REACH HIGHER. ARRIVE SOONER.

EarlyCollege

Orangeburg-Calhoun Technical College

Academic Program of Study Guide

Updated 6/7/2022

A Message from the President

Dear Parents and Students,

The Early College at Orangeburg-Calhoun Technical College (OCtech) is one of the most rewarding experiences you can participate in as a high school student. It is a "soft launch" to college because you get the opportunity to understand the rigor and expectations of college-level work while still receiving support and encouragement from your high school and home. I encourage you to take full advantage of an Early College experience and jump-start your college career for the following reasons:

- Students may enroll in Early College as either dual enrollment or concurrent enrollment students. Dual enrollment courses carry the same weighting as Advanced Placement (AP) and International Baccalaureate (IB) courses without the standardized exam required to receive college credit.
- Our Career Pathways help students select courses relevant to their field of interest, allowing them to transition from high school academics to degree programs at OCtech and beyond.
- Our transfer courses help with a seamless transition to four-year public and public universities in South Carolina at a fraction of the cost.
- Early College students can earn at least thirty (30) college credits towards a college degree and are eligible to earn industry-based certifications from OCtech.
- Career Academies provide students with the equivalent of an associate's degree in the advanced manufacturing and healthcare sectors. Our partnership with MUSC, for example, offers a direct pathway from high school to professional medical school.
- Early College students are eligible for SC Lottery Tuition Assistance, but successfully completing these courses will also help students maintain HOPE and LIFE during their later college years.

OCtech prides itself on a superior educational experience, both in the quality of the faculty, and the quality of the educational programs we offer. As you make decisions regarding your future, think about OCtech as a place to start your post-secondary education. Early College counselors can help plan your higher education academic career to prepare you for an exciting career.

I wish you all the best of luck in your educational aspirations and career goals. I hope you choose to begin your college experience at the OCtech Early College.

Sincerely,

Walter A. Tobin, Ph.D.
President

OCtech Mission Statement

The mission of OCtech is *to provide relevant training and education in a diverse, flexible, and inclusive environment that promotes success and self-reliance for students, and fosters economic development for the region.*

Introduction

Orangeburg-Calhoun Technical College's Early College allows ambitious high school students in Orangeburg and Calhoun counties the opportunity to earn college credits before they graduate. Early College Pathways help students select college courses relevant to their chosen fields of interest. Courses may count toward high school requirements (dual credit), or courses may be taken concurrently to enhance transfer opportunities and career interests (concurrent enrollment). Both Early College dual credit and concurrent enrollment credit may be used toward the two-year or four-year degree, as well as toward OCtech certificate programs. Early College Dual Enrollment requires the permission of the partner high school. Early College participation may also enable students to earn one or more South Carolina Diploma Seals of Distinction.

Students enrolled in either dual credit or concurrent enrollment courses should be both mature and self-motivated. Because OCtech is committed to all students' being college and career ready, the course selections are designed with that in mind. This Program of Study Guide provides information to assist students and their parents in selecting the most rigorous and appropriate coursework, as well as the most appropriate available Early College model for participation. Please read this program of study guide carefully and choose your method of participation wisely. Course descriptions are included for your convenience and indicate how the courses fit into both high school diploma and college certificate or degree completion. While this guide contains an abundance of information, please do not hesitate to contact either your high school counselor or an OCtech admissions counselor if you have any questions.

Traditional Early College Model

Degree Seeking Students: Students take dual credit courses toward an existing Associate of Arts (AA), Associate of Science (AS), or the Associate of Applied Science (AAS) degree in order to complete a degree, diploma, or certificate based on their existing high school schedule, including CTE courses at OCtech and CTE courses at area career centers.

Technical Scholars Model: Welding

Technical Certificate Students: Students may participate in OCtech certificate programs which result in industry recognized certifications required for the workforce.

- Welding (Basic Welding Certificate, Intermediate Welding Certificate, and NCCER Industry Certification

Early College District Honors Academy Model

District Selected Competitive Cohort for Degree-Seeking Students: Beginning in Grade 9, selected students participate in a cohesive and intensive honors academy cohort designed for both high school diploma and associate degree completion. The honors academies below are structured to maximize university transfer in either the Associate of Arts or Associate of Science degree models.

- Health Professions Warriors Academy (AA or AS degree – 60 hours)
- Orangeburg County Advanced College (AA or AS degree – 60 hours)
- Calhoun County Honors Academy (AA or AS degree – 60 hours)

OCtech Career Academies (NEW FOR FALL 2022)

OCtech and District Partnership for Selected Cohorts of Degree Seeking Associate of Science (AS) or Applied Science (AAS) students starting in Grade 9 (Readiness) and/or Grade 10: Selected Students will have the opportunity to complete the requirements for a SC High School Diploma and be able to complete up to the required credits needed for an AAS degree in one of the high-wage, high demand areas below.

Students may also enter in Grades 11 and 12 if they have a current high school IGP in a related area. These students will have the opportunity to complete a substantial portion of the A.S. or A.A.S degree, as well as OCtech certificate programs and industry certifications.

Admission is competitive.

- **Health Sciences Career Academy (2 Pathways)**
  - <u>Pathway 1: Medical University of South Carolina (MUSC)</u>
    Specialized Transfer Associate of Science Degree (66 semester credit hours) designed to transfer to MUSC's Healthcare Studies program, including pre-requisites for specialized clinical degrees including Pharmacy, Medicine, Physical Therapy, etc.). Courses will also

transfer to all other public and most private colleges and universities is the state.

Students should also plan to earn at least one of the following certificates that will assist in the acquisition of necessary clinical hours needed for competitive application to MUSC specialized clinical programs. The certification will result in the 72 hours needed to transfer to MUSC.

- Certified Nursing Assistant Certificate and NACES Certification
- Phlebotomy Certificate and NCCT Certification (must be 18 to complete required labs)
- Electrocardiography Certificate and NCCT Certification
- Emergency Medical Technician Certificate and State and National Certifications (must be 18 to complete required labs and sit for certification exam)
- Patient Care Technician

- Pathway 2: Health Professions and Clinical Studies General Technology Degree (AAS – 64 semester credit hours) designed to assist students in competitive admissions for OCtech professional programs, such as Nursing, Physical Therapist Assistant, Radiologic Technology, or Medical Assisting). Transfer course selections are also available to encourage attainment of a Bachelor of Science degree. Students will earn one or more of the following workforce certificates to prepare for a Competitive Admission program, such as Nursing:
  - Certified Nursing Assistant Certificate and NACES Certification
  - Phlebotomy Certificate and NCCT Certification (must be 18 to complete required labs)
  - Electrocardiography Certificate and NCCT Certification
  - Emergency Medical Technician Certificate and State and National Certifications (must be 18 to complete required labs and sit for certification exams)

- Patient Care Technician

- **Advanced Manufacturing and Engineering Career Academy (3 pathways)**
  Designed to assist students who desire to enter an Advanced Manufacturing, Engineering, or Engineering Technology Pathway. Transfer course selections are also available to encourage attainment of a Bachelor of Science degree.
  - Pathway 1: AAS General Technology Degree in Electronics Instrumentation Technology with an Electronics Secondary Specialty
    (AAS – 62 semester credit hours) with an Introductory Engineering Technology Certificate
  - Pathway 2: AAS General Technology Degree in Engineering Design Technology (AAS – 61 semester credit hours) with a certificate in Computer Aided Design (CAD)
  - Pathway 3: AAS General Technology Degree in Mechatronics Technology with an Industrial Maintenance Secondary Specialty
    (AAS – 62 semester credit hours) with certificates in Mechatronics: Basic Industrial Maintenance Certificate, Mechatronics I – Fundamentals; Mechatronics II – Automated Controls, and an NCCER Core Industry Certification

"Why Early College?"
Students and parents often ask, "Why Early College?" The following rationale is appropriate for both dual enrollment and concurrent enrollment students:

GET AHEAD - Students get a jump-start on a bachelor's degree, an Associate of Arts/Associate of Science degree, or Associate of Applied Science technical degree programs if they earn at least a "C" or better in their classes. Courses for dual credit may even earn AP weighting in a student's high school GPA.

BE PREPARED - Students become familiar with the demands of college and experience a smoother transition into college academics after high school. Early College students are expected to earn a college certificate, an associate degree, or at least complete the equivalent of the freshmen year in college.

BE COMPETITIVE - Students participating in Early College may earn South Carolina Diploma Seals of Distinction through thoughtful planning of their high school Individual Graduation Plan (IGP) and their OCtech Early College e-Plan. Early College courses may be used to facilitate such Seals of Distinction as the Honors Seal, the College Seal, the Career Seal, or a Specialization Seal. Courses can also be used toward Perkins CTE Completer status, if approved by the district.

MORE PERKS - Students receive preferential advisement with a college counselor assigned to each high school. Students will also develop a college degree completion e-Plan with an assigned OCtech faculty advisor. All courses and programs are taught by highly qualified instructors. Other Early College staff are available to help students navigate college.

SAVE MONEY - In addition to getting a head start on a degree, Early College helps students save thousands of dollars in tuition costs, experience a smoother transition into college academics, and take advantage of the small class sizes offered at OCtech.

