semester Hours Required in Culinary Arts certificate program: 18

+ Both segments (AB + BB) must be completed to receive credit for the course.

			Career Technical Education Pathway – available to eligible Jr, Sr Early Childhood Education (C55220H)					
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	EDU	119	Early Childhood Education	4		✓	✓	
*	EDU	144	Child Development I	3	*DRE 097, ENG 002, or ENG 111	✓	✓	
*	EDU	145	Child Development II	3	*DRE 097	✓	✓	
*	EDU	151	Creative Activities	3	*DRE 097	✓	✓	

Total Semester Hours Required in Early Childhood Education certificate program: 13

* Student's English & Reading test scores must be high enough to place the student out of developmental/remedial course work.

		Career Technical Education Pathway – available to eligible Jr, Sr Electrical Systems Technology (C35130H)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	ELC	115	Industrial Wiring	4			✓	
	ELC	117	Motors & Controls	4			✓	
	ELC	131	Circuit Analysis	4			✓	
*	ELC	131A	Circuit Analysis Lab	1	ELC 131		✓	

Total Semester Hours Required in Electrical Systems Technology certificate program: 13

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Facility Maintenance Technology: Basic Carpentry (C50190CH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
+	CAR	111AB	Carpentry I (Part A)	4		To be determined		
+	CAR	111BB	Carpentry I (Part B)	4				
+*	CAR	112AB	Carpentry II (Part A)	4	CAR 111			
+*	CAR	112BB	Carpentry II (Part B)	4				
Total Semester Hours Required in Facility Maintenance Technology: Basic Carpentry certificate program: 16								

+ Both segments (AB + BB) of each course must be completed to receive credit for the course.

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Facility Maintenance Technology: Basic Horticulture (C50190HH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	HOR	112	Landscape Design I	3		To be determined		
	HOR	114	Landscape Construction	3				
+	PME	101AB	Small Engine Repair I (Part A)	3				
+	PME	101BB	Small Engine Repair I (Part B)	3				
Total Semester Hours Required in Facility Maintenance Technology: Basic Horticulture certificate program: 12								

+ Both segments (AB + BB) must be completed to receive credit for the course.

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Facility Maintenance Technology: Basic Masonry (C50190MH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
+	MAS	110AB	Masonry I (Part A)	5		To be determined		
+	MAS	110BB	Masonry I (Part B)	5				
+	MAS	140AB	Intro to Masonry (Part A)	1				
+	MAS	140BB	Intro to Masonry (Part B)	1				
Total Semester Hours Required in Facility Maintenance Technology: Basic Masonry certificate program: 12								

+ Both segments (AB + BB) of each course must be completed to receive credit for the course.

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Facility Maintenance Technology: Basic Plumbing (C50190PH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	PLU	115	Basic Plumbing	4		To be determined		
+	PLU	120AB	Plumbing Applications (Part A)	4.5				
+	PLU	120BB	Plumbing Applications (Part B)	4.5				
Total Semester Hours Required in Facility Maintenance Technology: Basic Plumbing certificate program: 13								

+ Both segments (AB + BB) must be completed to receive credit for the course.

			Career Technical Education Pathway – available to eligible Jr, Sr Forest Management Technology (C15200H)					
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	FOR	121	Dendrology	4			✓	

	FOR	131	Forest Measurements	3			✓	
	FOR	171	Intro to Forest Resources	3			✓	
*	FOR	232	Forest Mensuration	4	FOR 131		✓	

Total Semester Hours Required in Forest Management Technology certificate program: 14

			Career Technical Education Pathway – available to eligible Jr, Sr Human Services Technology (C45380H)					
				Credit Hours	***Prerequisite/Co-requisite**	**Instructional Method Options**		
						Online	**Seated**	**Hybrid**
	HSE	110	Intro to Human Services	3		✓	✓	
	HSE	123	Interviewing Techniques	3		✓	✓	
	HSE	125	Counseling	3		✓	✓	
	HSE	225	Crisis Intervention	3		✓	✓	

Total Semester Hours Required in Human Services Technology certificate program: 12

			Career Technical Education Pathway – available to eligible Jr, Sr Hunting & Shooting Sports Management (C25600H)					
				Credit Hours	***Prerequisite/Co-requisite**	**Instructional Method Options**		
						Online	**Seated**	**Hybrid**
	BUS	110	Intro to Business	3		✓	✓	
	SSM	110	Intro to Shooting Sports	4		✓		
	SSM	111	Gun Shop Management	3		✓		
	SSM	112	Sports Hunting	3		✓		

Total Semester Hours Required in Hunting & Shooting Sports Management certificate program: 13

			Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Industrial Systems Technology (C50240H					
				Credit Hours	***Prerequisite/Co-requisite**	**Instructional Method Options**		
						Online	**Seated**	**Hybrid**
	BPR	111	Print Reading	2			✓	
	ELC	117	Motors & Controls	4			✓	
	ELC	131	Circuit Analysis	4			✓	
*	ELC	131A	Circuit Analysis Lab	1	ELC 131		✓	
	MEC	111	Machine Processes	3			✓	

Total Semester Hours Required in Industrial Systems Technology certificate program: 14

			Career Technical Education Pathway – available to eligible Jr, Sr Information Technology (C25590H)					
				Credit Hours	***Prerequisite/Co-requisite**	**Instructional Method Options**		
						Online	**Seated**	**Hybrid**
	CET	111	Computer Upgrade/Repair I	3				✓
	CET	211	Computer Upgrade/Repair II	3				✓
	CTI	110	Web, Pgm, & Db Foundation	3				✓
	CTI	120	Network and Sec Foundation	3				✓

Total Semester Hours Required in Information Technology certificate program: 12

			Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Mechatronics Engineering Technology (C40350MH)					
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	ATR	112	Intro to Automation	3		To be determined		
	ATR	115	Intro to Mechatronics	4				
	ELC	131	Circuit Analysis	4				
*	ELC	131A	Circuit Analysis Lab	1	ELC 131			

Total Semester Hours Required in Mechatronics Engineering Technology certificate program: 12

			Career Technical Education Pathway – available to eligible Jr, Sr Medical Assisting (C45400H)					
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
*	BIO	165	Anatomy & Physiology I	4	*DRE 097	✓	✓	✓
*	BIO	166	Anatomy & Physiology II	4	BIO 165	✓	✓	✓
	MED	118	Medical Law & Ethics	2		✓		
	MED	121	Medical Terminology I	3		✓	✓	
*	MED	122	Medical Terminology II	3	MED 121		✓	✓

Total Semester Hours Required in Medical Assisting certificate program: 16

* Student's English & Reading test scores must be high enough to place the student out of developmental/remedial course work.

			Career Technical Education Pathway – available to eligible Jr, Sr Medical Office Administration: Medical Coding					
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	MED	118	Medical Law & Ethics	2		✓		
	MED	121	Medical Terminology I	3		✓	✓	
*	MED	122	Medical Terminology II	3	MED 121		✓	✓
	OST	148	Medical Insurance & Billing	3		✓		
*	OST	247	Procedure Coding	3	MED 121 or OST 141	✓		
*	OST	248	Diagnostic Coding	3	MED 121 or OST 141	✓		

Total Semester Hours Required in Medical Office Administration: Medical Coding certificate program: 17

			Career Technical Education Pathway – available to eligible Jr, Sr Nurse Aide (C45840H)					
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
◆	NAS	101	Nurse Aide I	6			✓	
*	NAS	102	Nurse Aide II	6	NAS 101		✓	

Total Semester Hours Required in Nurse Aide certificate program: 12

◆ To enroll in NAS 101, the student must be at least 16.5 years of age on/before the first day of the term.

			Career Technical Education Pathway – available to eligible Jr, Sr Health Science: Therapeutic and Diagnostic Services Nurse Aide (C45970H)					
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid

*	BIO	165	Anatomy & Physiology I	4	*DRE 097	✓	✓	✓
*	BIO	166	Anatomy & Physiology II	4	BIO 165	✓	✓	✓
◆	NAS	101	Nurse Aide I	6			✓	

Total Semester Hours Required in Nurse Aide (Therapeutic & Diagnostic Services) certificate program: 17

* Student's English & Reading test scores must be high enough to place the student out of developmental/remedial course work.

◆ To enroll in NAS 101, the student must be at least 16.5 years of age on/before the first day of the term.

			Career Technical Education Pathway – available to eligible Jr, Sr Office Administration (C25370H)					
				Credit Hours	***Prerequisite/Co-requisite**	**Instructional Method Options**		
						Online	**Seated**	**Hybrid**
	OST	130	Comprehensive Keyboarding	3		✓	✓	
	OST	136	Word Processing	3		✓		
	OST	164	Text Editing Applications	3		✓		
*	OST	289	Administrative Office Management	3	OST 164 and either OST 134 *or* OST 136	✓		

Total Semester Hours Required in Office Administration certificate program: 12

			Career Technical Education Pathway – available to eligible Jr, Sr Office Administration MOS (C25370MH)					
				Credit Hours	***Prerequisite/Co-requisite**	**Instructional Method Options**		
						Online	**Seated**	**Hybrid**
	CIS	110	Intro to Computers	3		✓	✓	
	CTS	130	Spreadsheet	3		✓		
	OST	130	Comprehensive Keyboarding	3		✓		
	OST	136	Word Processing	3		✓		

Total Semester Hours Required in Office Administration MOS certificate program: 12

			Career Technical Education Pathway – available to eligible Jr, Sr Phlebotomy (C45600H)					
				Credit Hours	***Prerequisite/Co-requisite**	**Instructional Method Options**		
						Online	**Seated**	**Hybrid**
	PBT	100	Phlebotomy Technology	6			✓	
*◆	PBT	101	Phlebotomy Practicum	3	PBT 100		✓	
	PSY	101	Applied Psychology	3		✓	✓	

Total Semester Hours Required in Phlebotomy certificate program: 12

◆ To enroll in PBT 101, the student must be at least 18 years of age on/before the first day of the term.