Early College participation will:

- Align high school design to students' postsecondary choices.
- Align high school design to the talent pipeline in SC.
- Align high school design to national and international opportunities.

OCtech Early College students will graduate high school ready for further postsecondary education, competitive employment, military careers, independent and community living, and citizenship.

OCtech Early College and High School Diploma Seals of Distinction

Students enrolled in South Carolina high schools shall have the opportunity to earn diploma Seals of Distinction within each high school diploma pathway that identifies a particular area of focus. Students may earn one or more Seals of Distinction, including an Honors Seal, College Seal, Career Seal, Specialization Seal (with focus areas in the following: STEM, World Language, Arts, and Military).

Parents and students should consult with their high school counselor to carefully plan both high school and Early College coursework to earn one or more Seals of Distinction. In addition to the Honors and College Seals, the Early College Pathways are especially designed to support STEM and Career Pathways. The Early College Pathways listed in this Early College Academic Program of Study Guide may be used to support the following national career clusters and high school IGP majors:

- Agriculture, Food and Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communications
- Business Management & Administration
- Education & Training
- Finance
- Government & Public Administration
- Health Science
- Human Services
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing
- Marketing
- Science, Technology, Engineering & Math
- Transportation, Distribution & Logistics

College Policies

College policies will guide Early College instruction. Students should become familiar with the OCtech Catalog and OCtech Student Handbook. Both contain policies and procedures that govern student conduct and academic progress. Both publications are available on the OCtech website, as well as Student Services. Instructors will provide students access to departmental and class syllabi and policies regarding course work, lateness, absences, late work, missed work, and grading. The instructor, his or her department head and dean, and the college will enforce the policies stipulated in these documents. It is each student's responsibility to read, ask for timely clarification of, and abide by the stated policies for each class.

Course Availability

Early College students are beginning their college education with enrollment in the first course. Each student will begin a college transcript with Early College enrollment. Most college courses are available to all students who meet prerequisites. ***Students planning on taking courses for dual credit, however, must have high school or homeschool association approval. With the permission of the high school or governing home school association, these courses may be taken before, during, after school, or during the summer semester.***

All Early College courses, whether taken for dual credit or concurrent enrollment, will be reflected on the student's college transcript.

Dual Credit
Student performance in dual credit courses will directly affect high school records and graduation requirements, including the high school grade point average (GPA). In accordance with South Carolina state regulation, students may earn one unit toward the high school diploma for each approved three-semester hour college course they successfully complete.

South Carolina school districts are required to enter the earned numeric grade on the student's high school transcript. In calculating the student's GPA, all earned numeric grades for college-level dual credit courses are weighted the same as high school AP and IB level courses and receive additional weighting.

Concurrent Enrollment
Concurrent enrollment courses are taken on a student's own time while they are still in high school and transfer to public and most private South Carolina colleges and universities. Courses not taken for dual credit are considered concurrent enrollment courses. Concurrent enrollment courses will not impact the student's high school GPA or high school graduation.

Placement Testing
Students wishing to take Early College courses must meet the same placement criteria as required of all OCtech students. Current placement criteria can be found in the appendix of this document. The College uses multiple measures to place students into appropriate coursework. These measures may include qualifying SAT, ACT, WorkKeys, or Accuplacer Next Gen test scores, along with weighted high school GPA. More information regarding placement testing is available through the OCtech Admissions Office or your school counselor. Additional information regarding placement testing can be found on the OCtech website at: http://www.octech.edu/student-resources/testing-center.

Student Academic Conduct

OCtech students are considered to be mature individuals, whose conduct is expected to be dignified and honorable. It is the student's responsibility to remember that his or her actions directly affect the reputation of the college. Common courtesy and cooperation should be part of the student's daily living habits. Student conduct, both at the college and off campus, must reflect that of a good citizen. Dishonesty is considered a serious offense. Dishonesty in any form will result in severe disciplinary action. Any activities that may be considered detrimental to the mission of the college may be cause for dismissal, subject to the discretion of the Vice President for Academic Affairs or the

Vice President for Student Services. OCtech reserves the right, in the interest of its students, to decline admission, suspend or require the withdrawal of a student for any reason deemed to be in the interest of OCtech. The Student Code of Conduct may be found in the OCtech Student Handbook and the OCtech Catalog.

Course Rigor

Early College courses, although some may be taught on a high school campus, require college-level diligence with attention to independent learning, timely completion of all assignments, plagiarism, and class participation.

Transcripts

Students may obtain an informal transcript of their college course work through the OCtech Self Service platform. The College Registrar maintains an official transcript for each student's academic record. This shows courses taken and credits earned by the student while attending OCtech and is updated accordingly each semester. All transcript requests must be made by the student online through the OCtech website. Student transcripts are processed at least twice per week (except during peak times such as end of term, registration, etc.) upon receipt of an online request and payment for each transcript to be issued. All debts owed to the college must be paid before a student transcript is released from OCtech.

Attendance

Students are expected to attend all scheduled class meetings. The instructor will inform students of the required attendance policy in the course syllabus. If students will be absent, it is their responsibility to contact the instructor via phone or email. Students will be responsible for making up any missed class work, assignments, or tests. Absences due to conflicting high school activities or high school calendar conflicts do not preclude the student from making up missed work.

Grievance Procedure

Filing a Complaint

This procedure must be initiated by the student within 60 days of becoming aware of the decision, action or event giving rise to the grievance. This time limit may be extended by the OCtech official having jurisdiction over the grievance, if the student requests an extension within the 60-day period. Before initiating the student grievance process, a student could go to the college employee who originated the alleged problem and attempt to resolve the matter informally. If the student is not satisfied with the outcome of this meeting or if the student prefers to ignore this step, then the student may file a written complaint and initiate the grievance process. This written complaint should

describe the decision or action that is being grieved, the date of the decision or action, and the college employee(s) involved in the decision or action.

- Written complaints about alleged discrimination on the basis of age, gender, race, disability or veteran's status and written complaints about alleged sexual harassment shall be submitted to the OCtech Office of Human Resources Director, who is the designated Section 504, Title II and Title IX Compliance Officer.
- Written complaints about decisions and actions not related to discrimination on the basis of age, gender, race, disability, veteran's status or sexual harassment shall be submitted to the college's Chief Student Services Officer.

More information regarding the Grievance Procedure can be found in the OCtech Student Handbook.

Confidentiality of Student Academic Records

OCtech complies fully with the Family Educational Rights and Privacy Act of 1974 (FERPA). This law guarantees the privacy of student educational records and protects the student's right to access those records.

NOTE: Students enrolled in Early College courses are legally considered college students. Parents cannot unilaterally request information concerning the student from the instructor. Only school officials and students may legally make such a request. With a student's consent, a parent may be present at a conference with the instructor and the student.

Course Withdrawal Policy

Students may withdraw from the College and all classes during the first five calendar days of the full term (or the first two days of a mini-term) without penalty. Withdrawn courses will not appear on the student's transcript. Withdrawal of courses after the first five calendar days, but before the end of the first 30 calendar days of the term, will be reflected on the student's transcript. A student's official withdrawal date will be based on the student's last date of attendance. Withdrawn courses will receive a college grade of "W." Although this grade appears on the transcript, it is not calculated into the student's college grade point average. Withdrawals from courses after the end of the first 30 calendar days of the term will receive a grade of "WP" (Withdrawn Passing) if the student was passing the course at the time of withdrawal and a grade of "WF" (Withdrawn Failing) if the student was failing the course at the time of withdrawal.

The instructor may issue a grade of "W" in lieu of the "WP" or "WF" at the time of withdrawal. The "WF" is a punitive grade, which carries the same calculation in the grade point average as that of an "F." Prompt and regular class attendance is expected of all

students. A decision to stop attending classes at OCtech does not constitute an official course withdrawal. It is the student's responsibility to initiate the proper paperwork to withdraw from classes. Failure to complete and submit the proper paperwork to withdraw from classes after the published add/drop period will result in a failing college grade for the course(s).

Students and parents are also encouraged to consult the SC Uniform Grading Policy for the requirements for dropping a dual credit course.

The OCtech Bookstore

The OCtech Bookstore is located on the first floor of the Gressette Learning Resource Center, Building B, and carries a complete line of textbooks, supplies and general merchandise. Day and evening hours of operation are posted on the door of the bookstore and on the OCtech website.

Textbooks, Course Materials, and Required Electronic Device

Students must bring textbooks and other necessary materials to class, as needed. Attempting to take a college course without purchasing the required textbook and any other required materials will seriously jeopardize a student's ability to pass the course. Students should have all materials by the published add\drop date. Some courses may include an inclusive access fee to cover electronic texts and resources.

Some courses follow a text book model called Inclusive Access. This means that the textbook is included upon registration as a course fee and is provided electronically to the student. Students click on a link within the D2L course page to download course books and resources.

All OCtech programs require a laptop in order to complete coursework. Students may purchase a laptop from the OCtech Bookstore or provide their own device. Students are also encouraged to purchase a support package, extended warranties and/or accidental coverage for their device.

If students already have a laptop or tablet, it must:

- have a USB port.
- be capable of adding a second browser, such as Chrome, Edge or Firefox.
- be capable of playing, downloading and recording audio and video.
- be capable of downloading a free Office 365 license provided by OCtech.*

*Instructions and download link for Office 365 are found in your D2L account.

Bookstore Laptops
The bookstore stocks different models of laptops. While all models are OCtech compliant with classroom requirements, programs recommend at least the middle tier laptop stocked by the OCtech bookstore, with the exception of Engineering Design Technology (EDT). Due the size of the graphics programs used in computer design, the EDT program recommends the top tier computer.

OCtech Orientation

Students should plan to attend an OCtech Early College Orientation session. Research indicates that students who participate in an orientation session perform better in subsequent college work. Please consult your school counselor regarding dates and times for Early College orientation. New Early College students will be enrolled in COL-101 College Orientation and COL-103 College Skills during their first college semester.

Student Identification Cards

Every registered student at OCtech must have a current and valid student ID and is required to have it on their person at all times while on the college's campus. To obtain an ID, students should bring a driver's license or other state-issued picture ID to Student Services.

Vehicle Registration

Student vehicles on college property must be registered. Vehicles should be registered at the time of class registration. Registration during the semester may be processed at the Information Desk in the Patrick Student Services building.

Desire 2 Learn (D2L)

All Early College courses are delivered or facilitated through D2L, the college's learning management system. D2L provides a Help Desk for students for assistance with using D2L (for course or course software issues, please contact the instructor). Instructions for how to login, along with instructional videos and technical support information can be found on the OCtech website: https://www.octech.edu/student-resources/d2l-information/. Students are also able to access the Student Success Center and the OCtech Library through D2L.

Tutoring and Academic Support Services

The Student Success Center provides free resources and tutoring services for OCtech students. The purpose of the center is to provide opportunities for enhanced learning through academic support and programming aimed at developing content knowledge

and student success. There is no cost for academic tutoring. The Student Success Center is located inside the OCtech Library on the second floor of Building B.

Online tutoring in many disciplines is available for students through Brainfuse. Students are able to access Brainfuse directly through their D2L account. The link for Brainfuse can be found under the Resources tab once you have entered any class page. This online service connects students with a live tutor, or it may be used to submit a paper for review through the Brainfuse writing lab. If you need assistance, please call the Student Success Center at (803) 535-1376 or e-mail success@octech.edu.

Additional resources can be found through the Student Success Center's website. Links to educational online resources are provided to assist students with learning content for their classes. A direct link to the Student Success Center is provided on the Home Page of D2L that allows students to access services provided by the Center, the tutoring calendar, and other resources.

Student Success Center's website:
https://www.octech.edu/student-resources/student-success-center/

The OCtech Library

The OCtech Library is located on the second floor of the Gressette Learning Resource Center (Building B). Students and faculty have access to books, periodicals, newspapers, audiovisual resources, the Internet, and a variety of online databases as well as an extensive collection of electronic books. Please see http://libguides.octech.edu/?b=s for more information. The Library's hours are: Monday - Thursday 7:30am - 7:00pm and Friday 7:30am - 1:30pm.

Services for Students with Disabilities

Orangeburg-Calhoun Technical College complies fully with section 504 of the 1973 Vocational Rehabilitation Act and the Americans with Disability Act. Moreover, the college is committed to making all program services and college activities accessible to all students. Students with physical disabilities who require special assistance for registration, class attendance or parking should contact the Coordinator for Students with Disabilities in the Student Services Office.

Students who have a documented learning disability or a documented disability that interferes with cognitive performance and who require special accommodations should also contact the Coordinator for Students with Disabilities. Students must reveal their documented disability and the need for special accommodations.

Tuition and Fees

Dual Enrollment students should consult with their school counselor regarding Early College tuition, fees, and textbooks. Early College courses are subject to the OCtech currently published tuition and fee schedule. Please see https://www.octech.edu/cost-financial-aid/tuition-fees/ for the current tuition and fee schedule.

Tuition Assistance

Early College students may qualify for tuition assistance through state-funded sources. Students must be enrolled in at least six (6) credit hours per semester to qualify for Lottery Tuition Assistance or the SC Workforce and Industrial Needs Scholarship (SCWINS). **Lottery Tuition Assistance may not be used at two different SC colleges or universities within the same semester.** High school students are not eligible for other state or federal tuition assistance.

Eligibility/Citizenship

International students may not be eligible for tuition assistance and may be charged the out-of-state tuition.

Using the OCtech Early College Academic Program Guide

Students and parents should use this guide in conjunction with the high school Individual Graduation Plan (IGP), the OCtech Self Service completion plan, and the OCtech Catalog to ensure completion of one of the following:

- a college certificate or diploma, which may include an industry credential
- the first-year of an Associate's degree (thirty hours)
- an Associate of Arts (AA) or Associate of Science (AS) degree, or an Associate of Applied Science degree.

Early College students may work toward any of the programs listed in the OCtech Catalog. If students are taking courses for dual credit, the approval of their high school is required. High school students may choose from 18 specially-designated Early College Pathways. The list of these pathways can be found on the OCtech website at

https://www.octech.edu/admissions/early-college/. The following narratives detail coursework in which most Early College students participate. **See the OCtech Catalog for a more inclusive list of programs.**

Early College Models for Associate of Arts/Associate of Science

The Associate of Arts and Science programs are designed primarily for college transfer and are used in each of the Honors Academies, as well as for Traditional Early College University Transfer students. The Associate of Arts and Science degrees include a minimum of sixty college credits. The college credits outlined in this OCtech Early College Academic Program Guide may be used to meet those requirements. Through carefully planning, students earning the AA or AS degree may transfer the degree and enter a university with a class standing of "Junior". Students completing at least thirty credit hours (the first year of an AA or AS degree) may transfer to the university without the competitive pressure of the SAT/ACT score required of the traditional college freshman.

More information about customized AA/AS transfer pathways may be found in the OCtech Catalog or online.

SAMPLE ASSOCIATE IN ARTS
SEMESTER CURRICULUM MODEL
60 Semester Hours

FALL I		**Class**	**Lab**	**Credit**
BIO 101	Biological Science I or CHM 110	3.0	3.0	4.0
COL 101	Skills for Life-long Learning	1.0	0.0	1.0
ENG 101	English Composition I	3.0	0.0	3.0
HIS 201	American History: Discovery-1877	3.0	0.0	3.0
MAT 110	College Algebra	3.0	0.0	3.0
		13.0	3.0	14.0
SPRING I				
BIO 102	Biological Science II or CHM 111	3.0	3.0	4.0
ENG 102	English Composition II	3.0	0.0	3.0
HIS 202	American History: 1877-Present	3.0	0.0	3.0
PSY 201	General Psychology	3.0	0.0	3.0
SOC 101	Introduction to Sociology	3.0	0.0	3.0
		15.0	3.0	16.0

FALL II				
ECO 210	Macroeconomics	3.0	0.0	3.0
SPC 205	Public Speaking	3.0	0.0	3.0
CPT 101	Introduction to Computers	3.0	0.0	3.0
Literature Elective		3.0	0.0	3.0
Math/Science Elective		3.0/4.0	0.0	3.0/4.0
		15/16	0.0	15/16
SPRING II				
HIS 101	Western Civilization to 1689	3.0	0.0	3.0
PHI 101	Introduction to Philosophy	3.0	0.0	3.0
PSC 201	American Government	3.0	0.0	3.0
Elective		3.0	0.0	3.0
Elective		3.0	0.0	3.0
		15.0	0.0 1	5.0

SAMPLE ASSOCIATE IN SCIENCE
SEMESTER CURRICULUM MODEL
60 Semester Hours

		Class	**Lab**	**Credit**
FALL I				
ENG 101	English Composition I	3.0	0.0	3.0
SOC 101	Introduction to Sociology	3.0	0.0	3.0
BIO 101	Biological Science I	3.0	3.0	4.0
HIS 201	American History: Discovery-1877	3.0	0.0	3.0
MAT 110	College Algebra	3.0	0.0	3.0
		15.0	3.0	16.0
SPRING I				
ENG 102	English Composition II	3.0	0.0	3.0
BIO 102	Biological Science II	3.0	3.0	4.0
PSY 201	General Psychology	3.0	0.0	3.0
HIS 202	American History: 1877-Present	3.0	0.0	3.0
Math Elective		3.0	0.0	3.0
		15.0	3.0	16.0

FALL II				
ECO 210	Macroeconomics (or ECO 211)	3.0	0.0	3.0
CHM 110	College Chemistry I	3.0	3.0	4.0
CPT 101	Introduction to Computers	3.0	0.0	3.0
Literature Elective		3.0	0.0	3.0
Math Elective		3.0	0.0	3.0
		15.0	3.0	16.0
SPRING II				
SPC 205	Public Speaking	3.0	0.0	3.0
PHI 101	Introduction to Philosophy	3.0	0.0	3.0
*** Math/Science Elective		3.0	0/3.0	3.0/4.0
*** Math/Science Elective		3.0	0/3.0	3.0/4.0
		12	0/6	12/14

Career Academy Models

The five Career Academy models described earlier in this document provide students the opportunity to complete a substantial portion of an Associate in Science or an Associate in Applied Science degree in a high-demand, high-wage field. Students will also have the opportunity to complete certificates that are embedded in each degree program. The five Academy models are detailed below and can be found on the OCtech website at: https://www.octech.edu/admissions/early-college/career-academy/.