		Career Technical Education Pathway – available to eligible Jr, Sr Health Science: Therapeutic and Diagnostic Services Phlebotomy (C45950H) *~ Pathway includes UGETC class; pathway not eligible for the Principal GPA waiver recommendation. ~*						
				Credit Hours	***Prerequisite/Co-requisite**	**Instructional Method Options**		
						Online	**Seated**	**Hybrid**
	MED	121	Medical Terminology I	3		✓		
	PBT	100	Phlebotomy Technology	6			✓	
*◆	PBT	101	Phlebotomy Practicum	3	PBT 100		✓	
	PSY	*150*	*General Psychology (UGETC course)*	3		✓	✓	

Total Semester Hours Required in Phlebotomy (Therapeutic & Diagnostic Services) certificate program: 15

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Sustainable-Agriculture (C15410H)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	AGR	139	Intro to Sustainable Ag	3		To be determined		
	AGR	140	Agricultural Chemicals	3				
	AGR	160	Plant Science	3				
	AGR	170	Soil Science	3				
+	ANS	110AB	Animal Science (Part A)	1.5				
+	ANS	110BB	Animal Science (Part B)	1.5				

Total Semester Hours Required in Sustainable Agriculture certificate program: 15

+ Both segments (AB + BB) must be completed to receive credit for the course.

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Sustainable Agriculture: Greenhouse Operations (C15410GH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	AGR	139	Intro to Sustainable Ag	3		To be determined		
	AGR	160	Plant Science	3				
	AGR	170	Soil Science	3				
+	HOR	134	Greenhouse Operations	3				
+	HOR	162	Applied Plant Science	3				

Total Semester Hours Required in Sustainable Agriculture: Greenhouse Operations program: 15

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Sustainable Agriculture: Fruit & Vegetable Production (C15410PH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	AGR	139	Intro to Sustainable Ag	3		To be determined		
	AGR	160	Plant Science	3				
	AGR	170	Soil Science	3				
+	HOR	142	Fruit & Vegetable Production	2				
+	HOR	162	Applied Plant Science	3				

Total Semester Hours Required in Sustainable Agriculture: Fruit & Vegetable Production program: 14

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Sustainable Agriculture: Basic Horticulture (C15410BH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	AGR	139	Intro to Sustainable Ag	3		To be determined		
	AGR	160	Plant Science	3				
	AGR	170	Soil Science	3				
+	HOR	162	Applied Plant Science	3				

Total Semester Hours Required in Sustainable Agriculture: Basic Horticulture program: 12

		Career Technical Education Pathway – available to eligible Jr, Sr Taxidermy: Birds (C30380BH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	TXY	110	Bird Preparation	5			✓	
+	TXY	112AB	Bird Quality Control/Mounting – Part A	2.5			✓	
+	TXY	112BB	Bird Quality Control/Mounting – Part B	2.5			✓	
	TXY	114	Bird Finishing	5			✓	

Total Semester Hours Required in Taxidermy: Birds certificate program – 15

+ Both segments (AB + BB) must be completed to receive credit for the course.

Career Technical Education Pathway – available to eligible Jr, Sr Taxidermy: Fish (C30380FH) ~ Course list changed ~								
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	TXY	131	Fish Preparation	5			✓	
	TXY	133	Fish Finishing	5			✓	
*	MAT	110	Math Measurement & Literacy	3	*DMA 010, DMA 020, DMA 030	✓	✓	✓

Total Semester Hours Required in Taxidermy: Fish certificate program – 13

* Student's math test scores must be high enough to place the student out of developmental/remedial math and directly into MAT 110.

		Career Technical Education Pathway – available to eligible Jr, Sr Taxidermy: Mammals (C30380MH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	TXY	121	Mammal Preparation	5			✓	
+	TXY	122AB	Mammal Quality Control/Mount – Pt A	2.5			✓	
+	TXY	122BB	Mammal Quality Control/Mount – Pt B	2.5			✓	
	TXY	123	Mammal Finishing	5			✓	

Total Semester Hours Required in Taxidermy: Mammal certificate program – 12

+ Both segments (AB + BB) must be completed to receive credit for the course.

		Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Basic Welding (C50420BH)						
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	WLD	110	Cutting Processes	2			✓	
	WLD	112	Basic Welding Processes	2			✓	
	WLD	115	SMAW (Stick) Plate	5			✓	
	WLD	121	GMAW (MIG) FCAW/Plate	4			✓	
	WLD	141	Symbols & Specifications	3			✓	

Total Semester Hours Required in Welding: Basic certificate program – 16

			Career Technical Education Pathway – available to eligible Fr, So, Jr, Sr Intermediate Welding (C50420IH)					
				Credit Hours	*Prerequisite/Co-requisite	Instructional Method Options		
						Online	Seated	Hybrid
	WLD	121	GMAW (MIG) FCAW/Plate	4			✓	
	WLD	131	GTAW (TIG) Plate	4			✓	
	WLD	151	Fabrication I	4			✓	

Total Semester Hours Required in Welding: Intermediate certificate program – 12

College Transfer Pathways

Juniors & Seniors and Qualifying Freshmen & Sophomores

Montgomery Community College offers College Transfer pathways leading to Associate in Arts, Associate in Arts Teacher Preparation, Associate in Engineering, Associate in Fine Arts/Music, Associate in Science, and Associate in Science Teacher Preparation. The Associate Degree Nursing (ADN) pathway is designed for students who wish to begin their educational studies toward the ADN degree and a Baccalaureate degree in Associate Nursing.

Freshmen and Sophomores

The freshman or sophomore (a) must be identified as academically gifted by local AIG plan in English/reading and math; (b) must demonstrate college readiness in English, reading, and math on an approved assessment; and (c) must receive a recommendation from the high school principal or equivalent administrator verifying the student has the maturity to enroll **and** a recommendation from the AIG coordinator if one if employed by the district; (d) must receive approval of the college President or the college's VP of Instruction and Student Services; (e) must provide written consent from the student's parent/guardian to the high school and college; and (f) must receive academic advising before enrollment in the program.

Alternative option: The freshman or sophomore (a) must identified as academically or intellectually gifted in English, reading **and** math on an aptitude **and** achievement test as evidenced by a score in the range between the 92nd percentile and the 99th percentile on an aptitude and an achievement test included in the Mental Measurements Yearbook published by the Buros Institute of Mental Measurements; (b) must demonstrate college readiness in English, reading, and math on an approved assessment; (c) must receive a recommendation from the high school principal or equivalent administrator verifying the student has the maturity to enroll **and** a recommendation from the AIG coordinator if one if employed by the district; (d) must receive approval of the college President or the college's VP of Instruction and Student Services; (e) must provide written consent from the student's parent/guardian to the high school and college; and (f) must receive academic advising prior to enrollment in the program.

Juniors and Seniors

The student must be a junior or senior as designated by the high school; and must have a minimum unweighted high school GPA of 2.8 **or** must have demonstrated college readiness in English, reading, and math by meeting required scores on approved assessment tests.

To maintain eligibility for continued enrollment in the CCP program, the student must (a) continue to make progress toward high school graduation and (b) maintain a 2.0 GPA in college coursework after completing two college courses. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.

A student may enroll in only one College Transfer Pathway. However, with the approval of the high school Principal/designee and MCC's VP of Instruction and Student Services, a junior or senior may concurrently enroll in one College Transfer pathway and one Career Technical Education pathway.

A student may change his/her program of study major with the approval of the high school principal/designee and MCC's VP of Instruction and Student Services. The VP shall approve a change in pathway based on verification provided by the student that the program change allows the student to meet their newly chosen career path. Verification could include, but is not limited to, a bachelor degree plan published by the university, a career pathway plan, career information published in the North Carolina Career Cluster Guide, etc.

With the approval of the high school Principal/designee and MCC's VP of Instruction and Student Services, a student who completes a College Transfer pathway, while still enrolled in high school, may continue to earn college transfer credits leading to the completion of the associate degree. The degree may be awarded before high school graduation.

Students pursuing credits beyond the initial transfer associate degree must provide documentation of justification based upon career pathway needs or transfer program requirements (i.e. bachelor degree plan published by the university). The high school Principal/designee and MCC's VP of Instruction and Student Services must approve before enrollment in credits beyond the initial transfer program. Approval is contingent upon the student's documentation of justification based upon one pathway needs or transfer program requirements.

CCP students **may not** enroll in developmental courses but may enroll in supplemental courses. CCP students may not audit courses. Students enrolled in Adult Basic Education or Adult Secondary Education are not eligible for Career & College Promise.

Instruction at MCC may be delivered through these instructional methods: (1) Online – course instruction takes place online; (2) Seated (or face-to-face) – course instruction takes place in a traditional classroom setting; and (3) Hybrid – course instruction takes place through a combination of online and classroom instruction. Many seated/face-to-face courses include supplemental instructional materials that are maintained on Blackboard, MCC's online learning management system, so online access may be necessary for many of your classes.

The College Transfer pathway offers a head start on general education courses for students who plan to complete degrees at a 2-year or 4-year university or college. The pathway lets students choose a program of study. Pathways allows for a seamless transfer of credits from one CUNY college to another. Once students have completed a Common Core requirement at one CUNY college (30 credits), that requirement is considered fulfilled if they transfer to another CUNY college.