Associate in Science Degree Designed for Specialized Transfer to the Medical University of South Carolina (MUSC) Bachelor of Science in Healthcare Studies Program
65-66 Hours

9th Grade

Credit	Semester	Course	Course Description	Suggested High-School Progression
3.0	Fall	COL 103	College Skills (45 Contact Hours)	English I or II
1.0	Fall	COL 101	Skills for Life-Long Learning (15 Contact Hours)	World Geography
3.0	Fall	CPT 170 or CPT 101	Microcomputer Applications (45 Contact Hours)	PE or ROTC
7.0				AVID to include career development
3.0	Spring	CPT 114	Computers and Programming (Counts for high school graduation credit)	Algebra I or Geometry
3.0	Spring	MAT 155	Contemporary Mathematics(OR students may take a readiness course from below)	Biology (EOC)
6.0				AVID to include career development

Students may also take other Readiness Courses, such as English 155, Math 101, Math 102

Students may also participate in Summer Institute courses using LTA and SCWINS

10th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	Humanities	History or Fine Arts Transfer Course	Geometry or Algebra II
3.0	Fall	PSY 201	General Psychology (45 Contact Hours)	English II or English III
6.0				Chemistry I
3.0	Spring	ECO 210 or ECO 211 or Fine Arts	Economics Transfer or History or Fine Arts Transfer Course (ECO course can meet high school graduation requirement)	

3.0	Spring	SOC 101	Introduction to Sociology	English III or English IV
6.0				

Students may also participate in Summer Institute courses using LTA and SCWINS

11th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
4.0	Fall	Directed Elective	Directed Elective (such as Elementary Spanish 101) (90 Contact Hours)	English 4 (or OCtech ENG 101 and ENG 102)
4.0	Fall	BIO 101	Biological Sciences I	
3.0	Fall	ENG 101	English Composition I	AVID to include ACT and SAT Prep
11.0				
4.0	Spring	Directed Elective	Directed Elective (such as Elementary Spanish 102) (90 Contact Hours)	Third HS Science (or OCtech BIO 101)
3.0	Spring	MAT 110	College Algebra (45 Contact Hours)	US History (EOC)
4.0	Spring	BIO 102	Biological Sciences II	AVID to include ACT and SAT Prep
3.0	Spring	Eng 102	English Composition II	
14.0				

Students may also participate in Summer Institute courses using LTA and SCWINS

12th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	MAT 120	Probability and Statistics	
4.0	Fall	CHM 110	College Chemistry I	
4.0	Fall	Science Elective	Natural Science Elective	
11.0				

			English 102	
3.0	Spring	SPC 205	Public Speaking (45 Contact Hours)	
4.0	Spring	CHM 111	College Chemistry II	
3.0/4.0	Spring	Directed Elective	Math or Natural Science Elective	
4.0	Spring	Science Elective	Natural Science Elective	
14.0/15.0				

NOTE: AVID courses can be used as high school electives if approved by district; see Horry County; suggest .5 unit per semester

Associate in Applied Science General Technology Degree in Health Professions and Clinical Studies for the OCtech Early College Career Academy
64 Hours

9th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	COL 103	College Skills (45 Contact Hours)	English I or II
1.0	Fall	COL 101	Skills for Life-Long Learning (15 Contact Hours)	World Geography
3.0	Fall	CPT 170	Microcomputer Applications (45 Contact Hours)	PE or ROTC
7.0				AVID to include career development
3.0	Spring	IDS 154	Negotiating the Workplace (45 Contact Hours) (Earns Microburst Career Readiness Certification)	Algebra I or Geometry
3.0	Spring	MAT 155	Contemporary Mathematics(OR students may take a readiness course from below)	Biology (EOC)
6.0				AVID to include career development

Students may also take other Readiness Courses such as English 155.

Students may also participate in Summer Institute courses using LTA and SCWINS

10th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	AHS 104	Medical Vocabulary/Anatomy* (60 Contact Hours)	Geometry or Algebra II
3.0	Fall	AHS 119	Health Careers* (45 Contact Hours)	English II or English III
6.0				Chemistry I
3.0	Spring	AHS 140	Therapeutics for Health (60 Contact Hours)	
3.0	Spring	MAT 101	Beginning Algebra (45 Contact Hours)	English III or English IV
				Government/Economics
6.0				

Students may also participate in Summer Institute courses using LTA and SCWINS

11th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	BIO 126	Career Options for Health Professions (75 Contact Hours)	English 4 (or OCtech ENG 101 and ENG 102)
3.0	Fall	PSY 201	General Psychology (45 Contact Hours)	
4.0	Fall	BIO 117	Basic Anatomy and Physiology I (90 Contact Hours)	AVID to include ACT and SAT Prep
3.0	Fall	AHS 127	Basic Patient Care (75 Contact Hours)	
13.0				
6.0	Spring	AHS 149 and AHS 155	Healthcare Skills I* (135 Contact Hours) and Special Topics in Healthcare* (45 Contact hours) Both Courses allow student to sit for CNA Certification	
3.0	Spring	MAT 102	Intermediate Algebra (45 Contact Hours)	US History (EOC)
4.0	Spring	BIO 118	Basic Anatomy and Physiology II (90 Contact Hours)	AVID to include ACT and SAT Prep
1.0	Spring	AHS 106	Cardiopulmonary Resuscitation (15 Contact Hours)	
14.0				

Students may also participate in Summer Institute courses using LTA and SCWINS

12th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	ENG 101	English Composition I (45 Contact Hours)	
4.0	Fall	AHS 145 and AHS 166 or EMT 110 and EMT 212 or AHS 141 and AHS 144	Electrocardiography (60 Contact Hours) and ECG in a Clinical Setting (90 Contact Hours); students may sit for the certification exam in the area chosen	
3.0	Fall	Directed Elective	For Competitive Program Entry in Nursing or Health Science	
4.0	Fall	SPA 101	Elementary Spanish 101 (90 Contact Hours)	
14.0				
3.0	Spring	SPC 205	Public Speaking (45 Contact Hours)	
3.0	Spring	Directed Elective	For Competitive Program Entry in Nursing or Health Science	
3.0	Spring	PSY 203 or AHS 210	Human Growth and Development (45 Contact Hours)	
3.0	Spring	HSS 101	Introduction to Humanities (45 Contact Hours)	
12.0				

* PERKINS CTE COMPLETER COURSE

NOTE: AVID courses can be used as high school electives if approved by district; see Horry County; suggest .5 unit per semester

Associate in Applied Science General Technology Degree in Electronic Instrumentation with an Electronics Secondary Specialty for the OCtech Early College Career Academy
62 Hours

9th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	COL 103	College Skills (45 Contact Hours)	English I or II
1.0	Fall	COL 101	Skills for Life-Long Learning (15 Contact Hours)	World Geography
3.0	Fall	CPT 170	Microcomputer Applications (45 Contact Hours)	PE or ROTC
7.0				AVID to include career development
3.0	Spring	IDS 154	Negotiating the Workplace (45 Contact Hours) (Earns Microburst Career Readiness Certification)	Algebra I or Geometry
3.0	Spring	PSY 103	Human Relations (45 Contact Hours); (OR students may take a readiness course from below)	Biology (EOC)
6.0				AVID to include career development

Students may also take other Readiness Courses such as MAT 155, English 155, MAT 101, or MAT 102.

Students may also participate in Summer Institute courses using LTA and SCWINS

10th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	EGR 130	Engineering Technology Applications and Programming* (PLTW: 75 Contact Hours) (meets HS requirement for computer course)	Geometry or Algebra II Calhoun will take EGR 130 at HS
3.0	Fall	COL 120	STEM College & Career Readiness (45 Contact Hours)	English II or English III
6.0				Earth Science or Chemistry I
				AVID to include career opportunity planning, local and national

3.0	Spring	EGT 152	Fundamentals of CAD* (PLTW:75 Contact Hours)	Algebra II or Pre-Calculus/Probability and Statistics
3.0	Spring	CIM 130 (or EGR 112)	Computer Integrated Manufacturing* (PLTW: 75 Contact Hours)	English III or English IV
3.0	Spring	IDS 103	Critical Thinking (45 Contact Hours)	Government/Economics
9.0				Calhoun will take EGT 152 at HS
				AVID to include career opportunity planning, local and national
			Students may also participate in Summer Institute courses using LTA and SCWINS	**Students may take virtual Spanish I in summer (OCtech SPA 101)**