Career and College Promise College Transfer Pathway

Leading to the Associate in Arts (P1012C)

The CCP College Transfer Pathway Leading to the Associate in Arts is designed for high school students who wish to begin study toward the Associate in Arts degree and a baccalaureate degree in a non-STEM major.

GENERAL EDUCATION (31-32 SHC)

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement.

English Composition (**6 SHC**)

The following two English composition courses are required.

ENG 111	Writing & Inquiry	(3 SHC)
ENG 112	Writing/Research in the Disciplines	(3 SHC)

Select three courses from the following from at least two different disciplines (**9 SHC**)

Communication

COM 120	Introduction to Interpersonal or Communication	(3 SHC)
COM 231	Public Speaking	(3 SHC)

Humanities/Fine Arts

ART 111	Art Appreciation	(3 SHC)
ART 114	Art History Survey I	(3 SHC)
ART 115	Art History Survey II	(3 SHC)
DRA 111	Theatre Appreciation	(3 SHC)
ENG 231	American Literature I	(3 SHC)
ENG 232	American Literature II	(3 SHC)
ENG 241	British Literature I	(3 SHC)
ENG 242	British Literature II	(3 SHC)
MUS 110	Music Appreciation	(3 SHC)
MUS 112	Introduction to Jazz	(3 SHC)
PHI 215	Philosophical Issues	(3 SHC)
PHI 240	Introduction to Ethics	(3 SHC)

Social/Behavioral Sciences (9 SHC)

Select three courses from the following from at least two different disciplines:

ECO 251	Principles of Microeconomics	(3 SHC)
ECO 252	Principles of Macroeconomics	(3 SHC)
HIS 111	World Civilizations I	(3 SHC)
HIS 112	World Civilizations II	(3 SHC)
HIS 131	American History I	(3 SHC)
HIS 132	American History II	(3 SHC)
POL 120	American Government	(3 SHC)

PSY 150	General Psychology	(3 SHC)
SOC 210	Introduction to Sociology	(3 SHC)

Math (3-4 SHC)

Select one course from the following:

MAT 143	Quantitative Literacy	(3 SHC)
MAT 152	Statistical Methods I	(4 SHC)
MAT 171	Precalculus Algebra	(4 SHC)

Updated CC21-024 at: https://www.nccommunitycolleges.edu/sites/default/files/numbered-memos/numbered_memo_cc21-024_mat_271_placement_le.pdf

Natural Sciences (4 SHC)

Select 4 SHC from the following course(s):

AST 111 Descriptive Astronomy (3 SHC) **and** AST 111A Descriptive Astronomy Lab (1 SHC)
AST 151 General Astronomy I (3 SHC) **and** AST 151A General Astronomy Lab I (1 SHC)

BIO 110	Principles of Biology	(4 SHC)
BIO 111	General Biology I	(4 SHC)
CHM 151	General Chemistry I	(4 SHC)
GEL 111	Introductory Geology	(4 SHC)

PHY 110 Conceptual Physics (3 SHC) and PHY 110A Conceptual Physics Lab (1 SHC)

Total General Education Hours Required: 31-32

Academic Transition (1 SHC)

The following course is required:

ACA 122	College Transfer Success	(1 SHC)

***OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)**

A student may satisfy up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

Total Semester Hours Credit (SHC) in Program: 32-41*

High school students in the CCP College Transfer Pathway Leading to the Associate in Arts must complete the entire pathway before taking additional courses in the Associate in Arts degree, except for mathematics courses in the Associate in Arts.

Career and College Promise Associate Degree Nursing (ADN) Pathway (P1032C)

The Career and College Promise (CCP) ADN Pathway is designed for high school students who wish to begin their educational studies toward the Associate in Nursing degree and a Baccalaureate degree in Nursing. The Pathway is based on Block 1 of the *Uniform Articulation Agreement between the University of North Carolina's Registered Nurse to Bachelor of Science in Nursing programs and the North Carolina Community College Associate Degree Nursing Programs* which was approved by the State Board of Community Colleges and the UNC Board of Governors in February 2015.

A student who completes an Associate in Applied Science (AAS) in Nursing, which includes the courses listed below, with a GPA of at least 2.0 and a grade of C or better and completes the courses in Blocks 2-3 of the *Uniform Articulation Agreement between the University of North Carolina's Registered Nurse to Bachelor of Science in Nursing programs and the North Carolina Community College Associate Degree Nursing Programs* with a GPA of at least 2.0 and a grade of C or better, and who holds a current unrestricted license as a Registered Nurse in North Carolina will have fulfilled the UNC institutions lower-division general education requirements as well as nursing program entry requirements. However, because nursing program admissions are competitive, no student is guaranteed admission to the program of his or her choice.

GENERAL EDUCATION (23 SHC)

These courses are contained in Block 1 of the Five Block Degree Plan located within the RN to BSN Articulation Agreement.

English Composition (6 SHC)

The following English composition course is required.

ENG	111	Writing and Inquiry	(3 SHC)	

Select one course from the following (3 SHC)

ENG	112	Writing/Research in the Disciplines	(3 SHC)	**or**
ENG	114	Prof Research & Reporting	(3 SHC)	

Humanities/Fine Arts (3 SHC)

*Select one course from the following (*3 SHC*):*

ART	111	Art Appreciation	(3 SHC)
ART	114	Art History Survey I	(3 SHC)
ART	115	Art History Survey II	(3 SHC)
MUS	110	Music Appreciation	(3 SHC)
MUS	112	Introduction to Jazz	(3 SHC)
PHI	215	Philosophical Issues	(3 SHC)
PHI	240	Introduction to Ethics	(3 SHC)
HUM	115	Critical Thinking	(3 SHC)

Social/Behavioral Sciences (6 SHC)
The following courses are required (6 SHC):

PSY	150	General Psychology	(3 SHC)	
PSY	241	Developmental Psychology	(3 SHC)	

Natural Sciences (8 SHC)
Select one sequence from the following (8 SHC):

BIO	165	Anatomy and Physiology, I	(4 SHC)	**and**
BIO	166	Anatomy and Physiology II	(4 SHC)	**or**
BIO	168	Anatomy and Physiology, I	(4 SHC)	**and**
BIO	169	Anatomy and Physiology II	(4 SHC)	

Other Required Hours (1 SHC)

Academic Transition (1 SHC)
The following course is required:

ACA	122	College Transfer Success	(1 SHC)

Total Semester Hours Credit (SHC) in Pathway: 24 SHC

Denotes courses (23 Semester Hours of Credit) in Block 1 of the Five Block Degree Plan that are completed as part of the North Carolina Community College AAS Nursing degree.

For additional information about Blocks 2 and 3 of the Five Block Degree Plan located within the Uniform Articulation Agreement between the University of North Carolina RN to BSN please visit: https://www.nccommunitycolleges.edu/academic-programs-college-transferarticulation-agreements

High school students in the CCP Associate Degree Nursing Pathway to the Associate in General Education Nursing (A1030N) program must complete the entire pathway before taking additional courses in the Associate in General Education Nursing (A1030N) program.

- Student's English & Readning test scores must be high enough to place the student out of developmental/remedial course work.

Career and College Promise College Transfer Pathway
Leading to the Associate in Science in Teacher Preparation (P1042T)

The CCP College Transfer Pathway Leading to the Associate in Science in Teacher Preparation is designed for high school students who wish to begin study toward the Associate in Science in Teacher Preparation degree and a baccalaureate degree in teaching in a STEM or technical major.

GENERAL EDUCATION (34 SHC)
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement.

English Composition (6 SHC)
The following two English composition courses are required.

ENG 111	Writing & Inquiry	(3 SHC)
ENG 112	Writing/Research in the Disciplines	(3 SHC)

Select two courses from the following from at least two different disciplines **(6 SHC)**

Communication

COM 120	Introduction to Interpersonal Communication	(3 SHC) or
COM 231	Public Speaking	(3 SHC)

Humanities/Fine Arts

ART 111	Art Appreciation	(3 SHC)
ART 114	Art History Survey I	(3 SHC)
ART 115	Art History Survey II	(3 SHC)
DRA 111	Theatre Appreciation	(3 SHC)
ENG 231	American Literature I	(3 SHC)
ENG 232	American Literature II	(3 SHC)
ENG 241	British Literature I	(3 SHC)
ENG 242	British Literature II	(3 SHC)
MUS 110	Music Appreciation	(3 SHC)
MUS 112	Introduction to Jazz	(3 SHC)
PHI 215	Philosophical Issues	(3 SHC)
PHI 240	Introduction to Ethics	(3 SHC)

Social/Behavioral Sciences (3 SHC)
Select one course from the following:

ECO 251	Principles of Microeconomics	(3 SHC)
ECO 252	Principles of Macroeconomics	(3 SHC)
HIS 111	World Civilizations I	(3 SHC)
HIS 112	World Civilizations II	(3 SHC)
HIS 131	American History I	(3 SHC)
HIS 132	American History II	(3 SHC)

POL 120	American Government	(3 SHC)
PSY 150	General Psychology	(3 SHC)
SOC 210	Introduction to Sociology	(3 SHC)

Math (8 SHC)

Select two courses from the following:

MAT 171	Precalculus Algebra	(4 SHC)
MAT 172	Precalculus Trigonometry	(4 SHC)
MAT 263	Brief Calculus	(4 SHC)
MAT 271	Calculus I	(4 SHC)
MAT 272	Calculus II	(4 SHC)

Updated CC21-024 at: https://www.nccommunitycolleges.edu/sites/default/files/numbered-memos/numbered_memo_cc21-024_mat_271_placement_le.pdf

Natural Sciences (8 SHC)

Select 8 SHC from the following course(s):

AST 151	General Astronomy I (3 SHC)	*and* AST151A	General Astronomy Lab I (1 SHC)
BIO 110	Principles of Biology		(4 SHC)
BIO 111	General Biology I (4 SHC)	*and* BIO 112	General Biology II (4 SHC)
CHM 151	General Chemistry I (4 SHC)	*and* CHM 152	General Chemistry II (4 SHC)
GEL 111	Introductory Geology		(4 SHC)
PHY 110	Conceptual Physics (3 SHC)	*and* PHY 110A	Conceptual Physics Lab (1 SHC)
PHY 151	College Physics I (4 SHC)	*and* PHY 152	College Physics II (4 SHC)
PHY 251	General Physics I (4 SHC)	*and* PHY 252	General Physics II (4 SHC)

Other Required General Education (3 SHC)

SOC 225	Social Diversity	(3 SHC)

Total General Education Hours Required: 34

OTHER REQUIRED HOURS (8 SHC)

Education (7 SHC)

The following courses are required:

EDU 187	Teaching and Learning for All*	(4 SHC)
EDU 216	Foundations of Education	(3 SHC)

*Students who have completed Teacher Cadet or Teaching as a Profession courses in in high school with a B or better may substitute that course for EDU 187 Teaching and Learning for All. High school faculty must meet transfer level qualifications as established by SACSCOC or other accrediting body.