11th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
4.0	Fall	EET 113	Electrical Circuits I (90 contact hours)	English 4 (or OCtech Eng 101 and ENG 102)
3.0	Fall	MAT 175 (or MAT 110)	Algebra and Trigonometry I (45 Contact hours)	Pre-Calculus or Probability and Statistics (or use MAT 175 as a 4th HS math course)
3.0	Fall	EIT 110	Principles of Instrumentation (75 Contact Hours)	AVID to include ACT and SAT Prep
3.0	Fall	XXX	ADD a paired course to ensure mastery of EET 113	
13.0				
4.0	Spring	EET 140 and EET 143 (or EET 145)	Digital Electronics* and Digital Electronics Lab ((PLTW: 90 Contact hours)	Third HS Science (or OCtech PHY 201) Calhoun will take EET 140 at HS
3.0	Spring	MAT 176 (or MAT 111)	Algebra and Trigonometry II (45 Contact hours)	US History (EOC)
4.0	Spring	EET 141	Electronics Circuits (90 Contact Hours)	
3.0	Spring	ENG 160	Technical Communications (45 Contact Hours) (OR ENG 101 and SPC 205)	AVID to include ACT and SAT Prep
14.0				

			Students may also participate in Summer Institute courses using LTA and SCWINS	Students could also take virtual Spanish II in summer (OCtech SPA 102)
12th Grade				
Credit	**Semester**	**Course**	**Course Description**	**Suggested High School Progression**
4.0	Fall	PHY 201	Physics I (90 Contact hours; can serve as third high school science with lab)	AVID to include college transfer, college applications, job search
5.0	Fall	EIT 211	Introduction to Electronic Instrumentation I (135 Contact Hours)	
3.0	Fall	EET 235	Programmable Controllers (75 Contact Hours)	
4.0	Fall	SPA 101	Elementary Spanish 101 (90 Contact Hours)	
16.0				
5.0	Spring	EIT 212	Introduction to Electronic Instrumentation II (135 Contact Hours)	AVID to include college transfer, college applications, job search
3.0	Spring	EIT 220	Control Principles (75 Contact Hours)	
3.0	Spring	EET 227	Electrical Machinery (75 Contact Hours)	
3.0	Spring	HSS 101	Introduction to Humanities (45 Contact Hours)	
14.0				

NOTE: AVID courses can be used as high school electives
(see Horry County; suggest .5 unit per semester)

* PERKINS CTE COMPLETER COURSE

Associate in Applied Science General Technology Degree in Mechatronics Technology, Industrial Technology Secondary Specialty for the OCtech Early College Career Academy

61 Hours

9th Grade				
Credit	**Semester**	**Course**	**Course Description**	**Suggested High School Progression**
3.0	Fall	COL 103	College Skills (45 Contact Hours)	English I or II

1.0	Fall	COL 101	Skills for Life-Long Learning (15 Contact Hours)	World Geography
3.0	Fall	CPT 170	Microcomputer Applications (45 Contact Hours)	PE or ROTC
7.0				AVID to include career development
3.0	Spring	IDS 154	Negotiating the Workplace (45 Contact Hours) (Earns Microburst Career Readiness Certification)	Algebra I or Geometry
3.0	Spring	PSY 103	Human Relations (45 Contact Hours); (OR students may take a readiness course from below)	Biology (EOC)
6.0				AVID to include career development

Students may also take other Readiness Courses such as MAT 155, English 155, MAT 101, or MAT 102.

Students may also participate in Summer Institute courses using LTA and SCWINS

10th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	EGR 130	Engineering Technology Applications and Programming* (PLTW: 75 Contact Hours) (meets HS requirement for computer course)	Geometry or Algebra II Calhoun will take EGR 130 at HS
3.0	Fall	COL 120	STEM College & Career Readiness (45 Contact Hours)	English II or English III
				Earth Science or Chemistry I
6.0				AVID to include career opportunity planning, local and national
4.0	Spring	IMT 131	Hydraulics and Pneumatics* (90 Contact Hours)	Algebra II or Pre-Calculus/Probability and Statistics
3.0	Spring	IMT 210	Basic Industrial Skills I (NCCER Core Industry Certification: 75 Contact Hours)	English III or English IV
3.0	Spring	AMT 105	Robotics and Automated Controls* (75 Contact Hours)	Government/Economics

10.0				AVID to include career opportunity planning, local and national
			Students may also participate in Summer Institute courses using LTA and SCWINS	**Students could take virtual Spanish I in summer (or OCtech SPA 101)**
11th Grade				
Credit	**Semester**	**Course**	**Course Description**	**Suggested High School Progression**
4.0	Fall	EET 113	Electrical Circuits I* (90 contact hours) or EEM 117* and EEM 118*	English 4 (or OCtech Eng 101 and ENG 102)
3.0	Fall	MAT 101 (or MAT 175 or MAT 110)	Beginning Algebra I (45 Contact hours)	Pre-Calculus or Probability and Statistics (or use MAT 175 as a 4th HS math course)
3.0	Fall	IMT 211	Basic Industrial Skills II (NCCER Core Industry Certification: 75 Contact Hours)	AVID to include ACT and SAT Prep
3.0	Fall	XXX	ADD a paired course to ensure mastery of EET 113	
13.0				
4.0	Spring	EET 140 and EET 143 (or EET 145)	Digital Electronics* and Digital Electronics Lab ((PLTW: 90 Contact hours)	Third HS Science (or OCtech PHY 201)
3.0	Spring	MAT 102 (or MAT 176 or MAT 111)	Intermediate Algebra (45 Contact hours)	US History (EOC)
4.0	Spring	EET 141	Electronics Circuits (90 Contact Hours)	Calhoun will take EET 140 at HS
3.0	Spring	ENG 160	Technical Communications (45 Contact Hours) (OR ENG 101 and SPC 205)	AVID to include ACT and SAT Prep
14.0				
			Students may also participate in Summer Institute courses using LTA and SCWINS	**Students may take virtual Spanish II in summer (OCtech SPA 102)**

12th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
4.0	Fall	PHY 201	Physics I (90 Contact hours; can serve as third high school lab science)	AVID to inlude college transfer, college applications, job search
3.0	Fall	IMT 170	Statistical Process Control (75 Contact Hours)	
3.0	Fall	EGR 112	Engineering Programming (75 Contact Hours)	
4.0	Fall	SPA 101	Elementary Spanish 101 (90 Contact Hours)	
14.0				
3.0	Spring	EEM 215	DC/AC Machines (75 Contact Hours)	AVID to inlude college transfer, college applications, job search
3.0	Spring	EET 235	Programmable Controllers (75 Contact Hours)	
3.0	Spring	EEM 145	Control Circuits (75 Contact Hours)	
3.0	Spring	HSS 101	Introduction to Humanities (45 Contact Hours)	
12.0				

NOTE: AVID courses can be used as high school electives (see Horry County; suggest .5 unit per semester)

* PERKINS CTE COMPLETER COURSE

Associate in Applied Science General Technology Degree in Engineering Design Technology, Engineering Technology Secondary Specialty for the OCtech Early College Career Academy
61 Hours

9th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	COL 103	College Skills (45 Contact Hours)	English I or II
1.0	Fall	COL 101	Skills for Life-Long Learning (15 Contact Hours)	World Geography
3.0	Fall	CPT 170	Microcomputer Applications (45 Contact Hours)	PE or ROTC
7.0				AVID to include career development

3.0	Spring	IDS 154	Negotiating the Workplace (45 Contact Hours) (Earns Microburst Career Readiness Certification)	Algebra I or Geometry
3.0	Spring	PSY 103	Human Relations (45 Contact Hours); (OR students may take a readiness course from below)	Biology (EOC)
6.0				AVID to include career development
			Students may also take other Readiness Courses such as MAT 155, English 155, MAT 101, or MAT 102. **Students may also participate in Summer Institute courses using LTA and SCWINS**	

10th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
3.0	Fall	EGT 152	Fundamentals of CAD* (PLTW:75 Contact Hours)	Geometry or Algebra II Calhoun takes EGT 152 at HS
3.0	Fall	COL 103	STEM College & Career Readiness (45 Contact Hours)	English II or English III
				Earth Science or Chemistry I
6.0				AVID to include career opportunity planning, local and national
3.0	Spring	AET 101	Building Systems I* (PLTW: 75 Contact Hours)	Algebra II or Pre-Calculus/Probability and Statistics
3.0	Spring	CIM 130 (or EGR 112)	Computer Integrated Manufacturing* (PLTW: 75 Contact Hours) or EET 140*(PLTW)	English III or English IV
3.0	Spring	IDS 103	Critical Thinking (45 Contact Hours)	Calhoun takes EET 140 & AET 101 at HS
9.0				Government/Economics
				AVID to include career opportunity planning, local and national

Students may also participate in Summer Institute courses using LTA and SCWINS

Students may take virtual Spanish I in summer or SPA 101

11th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
4.0	Fall	EGT 110	Engineering Graphics I Electrical Circuits I (90 contact hours)	English 4 (or OCtech Eng 101 and ENG 102)
3.0	Fall	MAT 101 (or MAT 175 or MAT 110)	Beginning Algebra (45 Contact Hours)	Pre-Calculus or Probability and Statistics (or use MAT 175 as 4th HS math course)
3.0	Fall	EGT 151	Introduction to CAD (75 Contact Hours)	AVID to include ACT and SAT Prep
3.0	Fall	XXX	ADD a paired course to ensure mastery of EGT Courses	
13.0				
3.0	Spring	EGR 130	Engineering Technology Applications and Programming* (PLTW: 75 Contact Hours; Satisfies High School Graduation Computer Requirement)	Third HS Science (or OCtech PHY 201)
3.0	Spring	MAT 102 (or MAT 176 or MAT 111)	Intermediate Algebra (45 Contact Hours)	US History (EOC)
4.0	Spring	EGT 115	Engineering Graphics II (90 Contact Hours)	
3.0	Spring	ENG 160	Technical Communications (45 Contact Hours) (OR ENG 101 and SPC 205)	AVID to include ACT and SAT Prep
13.0				