Academic Transition (1 SHC)

The following course is required:

ACA 122 College Transfer Success (1 SHC)

****OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)** A student may satisfy up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.
Total Semester Hours Credit (SHC) in Pathway: 42-50**

High school students in the CCP College Transfer Pathway Leading to the Associate in Science in Teacher Preparation must complete the entire pathway before taking additional courses in the Associate in Science in Teacher Preparation degree with the exception of mathematics courses in the Associate in Science in Teacher Preparation.

Career and College Promise College Transfer Pathway

Leading to the Associate in Arts in Teacher Preparation (P1012T)

The CCP College Transfer Pathway Leading to the Associate in Arts in Teacher Preparation is designed for high school students who wish to begin study toward the Associate in Arts in Teacher Preparation degree and a baccalaureate degree in teaching in a non-STEM major.

GENERAL EDUCATION (31-32 SHC)

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement.

English Composition (6 SHC)

The following two English composition courses are required.

ENG 111	Writing & Inquiry	(3 SHC)
ENG 112	Writing/Research in the Disciplines	(3 SHC)

Select three courses from the following from at least two different disciplines **(9 SHC)**

Communication

COM 120	Introduction to Interpersonal Communication	(3 SHC) or
COM 231	Public Speaking	(3 SHC)

Humanities/Fine Arts

ART 111	Art Appreciation	(3 SHC)
ART 114	Art History Survey I	(3 SHC)
ART 115	Art History Survey II	(3 SHC)
DRA 111	Theatre Appreciation	(3 SHC)
ENG 231	American Literature I	(3 SHC)
ENG 232	American Literature II	(3 SHC)
ENG 241	British Literature I	(3 SHC)
ENG 242	British Literature II	(3 SHC)
MUS 110	Music Appreciation	(3 SHC)
MUS 112	Introduction to Jazz	(3 SHC)
PHI 215	Philosophical Issues	(3 SHC)
PHI 240	Introduction to Ethics	(3 SHC)

Social/Behavioral Sciences (6 SHC)

Select two courses from the following from at least two different disciplines:

ECO 251	Principles of Microeconomics	(3 SHC)
ECO 252	Principles of Macroeconomics	(3 SHC)
HIS 111	World Civilizations I	(3 SHC)
HIS 112	World Civilizations II	(3 SHC)
HIS 131	American History I	(3 SHC)
HIS 132	American History II	(3 SHC)
POL 120	American Government	(3 SHC)
PSY 150	General Psychology	(3 SHC)
SOC 210	Introduction to Sociology	(3 SHC)

Math (3-4 SHC)

Select one course from the following:

MAT 143	Quantitative Literacy	(3 SHC)
MAT 152	Statistical Methods I	(4 SHC)
MAT 171	Precalculus Algebra	(4 SHC)

Natural Sciences (4 SHC)

Select 4 SHC from the following course(s):

AST 111 Descriptive Astronomy (3 SHC) & AST 111A Descriptive Astronomy Lab (1 SHC)

AST 151 General Astronomy I (3 SHC) and AST 151A General Astronomy Lab I (1 SHC)

BIO 110	Principles of Biology	(4 SHC)
BIO 111	General Biology I	(4 SHC)
CHM 151	General Chemistry I	(4 SHC)
GEL 111	Introductory Geology	(4 SHC)

PHY 110 Conceptual Physics (3 SHC) and PHY 110A Conceptual Physics Lab (1 SHC)

Other Required General Education (3 SHC)

SOC 225	Social Diversity	(3 SHC)

****OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)**

A student may satisfy up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

Total Semester Hours Credit (SHC) in Program: 39-48**

High school students in the CCP College Transfer Pathway Leading to the Associate in Arts in Teacher Preparation must complete the entire pathway before taking additional courses in the Associate in Arts degree in Teacher Preparation except for mathematics courses mathematics courses in the Associate in Arts in Teacher Preparation.

Career and College Promise College Transfer Pathway

Leading to the Associate in Science (P1042C)

The CCP College Transfer Pathway Leading to the Associate in Science is designed for high school students who wish to begin study toward the Associate in Science degree and a baccalaureate degree in a STEM or technical major.

GENERAL EDUCATION (34 SHC)
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC).

English Composition (**6 SHC**)
The following two English composition courses are required.

ENG 111	Writing & Inquiry	(3 SHC)
ENG 112	Writing/Research in the Disciplines	(3 SHC)

Select two courses from the following from at least two different disciplines (**6 SHC**)

Communication

COM 120	Introduction to Interpersonal Communication	(3 SHC) or
COM 231	Public Speaking	(3 SHC)

Humanities/Fine Arts

ART 111	Art Appreciation	(3 SHC)
ART 114	Art History Survey I	(3 SHC)
ART 115	Art History Survey II	(3 SHC)
DRA 111	Theatre Appreciation	(3 SHC)
ENG 231	American Literature I	(3 SHC)
ENG 232	American Literature II	(3 SHC)
ENG 241	British Literature I	(3 SHC)
ENG 242	British Literature II	(3 SHC)
MUS 110	Music Appreciation	(3 SHC)
MUS 112	Introduction to Jazz	(3 SHC)
PHI 215	Philosophical Issues	(3 SHC)
PHI 240	Introduction to Ethics	(3 SHC)

Social/Behavioral Sciences (**6 SHC**)
Select two courses from the following from at least two different disciplines:

ECO 251	Principles of Microeconomics	(3 SHC)
ECO 252	Principles of Macroeconomics	(3 SHC)
HIS 111	World Civilizations I	(3 SHC)
HIS 112	World Civilizations II	(3 SHC)
HIS 131	American History I	(3 SHC)
HIS 132	American History II	(3 SHC)

POL 120	American Government	(3 SHC)
PSY 150	General Psychology	(3 SHC)
SOC 210	Introduction to Sociology	(3 SHC)

Math (8 SHC)

Select two courses from the following:

MAT 171	Precalculus Algebra	(4 SHC)
MAT 172	Precalculus Trigonometry	(4 SHC)
MAT 263	Brief Calculus	(4 SHC)
MAT 271	Calculus I	(4 SHC)
MAT 272	Calculus II	(4 SHC)

Updated CC21-024 at: https://www.nccommunitycolleges.edu/sites/default/files/numbered-memos/numbered_memo_cc21-024_mat_271_placement_le.pdf

Natural Sciences (8 SHC)

Select 8 SHC from the following course(s):

AST 151	General Astronomy I (3 SHC)	**and**	AST 151A	General Astronomy Lab I (1 SHC)
BIO 110	Principles of Biology			(4 SHC)
BIO 111	General Biology I (4 SHC)	**and**	BIO 112	General Biology II (4 SHC)
CHM 151	General Chemistry I (4 SHC)	**and**	CHM 152	General Chemistry II (4 SHC)
GEL 111	Introductory Geology			(4 SHC)
PHY 110	Conceptual Physics (3 SHC)	**and**	PHY 110A	Conceptual Physics Lab (1 SHC)
PHY 151	College Physics I (4 SHC)	**and**	PHY 152	College Physics II (4 SHC)
PHY 251	General Physics I (4 SHC)	**and**	PHY 252	General Physics II (4 SHC)

Total General Education Hours Required: 34

Academic Transition (1 SHC)

The following course is required:

ACA 122	College Transfer Success	(1 SHC)

***OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)**

A student may satisfy up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

Total Semester Hours Credit (SHC) in Pathway: 35-43*

High school students in the CCP College Transfer Pathway Leading to the Associate in Science must complete the entire pathway before taking additional courses in the Associate in Science degree, except for mathematics courses in the Associate in Science.

+ To place directly into MAT 271, a student must meet at least one of the following criteria within the past 5 years: (1) a score of 2/higher on the AP Calculus AB Exam; (2) a grade of C/higher in an AP Calculus course and an

unweighted HS GPA of 3.0/higher; (3) a score of 90/higher on the ACCUPLACER College-Level Math test; (4) a score of 46/higher on the trigonometry section of the ACT Compass Math Placement Test; (5) a score of 580/higher on the old (before March 2016) SAT Math and a grade of C/higher in the
NC Standard Course of Study Pre-Calculus course or an equivalent course from another state; (6) a score of 600/higher on the new (March 2016/beyond) SAT Math and a grade of C/higher in the NC Standard Course of Study Pre-Calculus course or an equivalent course from another state; (7) a score of 27/higher on the ACT Math and a grade of C/higher in the NC Standard Course of Study Pre-Calculus course or an equivalent course from another state; (8) a score of 560/higher on the SAT Subject Test in Mathematics Level 2.