Students may also participate in Summer Institute courses using LTA and SCWINS

Students may take virtual Spanish II in summer or SPA 102

12th Grade

Credit	Semester	Course	Course Description	Suggested High School Progression
4.0	Fall	PHY 201	Physics I (90 Contact hours; can serve as third high school science with lab)	AVID to include college transfer, college applications, job search
3.0	Fall	EGT 252	Advanced CAD (75 Contact Hours)	
3.0	Fall	EGT 259	Advanced Architectural CAD (75 Contact Hours)	
2.0	Fall	EGT 172	Electronic Drafting (30 Contact Hours)	
4.0	Fall	SPA 101	Elementary Spanish 101 (90 Contact Hours)	
16.0				
4.0	Spring	EGT 220	Structural and Piping Applications (120 Contact Hours)	AVID to include college transfer, college applications, job search
4.0	Spring	EGR 194	Statics and Strength of Materials (90 Contact Hours)	
3.0	Spring	EGT 251	Principles of CAD (75 Contact Hours)	
3.0	Spring	HSS 101	Introduction to Humanities (45 Contact Hours)	
14.0				

NOTE: AVID courses can be used as high school electives (see Horry County; suggest .5 unit per semester)

* PERKINS CTE COMPLETER COURSE

Technical Scholars Models

Technical Scholars students may participate in the Fall 2022-23 academic year in OCtech certificate programs which result in industry-recognized credentials required for the workforce.

Basic Welding Certificate
16 Hours

FALL		**Class**	**Lab**	**Credit**
IMT 210	Basic Industrial Skills I	2.0	3.0	3.0
WLD 101	Cutting Processes	0.5	1.5	1.0
WLD 106	Gas & Arc Welding	2.0	6.0	4.0
		4.5	10.5	8.0
SPRING				
WLD 111	Arc Welding I	2.0	6.0	4.0
WLD 118	Gas Metal Arc Welding Ferrous I	2.0	6.0	4.0
		4.0	12.0	8.0

Basic Welding Certificate
17 Hours

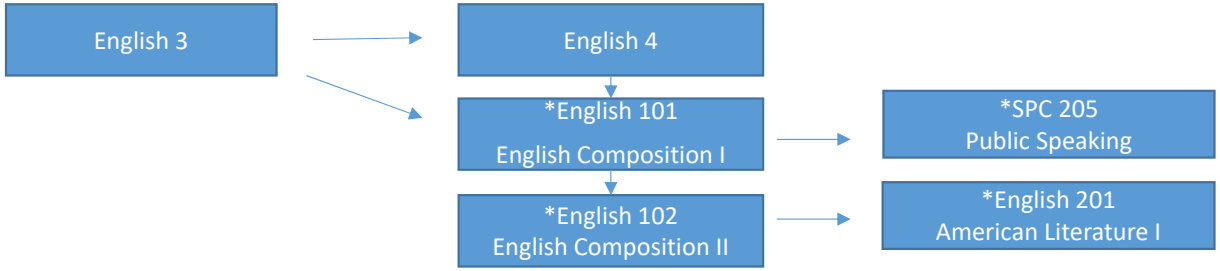
SUMMER		Class	Lab	Credit
WLD 103	Print Reading I	0.5	1.5	1.0
WLD 115	Arc Welding III	2.0	6.0	4.0
WLD 120	Flux Cored Arc Welding I	2.0	6.0	4.0
		4.5	13.5	9.0
FALL				
IMT 211	Basic Industrial Skills II	2.0	3.0	3.0
WLD 121	Flux Cored Arc Welding II	0.5	1.5	1.0
WLD 132	Inert Gas Welding – Ferrous	2.0	6.0	4.0
		4.5	10.5	8.0

Course Descriptions and Flow Charts

The following pages detail course descriptions for courses required for the degrees and certificates detailed previously, as well as for Traditional Early College Pathway courses suitable for dual enrollment participation. Each course description section is prefaced with a flow chart, which also references high school graduation requirements.

OCtech – Early College English Flow Chart

South Carolina requires high school students to take four units of English. Students may take OCtech courses if they meet prerequisites, with their school's approval.



Students must meet all prerequisites for the OCtech English course.

* All designated OCtech English courses earn three college credits and are transferrable to all public and most private universities in the state. Each course is eligible for one high school unit, with the approval of the student's high school. With local school board approval, English 101 and/or 102 may be approved for high school graduation credit

- *SPC 205 Public Speaking
- *English 201 American Literature I
- *English 202 American Literature II
- *English 205 English Literature I
- *English 206 English Literature II
- *English 207 Literature for Children
- *English 208 World Literature I
- *English 209 World Literature II
- *English 236 African American Literature

ALL LITERATURE COURSES MAY ALSO BE USED AS A HUMANITIES ELECTIVE. SEE ELECTIVES FLOW CHART.

Other Available Non -Transfer Courses: English 155 and English 160

- English 155 Communications I
- English 160 Technical Communications

Updated 4-13-22

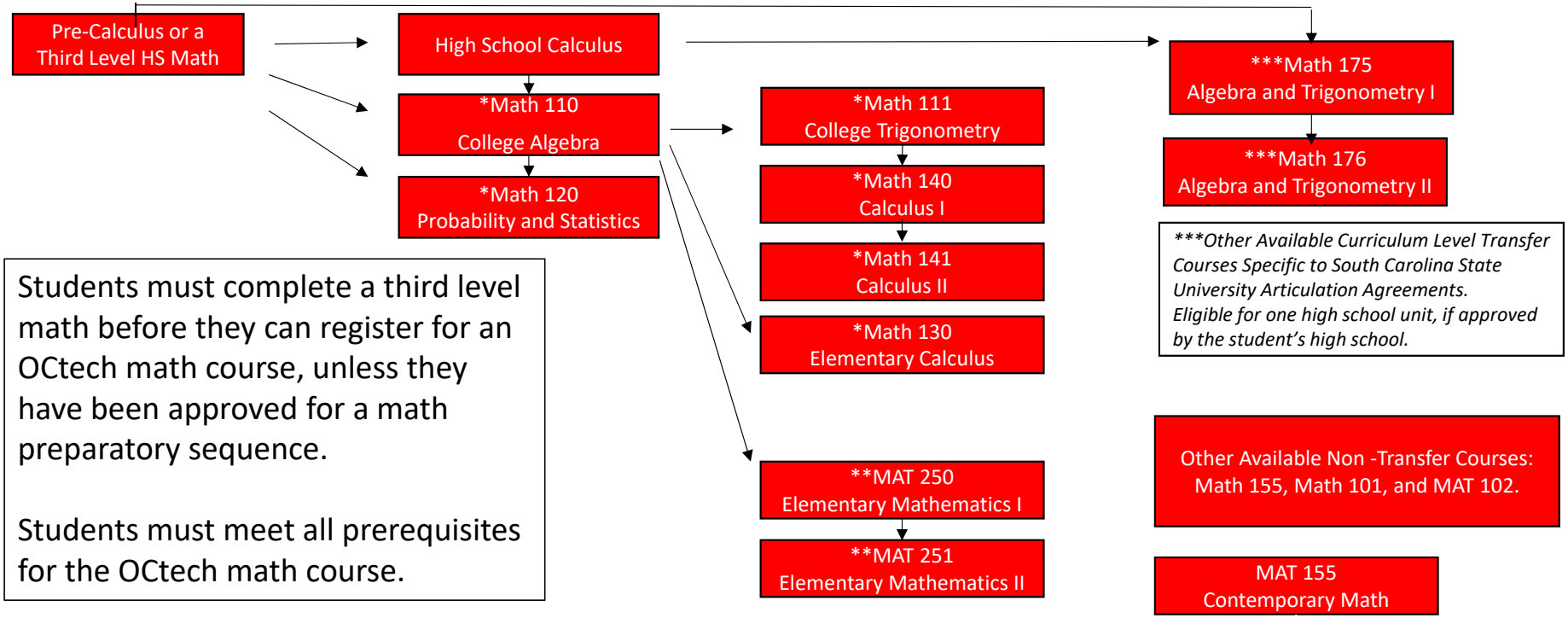
OCtech Early College
Programs of Study Courses: English and Communications