Career and College Promise College Transfer Pathway

Leading to the Associate in Engineering (P1052C)

The College Transfer Pathway (CCP) leading to the Associate in Engineering is designed for high school students who wish to begin study toward the Associate in Engineering degree and a baccalaureate degree in a STEM or technical major.

GENERAL EDUCATION (28 SHC): The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC).

English Composition (6 SHC)

The following two English composition courses are required.

ENG 111	Writing and Inquiry	(3 SHC)
ENG 112	Writing/Research in the Disciplines	(3 SHC)

Humanities, Fine Arts and Communications (3 SHC)

Select one course from the following:

ART 111	Art Appreciation	(3 SHC)
ART 114	Art History Survey I	(3 SHC)
ART 115	Art History Survey II	(3 SHC)
COM 231	Public Speaking	(3 SHC)
ENG 231	American Literature I	(3 SHC)
ENG 232	American Literature II	(3 SHC)
ENG 241	British Literature I	(3 SHC)
ENG 242	British Literature II	(3 SHC)
MUS 110	Music Appreciation	(3 SHC)
MUS 112	Introduction to Jazz	(3 SHC)
PHI 215	Philosophical Issues	(3 SHC)
PHI 240	Introduction to Ethics	(3 SHC)

Social/Behavioral Sciences (3 SHC)

The following course is required:

ECO 251	Principles of Microeconomics	(3 SHC)

Mathematics (8 SHC)

The following courses are required (8 SHC):
*Calculus I is the lowest level math course that will be accepted by the engineering programs for transfer as a math credit. Students who are not calculus-ready will need to take additional math courses. **

MAT 271	Calculus I	(4 SHC)
MAT 272	Calculus II	(4 SHC)

Updated CC21-024 at: https://www.nccommunitycolleges.edu/sites/default/files/numbered-memos/numbered_memo_cc21-024_mat_271_placement_le.pdf

Natural Sciences (8 SHC)
Select 8 SHC from the following course(s):

CHM 151	General Chemistry I	(4 SHC)
PHY 251	General Physics I	(4 SHC)
PHY 252	General Physics II	(4 SHC)

Other Required Hours (6 SHC)

Academic Transition (1 SHC)
The following course is required:

ACA 122	College Transfer Success	(1 SHC)

Engineering (5 SHC)
The following courses are required:

EGR 150	Introduction to Engineering	(2 SHC)
DFT 170	Engineering Graphics	(3 SHC)

***PREREQUISITE GENERAL EDUCATION HOURS (0-8 SHC)**
MAT 171 Pre-Calculus Algebra
MAT 172 Pre-Calculus Trigonometry

Students who do not place directly into MAT 271 must complete MAT 171 and MAT 172 prior to enrolling in MAT 271 Calculus I.

***OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)**
Foreign Language:
A student may satisfy up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

Total Semester Hours Credit (SHC) in Pathway: 34-50

High school students in the CCP College Transfer Pathway Leading to the Associate in Engineering must complete the entire pathway before taking additional courses in the Associate in Engineering degree, with the exception of mathematics courses listed in the Associate in Engineering.

Career and College Promise (CCP) College Transfer Pathway
Leading to the Associate in Fine Arts in Music (P1072C)

The CCP College Transfer Pathway Leading to the Associate in Fine Arts in Music is designed for high school students who wish to begin study toward the Associate in Fine Arts in Music and a baccalaureate degree in Music.

GENERAL EDUCATION (25-26 SHC)
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) of the Comprehensive Articulation Agreement.

English Composition (**6 SHC**) *The following two English composition courses are required.*

ENG	111	Writing and Inquiry	(3 SHC)	
ENG	112	Writing/Research in the Disciplines	(3 SHC)	

Communications and Humanities/Fine Arts (6 SHC)
Select two courses from two different disciplines.

Communications

COM	120	Introduction to Interpersonal Communication	(3 SHC)	or
COM	231	Public Speaking	(3 SHC)	

Humanities/Fine Arts

ART	111	Art Appreciation	(3 SHC)
ART	114	Art History Survey I	(3 SHC)
ART	115	Art History Survey II	(3 SHC)
DRA	111	Theater Appreciation	(3 SHC)
ENG	231	American Literature I	(3 SHC)
ENG	232	American Literature II	(3 SHC)
ENG	241	British Literature I	(3 SHC)
ENG	242	British Literature II	(3 SHC)
MUS	110	Music Appreciation	(3 SHC)
MUS	112	Introduction to Jazz	(3 SHC)
PHI	215	Philosophical Issues	(3 SHC)
PHI	240	Introduction to Ethics	(3 SHC)

Social/Behavioral Sciences (6 SHC)
Select two courses from two different disciplines.

ECO	251	Principles of Microeconomics	(3 SHC)
ECO	252	Principles of Macroeconomics	(3 SHC)
HIS	111	World Civilizations I	(3 SHC)
HIS	112	World Civilizations II	(3 SHC)
HIS	131	American History I	(3 SHC)

HIS	132	American History II	(3 SHC)		
POL	120	American Government	(3 SHC)		
PSY	150	General Psychology	(3 SHC)		
SOC	210	Introduction to Sociology	(3 SHC)		

Math (3-4 SHC) *Select one course from the following:*

MAT	143	Quantitative Literacy	(3 SHC)	
MAT	152	Statistical Methods I	(4 SHC)	
MAT	171	Precalculus Algebra	(4 SHC)	
MAT	271	Calculus I	(4 SHC)	

Updated CC21-024 at: https:// ww.nccommunitycolleges.edu/sites/default/f iles/numbered-memos/numbered_m emo_cc2 -024_mat_271_placement_le.pdf

Natural Sciences (4 SHC) *Select 4 SHC from the following:*

	AST	111	Descriptive Astronomy	(3 SHC)	*and*
	AST	111A	Descriptive Astronomy Lab	(1 SHC)	
	AST	151	General Astronomy I	(3 SHC)	*and*
	AST	151A	General Astronomy I Lab	(1 SHC)	
	BIO	110	Principles of Biology	(4 SHC)	
	BIO	111	General Biology I	(4 SHC)	
	CHM	151	General Chemistry I	(4 SHC)	
	GEL	111	Geology	(4 SHC)	
or	PHY	110	Conceptual Physics	(3 SHC)	*and*
	PHY	110A	Conceptual Physics Lab	(1 SHC)	

Other Required (7 SHC):

Music (4 SHC) *The following courses are required.*

MUS	111	Fundamentals of Music	(3 SHC)
MUS	151	Class Music I	(1 SHC)

Ensemble (2 SHC) *Select 2 SHC from the following:*

MUS	131	Chorus I	(1 SHC)	MUS	136	Jazz Ensemble II	(1 SHC)
MUS	132	Chorus II	(1 SHC)	MUS	137	Orchestra I	(1 SHC)
MUS	133	Band I	(1 SHC)	MUS	138	Orchestra II	(1 SHC)
MUS	134	Band II	(1 SHC)	MUS	141	Ensemble I	(1 SHC)
MUS	135	Jazz Ensemble I	(1 SHC)	MUS	142	Ensemble II	(1 SHC)

Academic Transition (1 SHC) *The following course is required.*

ACA	122	College Transfer Success	(1 SHC)

***OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)** **Foreign Language:** A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as general education in the Comprehensive Articulation Agreement as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of "C" or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.
Total Semester Hours Credit (SHC) in CCP Pathway: 32-41*

Students must meet the receiving university's foreign language and/or health and physical education
requirements, if applicable, prior to or after transfer to the senior institution.

High school students in the CCP College Transfer Pathway Leading to the AFA-Music must complete the entire pathway before taking additional courses in the AFA-Music degree except for mathematics courses in the AFA-Music.

Approved by the State Board of Community Colleges on 05/17/19; Editorial Revision 03/16/20.

Course Descriptions □ indicates that the course is a UGETC (Universal General Education Transfer Course)

	Class Hours	Lab/Clinical Hours	Credit Hours
ACA 122 College Transfer Success	**1**	**0**	**1**

Prerequisites:
Corequisites:
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

ACC 120 Principles of Financial Accounting	**3**	**2**	**4**

Prerequisites:
Corequisites:
This course introduces business decision-making accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

AGR 139 Intro to Sustainable Ag	**3**	**0**	**3**

Prerequisites:
Corequisites:
This course will provide students with a clear perspective on the principles, history and practices of sustainable agriculture in our local and global communities. Students will be introduced to the economic, environmental and social impacts of agriculture. Upon completion, students will be able to identify the principles of sustainable agriculture as they relate to basic production practices.

AGR 140 Agricultural Chemicals	**2**	**2**	**3**

Prerequisites:
Corequisites:
This course covers all aspects of agricultural chemicals. Topics include safety, environmental effects, federal and state laws, pesticide classification, sprayer calibration, and licensing. Upon completion, students should be able to calibrate a sprayer, give proper pesticide recommendations (using integrated pest management), and demonstrate safe handling of pesticides.

AGR 160 Plant Science	**2**	**2**	**3**

Prerequisites:
Corequisites:
This course introduces the basic principles of botany that pertain to agricultural production. Emphasis is placed on the anatomy and physiology of flowering plants. Upon completion, students should be able to identify and explain plant systems.

AGR 170 Soil Science	**3**	**0**	**3**

Prerequisites:
Corequisites:
This course covers the basic principles of soil fertilizing. Topics include liming, fertilization, management, and plant nutrients. Upon completion, students should be able to give nutrient and liming recommendations for soils.