Core Courses		
ENGLISH	**ENGLISH**	**ENGLISH**
ENG 101 English Composition I (3-0-3) Prerequisites: ENG 155 (minimum grade of C); ENG 032 (minimum grade of B or better) or appropriate placement scores Credit: 1 Unit This course in presents the following topics: a study of composition in conjunction with appropriate literary selections, with frequent theme assignments to reinforce effective writing. A review of standard usage and the basic techniques of research are presented. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3015 **ENG 102 English Composition II (3-0-3)** Prerequisites: ENG 101 (minimum grade of C) Credit: 1 Unit This course presents the following topics: development of writing skills through logical organization, effective style, literary analysis and research. An introduction to literary genre is also included. *This course is transferable to public 4-year institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3016 **ENG 201 American Literature I (3-0-3)** Prerequisites: ENG 102 Credit: 1 Unit This course is a study of American literature from the colonial period to the civil war. *This course is transferable to public 4-year institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3019	**ENG 202 American Literature II (3-0-3)** Prerequisites: ENG 102 Credit: 1 Unit This course is a study of American literature from the civil war to the present. *This course is transferable to public 4-year institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement*. SDE Activity Code: 3020 **ENG 205 English Literature I 3-0-3 (3-0-3)** Prerequisites: ENG 102 Credit: 1 Unit This course presents the following topics: the study of English literature from the old English period to the romantic period with emphasis on major writers and periods. *This course is transferable to public 4-year institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3037 **ENG 206 English Literature II (3-0-3)** Prerequisites: ENG 102 Credit: 1 Unit This course presents the following topics: the study of English literature from the romantic period to the present, with emphasis on major writers and periods*. This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3034 **ENG 207 Literature for Children (3-0-3)** Prerequisites: ENG 102, C or better Credit: 1 Unit This course provides an introduction to children's literature in America through an examination of picture books and novels that depict Americans of various backgrounds	and experiences. It focuses on defining quality in children's book writing and illustration, and assessing concerns in the field. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4025 **ENG 208 World Literature I (3-0-3)** Prerequisites: ENG 102, C or better Credit: 1 Unit This course is a study of masterpieces of world literature in translation from the ancient world to the sixteenth century. Works studied are selected from various cultures throughout the world. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3017 **ENG 209 World Literature II (3-0-3)** Prerequisites: ENG 102, C or better Credit: 1 Unit This course is a study of masterpieces of world literature in translation from the seventeenth century to the present. Works studied are selected from various cultures throughout the world. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3018

ENGLISH	SPEECH	ENGLISH (NON-TRANSFER)
ENG 236 African American Literature (3-0-3) Prerequisites: ENG 102, C or better Credit: 1 Unit This course is a critical study of African American literature examined from historical, social, and psychological perspectives. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4032	**SPC 205 Public Speaking (3-0-3)** Prerequisites: ENG 101, C or better Credit: 1 Unit This course is an introduction to the principles of public speaking with application of speaking skills. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3045	**ENG 155 Communications I (3-0-3)** Prerequisites: ENG 032 or appropriate placement Credit: 1 Unit This course introduces the principles of expository writing through practice and development of communication skills. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 3023 **ENG 160 Technical Communications (3-0-3)** Prerequisites: ENG 032 or ENG 155 or ENG 101 with a grade of "C" or better Credit: 1 Unit This course is a study of various technical communications such as definitions, processes, instructions, descriptions, and technical reports, including oral presentations. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 3066

OCtech – Early College Math Flow Chart

South Carolina requires high school students to take four units of mathematics. Units must include Algebra I, Algebra II, and Geometry. A fourth higher level should be taken before or during the senior high school year. Students may take OCtech courses if they meet prerequisites, with their school's approval.



Students must complete a third level math before they can register for an OCtech math course, unless they have been approved for a math preparatory sequence.

Students must meet all prerequisites for the OCtech math course.

***Other Available Curriculum Level Transfer Courses Specific to South Carolina State University Articulation Agreements. Eligible for one high school unit, if approved by the student's high school.*

Other Available Non -Transfer Courses: Math 155, Math 101, and MAT 102.

MAT 155 Contemporary Math

MAT-101 Beginning Algebra

MAT-102 Intermediate Algebra

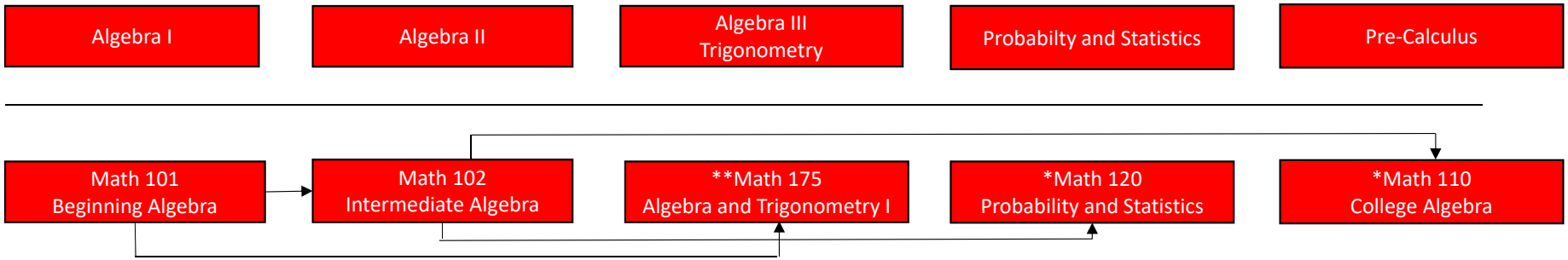
- All designated OCtech math courses earn three college credits and are transferrable to all public and most private universities in the state. Each course is eligible for one high school unit, with the approval of the student's high school.

**These courses transfer under specialized School of Education agreements to USC Columbia, SC State, and Claflin Universities.

Updated 4-13-22

OCtech – Math High School and OCtech Equivalencies Flow Chart

South Carolina requires high school students to take four units of mathematics. Students may take OCtech courses if they meet prerequisites, with their school's approval.



Students must complete a third level math before they can register for an OCtech math course, <u>unless they have been approved for a math preparatory sequence.</u>

Students must meet all prerequisites for the OCtech math course. The student's high school must approve preparatory sequences.

***Other Available Curriculum Level Transfer Courses Specific to South Carolina State University Articulation Agreements. Eligible for one high school unit, if approved by the student's high school.*

Math 155 Contemporary Math may be taken for approved programs of study and must be approved by the student's high school.

* All designated OCtech math courses earn three college credits and are transferrable to all public and most private universities in the state. Each course is eligible for one high school unit, with the approval of the student's high school.

Updated 4-13-22

OCtech Early College
Program of Study: Mathematics Courses

Core Courses		
MATHEMATICS	**MATHEMATICS**	**MATHEMATICS (TRANSFER BY AGREEMENT)**
MAT 110 College Algebra (3-0-3) Prerequisites: MAT 102, C or better Credit: 1 Unit This course includes the following topics: polynomial, rational, logarithmic, and exponential functions; inequalities; systems of equations and inequalities; matrices; determinants; and solutions of higher degree polynomials. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4133 **MAT 111 College Trigonometry (3-0-3)** Prerequisites: MAT 110, C or better Credit: 1 Unit This course includes the following topics: circular functions, trigonometric identities, solution of right and oblique triangles, solution. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4134 **MAT 120 College Trigonometry (3-0-3)** Prerequisites: MAT 102, C or better Credit: 1 Unit This course includes the following topics: introductory probability and statistics including organization of data, sample space concepts, random variables, counting problems, binomial and normal distributions, Central Limit Theorem, confidence intervals, and hypothesis tests for large and small samples, types I and II errors, linear regression and correlation. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4143	**MAT 130 Elementary Calculus (3-0-3)** Prerequisites: MAT 110, C or better Credit: 1 Unit This course includes the following topics: differentiation and integration of polynomials, rational, logarithmic and exponential functions, and interpretation and applications of these processes. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement* SDE Activity Code: 4139 **MAT 140 Analytical Geometry and Calculus I (3-0-3)** Prerequisites: MAT 111, C or better Credit: 1 Unit This course includes the following topics: derivatives and integrals of polynomials, rational, logarithmic, exponential, trigonometric, and inverse trigonometric functions; curve sketching; maxima and minima of functions; related rates; work; analytic geometry. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4136 **MAT 141 Analytical Geometry and Calculus II (3-0-3)** Prerequisites: MAT 140, C or better Credit: 1 Unit This course includes the following topics: continuation of calculus of one variable, including analytic geometry, techniques of integration volumes of integration and other applications, infinite series, including Taylor series and improper integrals. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4137	**MAT 250 Elementary Mathematics I (3-0-3)** Prerequisites: MAT 102, C or better Credit: 1 Unit This course provides students with an understanding of the meaning of numbers, fundamental operations of arithmetic, structure of the real number system and its subsystems, and elementary number theory. *This course is designed for transfer to University of South Carolina-Columbia - College of Education, Department of Instruction and Teacher Education.* **MAT 251 Elementary Mathematics II (3-0-3)** Prerequisites: MAT 250, C or better Credit: 1 Unit This course provides students with an understanding of informal geometry and basic concepts of algebra. *This course is designed for transfer to University of South Carolina-Columbia - College of Education, Department of Instruction and Teacher Education.*

MATHEMATICS (TRANSFER BY AGREEMENT)	MATHEMATICS (NON-TRANSFER)	
MAT 175 Algebra and Trigonometry I (3-0-3) Prerequisites: MAT 101, C or better Credit: 1 Unit This course includes the following topics: basic laws and operations of algebra, linear and quadratic equations, systems of equations, introduction to trigonometry, concepts of functions, and graphs of functions. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 9100 **MAT 176 Algebra and Trigonometry II (3-0-3)** Prerequisites: MAT 175, C or better Credit: 1 Unit This course includes the following topics: advanced algebra, exponential and logarithmic functions, complex numbers, trigonometric identities, and graphs of trigonometric functions. Additional topics may include statistics and discrete mathematics. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 9101	**MAT 101 Beginning Algebra (3-0-3)** Prerequisites: MAT 032, C or better Credit: 1 Unit This course includes the study of integers and their applications, operations with algebraic expressions, linear equations and applications, linear inequalities, graphs of linear equations, operations with exponents and polynomials, and factoring. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 480800CW **MAT 102 Intermediate Algebra (3-0-3)** Prerequisites: MAT 101, C or better Credit: 1 Unit This course includes the study of linear systems and applications; quadratic expressions, equations, functions and graphs; and rational expressions and functions. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 481200CW **MAT 155 Contemporary Mathematics (3-0-3)** Prerequisites: MAT 032 or equivalent with a grade of "C" or better. Credit: 1 Unit This course includes techniques and applications of the following topics: elementary number theory; algebra; geometry; measurements; graph sketching and interpretations; and descriptive statistics. SDE Activity Code: 4140	

OCtech – Early College Laboratory Science Flow Chart

South Carolina requires high school students to take three units of science. For university admission, two units must be taken in two different fields of physical, earth, or life sciences and selected among biology, chemistry, physics or earth sciences. The third unit may be from the same field as one of the first two units.