AHR 110 Intro to Refrigeration	**2**	**6**	**5**

Prerequisites:
Corequisites:

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

AHR 113 Comfort Cooling **2** **4** **4**
Prerequisites:
Corequisites:

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychrometrics, manufacturer specifications, and test instruments to determine proper system operation.

AHR 114 Heat Pump Technology **2** **4** **4**
Prerequisites: AHR 110 or AHR 113
Corequisites:

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

AHR 151 HVAC Duct Systems I **1** **3** **2**
Prerequisites:
Corequisites:

This course introduces the techniques used to lay out and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work. Upon completion, students should be able to lay out and fabricate simple duct work.

AHR 160 Refrigerant Certification **1** **0** **1**
Prerequisites:
Corequisites:

This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

ANS 110 Animal Science **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces the livestock industry. Topics include nutrition, reproduction, production practices, diseases, meat processing, sustainable livestock production, and marketing. Upon completion, students should be able to demonstrate a basic understanding of livestock production practices and the economic impact of livestock locally, regionally, state-wide, and internationally.

ART 111 Art Appreciation **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

ATR 112 Intro to Automation **2** **3** **3**
Prerequisites:
Corequisites:

This course introduces the basic principles of automated systems and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems.

ATR 115 Intro to Mechatronics **3** **3** **4**
Prerequisites:
Corequisites:
This course introduces the synergistic application of mechanical, electrical, electronic, and computer engineering technologies that are used for the purpose of control and maintenance of high-tech devices and equipment. Topics include automation, advanced manufacturing, sensors, actuators, process control, circuits, robotics, electromechanical equipment, hydraulics, pneumatics, electrical drives, motors, and programmable logic controllers. Upon completion, students should be able to demonstrate an understanding of the function of the components of a mechatronic system, their controlling interactions, and the overall operation of the mechatronic control system.

AUT 141 Suspension & Steering Systems **2** **3** **3**
Prerequisites:
Corequisites:
This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

AUT 141A Suspension & Steering Lab **0** **3** **1**
Prerequisites:
Corequisites: AUT 141
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours.
Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

AUT 151 Brake Systems **2** **3** **3**
Prerequisites:
Corequisites:
This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT 151A Brake Systems Lab **0** **3** **1**
Prerequisites:
Corequisites: AUT 141
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

BIO 111 General Biology I **3** **3** **4**
Prerequisites:
Corequisites:
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This course has been approved for transfer under the ICAA as a general education course in Natural Science.*

BIO 112 General Biology II **3** **3** **4**
Prerequisites: BIO 111
Corequisites:
This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This course has been approved for transfer under the ICAA as a general education course in Natural Science*.

BIO 165 Anatomy & Physiology I **3** **3** **4**
Prerequisites: DRE 097
Corequisites:
This course is the first of a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

BIO 166 Anatomy & Physiology II **3** **3** **4**
Prerequisites: BIO 165
Corequisites:
This course is the second in a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and the interrelationships of all body systems. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

BPR 111 Print Reading **1** **2** **2**
Prerequisites:
Corequisites:
This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system.

BUS 110 Introduction to Business **3** **0** **3**
Prerequisites:
Corequisites:
This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

BUS 115 Business Law I **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces the student to the legal and ethical framework of business. Contracts, negotiable instruments, the law of sales, torts, crimes, constitutional law, the Uniform Commercial Code, and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them.*This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

CAR 111 Carpentry I **3** **15** **8**
Prerequisites:
Corequisites:

This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision.

CAR 112 Carpentry II **3** **15** **8**
Prerequisites: CAR 111
Corequisites:
This course covers the advanced theory and construction methods associated with the building industry including framing and exterior finishes. Topics include safety, hand/power tool use, measurement and layout, construction framing, exterior trim and finish, and other related topics. Upon completion, students should be able to safely frame and apply exterior finishes to a residential building with supervision.

CET 111 Computer Upgrade/Repair I **2** **3** **3**
Prerequisites:
Corequisites:
This course covers repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include CPU/memory/bus identification, disk subsystems, hardware/software installation/configuration, common device drivers, data recovery, system maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications.

CET 211 Computer Upgrade/Repair II **2** **3** **3**
Prerequisites:
Corequisites:
This course covers concepts of repair, service, and upgrade of computers and peripherals in preparation for industry certification. Topics may include resolving resource conflicts and system bus specifications, configuration and troubleshooting peripherals, operating system configuration and optimization, and other related topics. Upon completion, students should be able to identify and resolve system conflicts and optimize system performance.

CHM 151 General Chemistry I **3** **3** **4**
Prerequisites:
Corequisites:
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This course has been approved for transfer under the ICAA as a general education course in Natural Science.*

CHM 152 General Chemistry II **3** **3** **4**
Prerequisites: CHM 151
Corequisites:
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This course has been approved for transfer under the ICAA as a general education course in Natural Science.*

CIS 110 Introduction to Computers **2** **2** **3**
Prerequisites:
Corequisites:
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. *This course has been approved for transfer under the CAA as a general education course in Mathematics (Quantitative). This course has been approved for transfer under the ICAA as a general education course in Mathematics (Quantitative).*

CJC 111 Intro to Criminal Justice **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

CJC 121 Law Enforcement Operations **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

CJC 131 Criminal Law **3** **0** **3**
Prerequisites:
Corequisites:
This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC 221 Investigative Principles **3** **2** **4**
Prerequisites:
Corequisites:
This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

COM 231 Public Speaking **3** **0** **3**
Prerequisites:
Corequisites:
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. *This course has been approved for transfer under the CAA as a general education course in English Composition. This course has been approved for transfer under the ICAA as a general education course in English Composition.*

CTI 110 Web, Pgm, & Db Foundation **2** **2**
Prerequisites:
Corequisites:
This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

CTI 120 Network & Sec Foundation **2** **2** **3**
Prerequisites:
Corequisites:
This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various

implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

CTS 130 Spreadsheet **2** **2** **3**
Prerequisites:
Corequisites:
This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

CUL 110 Sanitation & Safety **2** **0** **2**
Prerequisites:
Corequisites:
This course introduces the basic principles of sanitation and safety relative to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of the content necessary for successful completion of a nationally recognized food/safety/sanitation exam.

CUL 140 Culinary Skills I **2** **6** **5**
Prerequisites:
Corequisites: CUL 110
This course introduces the fundamental concepts, skills and techniques in basic cookery, and moist, dry and combination heat. Emphasis is placed on recipe conversion, measurements, terminology, classical knife cuts, safe food/equipment handling, flavorings/seasonings, stocks/sauces/soups, and related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the foodservice industry.

CUL 160 Baking I **1** **4** **3**
Prerequisites:
Corequisites: CUL 110
This course covers basic ingredients, techniques, weights and measures, baking terminology and formula calculations. Topics include yeast/chemically leavened products, laminated doughs, pastry dough batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate proper scaling and measurement techniques, and prepare and evaluate a variety of bakery products.

CUL 170 Garde Manger I **1** **4** **3**
Prerequisites:
Corequisites: CUL 110
This course introduces basic cold food preparation techniques and pantry production. Topics include salads, sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion, students should be able to present a cold food display and exhibit an understanding of the cold kitchen and its related terminology.

CUL 240 Culinary Skills II **1** **8** **5**
Prerequisites: CUL 110 and CUL 140
Corequisites:
This course is designed to further students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on meat identification/fabrication, butchery and cooking techniques/methods; appropriate vegetable/starch accompaniments; compound sauces; plate presentation; breakfast cookery; and quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees with complementary side items.

DFT 170 Engineering Graphics **2** **2**
Prerequisites:
Corequisites:
This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

ECO 251 Principles of Microeconomics **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces economic analysis of individual, business, and industr in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

ECO 252 Principles of Macroeconomics **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

EDU 119 Intro to Early Child Education **4** **0** **4**
Prerequisites:
Corequisites:
This course covers the foundations of the education profession, the diverse educational settings for young children, professionalism and planning developmentally appropriate programs for all children. Topics include historical foundations, program types, career options, professionalism and creating inclusive environments and curriculum responsive to the needs of all children and families. Upon completion, students should be able to design career plans and develop schedules, environments and activity plans appropriate for all children.

EDU 144 Child Development I **3** **0** **3**
Prerequisites:
Corequisites: DRE 097
This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

EDU 145 Child Development II **3** **0** **3**
Prerequisites: DRE 097
Corequisites:
This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

EDU 151 Creative Activities
Prerequisites:
Corequisites: DRE 097

This course introduces developmentally supportive creative learning environments with attention to divergent thinking, creative problem-solving, evidence-based teaching practices, and open-ended learning materials while applying NC Foundations for Early Learning and Development. Emphasis is placed on observation of process driven learning experiences in art, music, creative movement, dance, and dramatics for every young child age birth through eight, integrated through all domains and academic content. Upon completion, students should be able to examine, create, and adapt developmentally creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.

EGR 150 Intro to Engineering **1** **2** **2**
Prerequisites:
Corequisites:
This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

ELC 115 Industrial Wiring **2** **6** **4**
Prerequisites:
Corequisites:
This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

ELC 117 Motors & Controls **2** **6** **4**
Prerequisites:
Corequisites:
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC 131 Circuit Analysis I **3** **3** **4**
Prerequisites:
Corequisites:
This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

ELC 131A Circuit Analysis I Lab **0** **3** **1**
Prerequisites:
Corequisites:
This course provides laboratory assignments as applied to fundamental principles of DC/AC electricity. Emphasis is placed on measurements and evaluation of electrical components, devices and circuits. Upon completion, the students will gain hands-on experience by measuring voltage, current, and opposition to current flow utilizing various meters and test equipment.

ENG 111 Writing & Inquiry **3** **0** **3**
Prerequisites: DRE 098
Corequisites:
This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process.
Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. *This course has been approved for transfer under the CAA as a general education course in English Composition. This course has been approved for transfer under the ICAA as a general education course in English Composition.*

ENG 112 Writing/Research in the Disciplines Prerequisites: ENG 111
Corequisites:
This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines. *This course has been approved for transfer under the CAA as a general education course in English Composition. This course has been approved for transfer under the ICAA as a general education course in English Composition.*

ENG 231 American Literature I **3** **0** **3**
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites:
This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

ENG 232 American Literature II **3** **0** **3**
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites:
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

ENG 241 British Literature I **3** **0** **3**
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites:
This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

ENG 242 British Literature II **3** **0** **3**
Prerequisites: ENG 112, ENG 113, or ENG 114
Corequisites:
This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

FOR 121 Dendrology **2** **6** **4**
Prerequisites:
Corequisites:
This course covers field identification, classifications, uses, and nomenclature of trees. Emphasis is placed on silvics, characteristics, commercial importance, and wildlife benefits of trees. Upon completion, students should be able to identify trees and understand their uses.

FOR 131 Forest Measurements **2** **3** **3**
Prerequisites:
Corequisites:

This course introduces basic land and tree measurement equipment and mapping techniques. Emphasis is placed on developing skills for land, tree, and log measurements. Upon completion, students should be able to accurately use land and tree measurement equipment.

FOR 171 Intro to Forest Resources
Prerequisites:
Corequisites:
This course introduces the relationships within the forest and its various uses. Emphasis is placed on forest history, ecology, protection, management, policies, and practices. Upon completion, students should be able to discuss the relationship of the forest and its use to the welfare of mankind.

FOR 232 Forest Mensuration **2** **6** **4**
Prerequisites: FOR 131
Corequisites:
This course provides applications of previously covered measurement techniques to the volume estimation and valuation of forest stands. Emphasis is placed on applications of various timber cruising methods. Upon completion, students should be able to determine the size, volume, and quality of forest stands.

HIS 111 World Civilizations I **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

HIS 112 World Civilizations II **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

HIS 131 American History I **3** **0** **3**
Prerequisites:
Corequisites:
This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

HIS 132 American History II **3** **0** **3**
Prerequisites:
Corequisites:
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

HOR 112 Landscape Design I **2** **3** **3**
Prerequisites:
Corequisites:
This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization (encouraged use of native plants and discouraged use of invasive species). Upon completion, students should be able to read plans and draft a landscape design according to sustainable practices.

HOR 114 Landscape Construction **2** **2** **3**
Prerequisites:
Corequisites:
This course introduces the design and fabrication of landscape structures/features. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features.

HSE 110 Intro to Human Services **2**
Prerequisites:
Corequisites:
This course introduces the human services field, including the history, agencies, roles, and careers. Topics include personal/professional characteristics, diverse populations, community resources, disciplines in the field, systems, ethical standards, and major theoretical and treatment approaches. Upon completion, students should be able to identify the knowledge, skills, and roles of the human services worker.

HSE 123 Interviewing Techniques **2** **2** **3**
Prerequisites:
Corequisites:
This course covers the purpose, structure, focus, and techniques employed in effective interviewing. Emphasis is placed on observing, attending, listening, responding, recording, and summarizing of personal histories with instructor supervision. Upon completion, students should be able to perform the basic interviewing skills needed to function in the helping relationship.

HSE 125 Counseling **2** **2** **3**
Prerequisites:
Corequisites:
This course covers the major approaches to psychotherapy and counseling, including theory, characteristics, and techniques. Emphasis is placed on facilitation of self-exploration, problem solving, decision making, and personal growth. Upon completion, students should be able to understand various theories of counseling and demonstrate counseling techniques.

HSE 225 Crisis Intervention **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces the basic theories and principles of crisis intervention. Emphasis is placed on identifying and demonstrating appropriate and differential techniques for intervening in various crisis situations. Upon completion, students should be able to assess crisis situations and respond appropriately.

HUM 115 Critical Thinking **3** **0** **3**
Prerequisites: DRE 098, ENG 002, or ENG 111
Corequisites:
This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

MAC 111 Machining Technology I **2** **12** **6**
Prerequisites:

Corequisites:
This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

MAC 112 Machining Technology II **2** **12** **6**
Prerequisites:
Corequisites:
This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

MAS 110 Masonry I **5** **15** **10**
Prerequisites:
Corequisites:
This course introduces the basic principles of construction with masonry units. Topics include history of the masonry field, safety practices, blueprint reading, and principles of laying masonry units to the line using tools, equipment, and materials. Upon completion, students should be able to demonstrate knowledge of safety practices, blueprint reading, and basic tool use; identify materials; operate machinery; and lay masonry units.

MAS 140 Intro to Masonry **1** **2**
Prerequisites:
Corequisites:
This course introduces basic principles and practices of masonry. Topics include standard tools, materials, and practices used in basic masonry and other related topics. Upon completion, students should be able to demonstrate an understanding of masonry and be able to use basic masonry techniques.

MAT 110 **2** **2** **3**
Prerequisites: DMA 010 – DMA 030
Corequisites:
This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for non-math intensive programs. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; financial literacy; and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students should be able to demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.

MAT 143 **2** **2** **3**
Prerequisites: DMA 010 – DMA 050 and DRE 098
Corequisites:
This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life. *This course has been approved for transfer under the CAA as a general education course in Mathematics (Quantitative). This course has been approved for transfer under the ICAA as a general education course in Mathematics (Quantitative).*

MAT 152 Statistical Methods I **3** **2** **4**
Prerequisites: DMA 010 – DMA 050 and DRE 098
Corequisites:
This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population

from sample data, and interpret and communicate results. *This course has been approved for transfer under the CAA as a general education course in Mathematics (Quantitative). This course has been approved for transfer under the ICAA as a general education course in Mathematics (Quantitative).*

MAT 171 Precalculus Algebra **3** **2** **4**
Prerequisites: Take one set (1) DMA 010 – DMA 080 or (2) DMA 010 – DMA 050 and DMA 065 or (3) MAT 121
This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in Mathematics. This course has been approved for transfer under the ICAA as a general education course in Mathematics.*

MAT 172 Precalculus Trigonometry **3** **2** **4**
Prerequisites: MAT 171
This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in Mathematics. This course has been approved for transfer under the ICAA as a general education course in Mathematics.*

MAT 263 Brief Calculus **3** **2** **4**
Prerequisites: MAT 171
This course is designed to introduce concepts of differentiation and integration and their applications to solving problems. Topics include graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. *This course has been approved for transfer under the CAA as a general education course in Mathematics. This course has been approved for transfer under the ICAA as a general education course in Mathematics.*

MAT 271 Calculus I **4**
Prerequisites: MAT 172
This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in Mathematics. This course has been approved for transfer under the ICAA as a general education course in Mathematics.*

A student may place directly into MAT 271 if the student has met at least one of the following criteria within the past 5 years: 1. A score of 2/higher on the AP Calculus AB Exam. 2. A grade of C/higher in an AP Calculus course and an unweighted HS GPA of 3.0/higher. 3. A score of 90/higher on the ACCUPLACER College-Level Math test. 4. A score of 46/higher on the trigonometry section of the ACT Compass Math Placement Test. 5. A score of 580/higher on the old (prior to March 2016)SAT Math and a grade of C/higher in the NC Standard Course of Study Pre-Calculus course or an equivalent course from another state. 6. A score of 600/higher on the new (March 2016/beyond) SAT Math and a grade of C/higher in the NC Standard Course of Study Pre-Calculus course or an equivalent course from another state. 7. A score of 27/higher on the ACT Math and a grade of C/higher in the NC Standard Course of Study Pre-Calculus course or an equivalent course from another state. 8. A score of 560/higher on the SAT Subject Test in Mathematics Level 2.

MAT 272 Calculus II **3** **2** **4**
Prerequisites: MAT 271
This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in Mathematics. This course has been approved for transfer under the ICAA as a general education course in Mathematics.*

MEC 111 Machine Processes I **1** **4** **3**
Prerequisites:
Corequisites:
This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to manufacture simple parts to specified tolerance.

MED 118 **2** **0** **2**
Prerequisites:
Corequisites:
This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional.

MED 121 Medical Terminology I **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 122 Medical Terminology II **3** **0** **3**
Prerequisites: MED 121
Corequisites:
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MUS 110 Music Appreciation **3** **0** **3**
Prerequisites:
Corequisites:
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

MUS 111 Fundamentals of Music
Prerequisites:
Corequisites:
This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

MUS 141 Ensemble I **0** **2** **1**
Prerequisites:
Corequisites:
This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more.
Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

MUS 142 Ensemble II **0** **2** **1**
Prerequisites: MUS 141
Corequisites:
This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

MUS 151 Class Music I **0** **2** **1**
Prerequisites:
Corequisites:
This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

NAS 101 Nurse Aide I **3** **7** **6**
Prerequisites:
Corequisites:
This course includes basic nursing skills required to provide safe, competent personal care for individuals. Emphasis is placed on person-centered care, the aging process, communication, safety/emergencies, infection prevention, legal and ethical issues, vital signs, height and weight measurements, elimination, nutrition, basic restorative care/rehabilitation, dementia, mental health and end-of-life care. Upon completion, students should be able to demonstrate knowledge and skills and be eligible to test for listing on the North Carolina Nurse Aide I Registry. (Student must be at least 16.5 years old on or before the first day of the term to register for NAS 101.)

NAS 102 Nurse Aide II **3** **8** **6**
Prerequisites: NAS 101
Corequisites:
This course provides training in Nurse Aide II tasks. Emphasis is placed on the role of the Nurse Aide II, sterile technique and specific tasks such as urinary catheterization, wound care, respiratory procedures, ostomy care, peripheral IV assistive activities, and alternative feeding methods. Upon completion, students should be able to demonstrate knowledge and skills and safe performance of skills necessary to be eligible for listing on the North Carolina Nurse Aide II Registry.

OST 130 Comprehensive Keyboarding **2** **2** **3**
Prerequisites:
Corequisites:
This course is designed to develop keyboarding skills and introductory document formatting. Emphasis is placed on keyboarding techniques and formatting basic business documents. Upon completion, students should be able to create documents in an everchanging workplace.

OST 136 Word Processing **2** **2** **3**
Prerequisites:
Corequisites:
This course is designed to introduce word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

OST 148 Medical Insurance and Billing
Prerequisites:
Corequisites:
This course introduces fundamentals of medical insurance and billing. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim.

OST 164 Text Editing Applications **3** **0** **3**
Prerequisites:
Corequisites:
This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

OST 247 Procedure Coding **2** **2** **3**
Prerequisites: MED 121 or OST 141
Corequisites:
This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

OST 248 Diagnostic Coding **2** **2** **3**
Prerequisites: MED 121 or OST 141
Corequisites:
This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

OST 289 Administrative Office Management **2** **2** **3**
Prerequisites: OST 164 and either OST 134 or OST 136
Corequisites:
This course is designed to be a capstone course for the office professional and provides a working knowledge of modern office procedures. Emphasis is placed on scheduling, telephone procedures, travel arrangements, event planning, office design, and ergonomics. Upon completion, students should be able to adapt in an office environment.

PBT 100 Phlebotomy Technology **5** **2** **6**
Prerequisites:
Corequisites: PBT 101
This course provides instruction in the skills needed for the proper collection of blood and other specimens used for diagnostic testing. Emphasis is placed on ethics, legalities, medical terminology, safety and universal precautions, health care delivery systems, patient relations, anatomy and physiology, and specimen collection. Upon completion, students should be able to demonstrate competence in the theoretical comprehension of phlebotomy techniques.

PBT 101 Phlebotomy Practicum **0** **9** **3**
Prerequisites: PBT 100
Corequisites: PBT 100
This course provides supervised experience in the performance of venipuncture and microcollection techniques in a clinical facility. Emphasis is placed on patient interaction and application of universal precautions, proper collection techniques, special procedures, specimen handling, and data management. Upon completion, students should be able to safely perform procedures necessary for specimen collections on patients in various health care settings. (Student must be at least 18 years old on or before the first day of the term to register for PBT 101.)

PHI 215 Philosophical Issues **3** **0** **3**
Prerequisites: ENG 111
Corequisites:
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components of an issue. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

PHI 240 Introduction to Ethics Prerequisites: ENG 111 Corequisites:
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on moral theories such as consequentialism, deontology, and virtue ethics. Upon

completion, students should be able to apply various ethical theories to moral issues such as abortion, capital punishment, poverty, war, terrorism, the treatment of animals, and issues arising from new technologies. *This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts. This course has been approved for transfer under the ICAA as a general education course in Humanities/Fine Arts.*

PHY 251 General Physics I **3** **3** **4**
Prerequisites: MAT 271
Corequisites: MAT 272
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This course has been approved for transfer under the ICAA as a general education course in Natural Science.*

PHY 252 General Physics II **3** **3** **4**
Prerequisites: MAT 272 and PHY 251
Corequisites:
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *This course has been approved for transfer under the CAA as a general education course in Natural Science. This course has been approved for transfer under the ICAA as a general education course in Natural Science.*

PLU 115 Basic Plumbing **2** **6** **4**
Prerequisites:
Corequisites:
This course covers the basic installation and maintenance of plumbing systems and components. Topics include safe use of tools, implementation of standard practices, and installation/maintenance of piping, fittings, valves, appliances and fixtures used in plumbed systems. Upon completion, students should be able to install/maintain basic plumbing systems, components, appliances, and fixtures through appropriate use of plumbing tools and standard practices.

PLU 120 Plumbing Applications **4** **15** **9**
Prerequisites:
Corequisites:
This course covers general plumbing layout, fixtures, and water heaters. Topics include drainage, waste and vent pipes, water service and distribution, fixture installation, water heaters, and other related topics. Upon completion, students should be able to safely install common fixtures and systems in compliance with state and local building codes.

PME 101 Small Engine Repair I **1** **15** **6**
Prerequisites:
Corequisites:
This course covers the rebuilding of small, air-cooled, single-cylinder engines under fifteen cubic inch displacement. Emphasis is placed on complete engine rebuilding, including all internal engine components, following safe shop procedures. Upon completion, students should be able to safely disassemble, repair, and reassemble small engines according to industry standards.

POL 120 American Government **3** **0** **3**
Prerequisites:
Corequisites:
This course is a study of the origins, development, structure, and functions of American government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy process. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

PSY 101 Applied Psychology
Prerequisites:
Corequisites:
This course introduces the basic principles of psychology as they apply to daily life. Topics include perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one's personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living.

PSY 150 General Psychology **3** **0** **3**
Prerequisites:
Corequisites:
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

SOC 210 Introduction to Sociology **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. *This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences. This course has been approved for transfer under the ICAA as a general education course in Social/Behavioral Sciences.*

SSM 110 Intro to Shooting Sports **3** **3** **4**
Prerequisites:
Corequisites:
This course covers the theories and fundamentals of shooting sports. Topics include shotgun shooting sports, rifle shooting sports, and handgun shooting sports. Upon completion, students should be able to identify, explain and demonstrate the rules, regulations and equipment used in various shooting sports currently in the United States.

SSM 111 Gun Shop Management **3** **0** **3**
Prerequisites:
Corequisites:
This course introduces managing a gun shop. Topics include handling firearms safely, federal and state firearms laws, purchasing new and used firearms, purchasing related firearms equipment, supplies and firearms security. Upon completion, students should be able to safely and legally start working a firearms counter.

SSM 112 Sports Hunting **3** **0** **3**
Prerequisites:
Corequisites:
This course covers the theories and fundamentals of hunting in the world today. Topics include hunting in the United States, as well as the popular hunting spots around the world. Upon completion, students should be able to identify, explain and demonstrate the firearms and related equipment needed to hunt locally, nationally and in today's world.

TRN 110 Intro to Transport Tech **1** **2** **2**
Prerequisites:
Corequisites:
This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

TRN 120 Basic Transport Electricity **4** **3** **5**
Prerequisites:
Corequisites:
This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

TXY 110 Bird Preparation **2** **6** **5**
Prerequisites:
Corequisites:
This course introduces skills related to bird taxidermy. Topics include the proper assessment of damage, measuring and skinning of birds. Upon completion, students should be able to properly prepare a bird for mounting.

TXY 112 Bird Quality Control & Mounting **2** **6** **5**
Prerequisites:
Corequisites:
This course is designed to provide skills related to the control methods required for quality bird taxidermy. Topics include the precise measurement, assessment, and mounting of birds. Upon completion, students should be able to provide a realistic, quality bird mount.

TXY 114 Bird Finishing **2** **6** **5**
Prerequisites:
Corequisites:
This course is designed to provide skills related to the creation of bird mounts in an authentic natural setting. Topics include anatomy, feather alignment, balancing and alignment of mounts. Upon completion, students should be able to properly mount birds that depict realistic natural settings.

TXY 121 Mammal Preparation **2** **6** **5**
Prerequisites:
Corequisites:
This course introduces skills related to mammal taxidermy. Topics include the proper assessment of damage, measuring and skinning of mammals for mounting. Upon completion, students should be able to properly prepare mammals for mounting.

TXY 122 Mammal Quality Control & Mounting **2** **6** **5**
Prerequisites:
Corequisites:
This course is designed to cover skills related to the quality control required for realistic mammal taxidermy. Topics include the precise measurement, assessment, and mounting of mammals. Upon completion, students should be able to properly mount mammals in a quality manner.

TXY 123 Mammal Finishing **2** **6** **5**
Prerequisites:
Corequisites:
This course is designed to cover the advanced skills needed to prepare quality mammal mounts. Topics include anatomy, cape alignment, pose alignment utilized to finish mammal mounts. Upon completion, students should be able to properly mount mammals that depict realistic natural settings.

TXY 131 Fish Preparation **2** **6** **5**
Prerequisites:
Corequisites:
This course introduces skills related to fish taxidermy. Topics include the proper assessment of damage, measuring and skinning of fish. Upon completion, students should be able to properly prepare a fish for mounting.

TXY 133 Fish Finishing **2** **6** **5**
Prerequisites:
Corequisites:

This course is designed to provide skills related to the control methods required for quality, realistic fish taxidermy. Topics include anatomy, skin alignment, fin positioning and alignment of mounts to mimic natural poses. Upon completion, students should be able to properly mount fish that depict realistic natural settings.

WLD 110 Cutting Processes **1** **3** **2**
Prerequisites:
Corequisites:
This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

WLD 112 Basic Welding Processes **1** **3** **2**
Prerequisites:
Corequisites:
This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

WLD 115 SMAW (Stick) Plate **2** **9** **5**
Prerequisites:
Corequisites:
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

WLD 121 GMAW (MIG) FCAW/Plate **2** **6** **4**
Prerequisites:
Corequisites:
This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

WLD 131 GTAW (TIG) Plate **2** **6** **4**
Prerequisites:
Corequisites:
This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

WLD 141 Symbols & Specifications **2** **2** **3**
Prerequisites:
Corequisites:
This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

WLD 151 Fabrication I **2** **6** **4**
Prerequisites:
Corequisites:
This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, cutting, joining techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

For more information

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