Physics	Chemistry	Biology

Suggested Dual Credit Options: Must meet Course Prerequisites.

Physics	Chemistry	Biology
*PHY 201 Physics I *PHY 202 Physics II *Physics 221 University Physics I *PHY 222 University Physics II	*CHM 110 College Chemistry I *CHM 111 College Chemistry II **CHM 105 General, Organic, and Biochemistry	*BIO 101 Biological Sciences I *BIO 102 Biological Sciences II *BIO 210 Anatomy and Physiology I *BIO 211 Anatomy and Physiology II BIO 117 Basic Anatomy and Physiology I BIO 118 Basic Anatomy and Physiology II

* All OCtech courses listed above are transferable to all public and most private universities in South Carolina.

** This course transfers under specialized agreement to colleges and universities such as University of South Carolina Upstate, Claflin University, and South Carolina State University.

Science courses have been aligned with college and university admission requirements, as well as with high school graduation requirements. Students are encouraged to take dual enrollment courses if they meet all prerequisites.

All OCtech laboratory sciences earn 4.0 college credits and may equal one high school unit with the approval of the student's high school.

Updated 4-13-22

OCtech – High School and OCtech Equivalencies Flow Chart

South Carolina requires high school students to take three units of science. For university admission, two units must be taken in two different fields of physical, earth, or life sciences and selected among biology, chemistry, physics or earth sciences. The third unit may be from the same field as one of the first two units.

Physics | Chemistry | Biology

Suggested Dual Credit Options: Must meet Course Prerequisites.

*PHY 201
Physics I
↓
*PHY 202
Physics II
OR
*Physics 221
University Physics I
↓
*PHY 222
University Physics II

*CHM 110
College Chemistry I
↓
*CHM 111
College Chemistry II
↓
*Organic Chemistry courses are available with completion of CHM 111
OR
**CHM 105
General, Organic, and Biochemistry

*BIO 101
Biological Sciences I
↓
*BIO 102
Biological Sciences II

BIO 117
Basic Anatomy and Physiology I
↓
BIO 118
Basic Anatomy and Physiology II

*BIO 210
Anatomy and Physiology I
↓
*BIO 211
Anatomy and Physiology II
↓
*BIO 225
Microbiology

* All OCtech courses listed above are transferable to all public and most private universities in South Carolina.

** This course transfers under specialized agreement to University of South Carolina Upstate and to Claflin and South Carolina State Universities.

All OCtech laboratory sciences earn 4.0 college credits and may equal one high school unit with the approval of the student's high school.

Students are encouraged to take dual enrollment courses if they meet all prerequisites.

Updated 4-13-22

OCtech Early College
Program of Study: Science Courses

Core Courses		
LABORATORY SCIENCES	**LABORATORY SCIENCES**	**LABORATORY SCIENCES**
BIO 101 Biological Science I (3-3-4) Prerequisites: RDG 032 or appropriate placement Credit: 1 Unit This course is the first of a sequence introducing biology. Topics include the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, natural selection, evolution, and ecology. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3228 **BIO 102 Biological Science II (3-3-4)** Prerequisites: BIO 101, C or better Credit: 1 Unit This is a continuation of introductory biology which includes classification of organisms and structural and functional considerations of all kingdoms (particularly major phyla as well as viruses). Vertebrate animals and vascular plants are emphasized. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3229 **BIO 210 Anatomy and Physiology I (3-3-4)** Prerequisites: BIO 118, C or better or appropriate placement Credit: 1 Unit This is the first in a sequence of courses, including intensive coverage of the body as an integrated whole. All body systems are studied. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3266	**BIO 211 Anatomy and Physiology II (3-3-4)** Prerequisites: BIO 210, C or better Credit: 1 Unit This is a continuation of a sequence of courses, including intensive coverage of the body as an integrated whole. All body systems are studied. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3267 **BIO 225 Microbiology (3-3-4)** Prerequisite: BIO 102 or BIO 211 with a grade of "C" or better or two semesters freshman college biology with a grade of "C" or better. Credit: 1 Unit This is a detailed study of microbiology as it relates to infection and the disease processes of the body. Topics include immunity, epidemiology, medically important microorganisms, and diagnostic procedures for identification. SDE Activity Code: 3270 **CHM 110 College Chemistry I (3-3-4)** Prerequisites: RDG 032 and MAT 102, C or better Credit: 1 Unit This is the first course in a sequence which includes the following topics: atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions, and equilibria. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3237	**PHY 201 Physics I (3-3-4)** Prerequisites: MAT 110 or MAT 175 Credit: 1 Unit This is the first in a sequence of physics courses. Topics include mechanics, wave motion, sound, heat, electromagnetism, optics, and modern physics. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3247 **PHY 202 Physics II (3-3-4)** Prerequisites: PHY 201, C or better Credit: 1 Unit This is the second in a sequence of physics courses. Topics include mechanics, wave motion, sound, heat, electromagnetism, optics, and modern physics. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3248 **PHY 221 University Physics I (3-3-4)** Prerequisites: MAT 140 Credit: 1 Unit This is the first of a sequence of courses. The course includes a calculus-based treatment of the following topics: vectors, laws of motions, rotation, vibratory and wave motion. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3249

CHM 111 College Chemistry II (3-3-4) Prerequisites: CHM 110, C or better Credit: 1 Unit This course is a continuation of the study of atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions, and equilibria. Other topics included are kinetics, thermodynamics and electrochemistry. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3238	**PHY 222 University Physics II (3-3-4)** Prerequisites: PHY 221, C or better Credit: 1 Unit This course is a continuation of calculus-based treatment of the following topics: thermodynamics, kinetic theory of gases, electricity and magnetism, including electrostatics, dielectrics, electric circuits, magnetic fields, and induction phenomena. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3250	
LABORATORY SCIENCES (TRANSFER BY AGREEMENT)	**LABORATORY SCIENCES (TRANSFER BY AGREEMENT)**	**LABORATORY SCIENCES (NON-TRANSFER)**
CHM 105 General, Organic, and Biochemistry (3-3-4) Prerequisites: RDG 032 and MAT 101, C or better Credit: 1 Unit This course is a study of the fundamental principles of chemistry, including atomic and molecular structure, common substances and reactions, introduction to organic chemistry, and biochemistry. *This course is designed for transfer to University of South Carolina Upstate, SC State University, and Claflin University.* SDE Activity Code: 3240 **CHM 210 College Chemistry I (3-3-4)** Prerequisite: RWR 032 and MAT 102 or equivalent Credit: 1 Unit This is the first course in a sequence which includes the following topics: atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions, and equilibria. SDE Activity Code: 3237	**CHM 212 Organic Chemistry II (3-3-4)** Prerequisite: CHM 211 with a grade of "C" or better Credit: 1 Unit This course is a continuation of basic organic chemistry. Topics include nomenclature, structure and properties, reaction mechanisms of basic organic chemistry, biochemistry, and spectroscopy. SDE Activity Code: 4231 **BIO 126 Career Options for Health Professionals (2-3-3)** Prerequisites: ENG 032 and RDG 032 or RWR 032, C or better Credit: 1 Unit This course is designed for students interested in a healthcare-related career. Students will study how social determinates of health contribute to health inequities and assess research evidence presented in health science. Skills that promote academic and clinical success are emphasized. *This course is designed for transfer to the Medical University of South Carolina under a specialized agreement for the Bachelors Degree in Healthcare Studies.*	**BIO 117 Basic Anatomy and Physiology I (3-3-4)** Prerequisites: RDG 032, C or better Credit: 1 Unit This is the first in a sequence of courses, including basic integrated study of the structure and function of the human body. Levels of human body organization up to all eleven organ systems are studied within the completion of the sequence. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 9212 **BIO 118 Basic Anatomy and Physiology II (3-3-4)** Prerequisites: BIO 117, C or better Credit: 1 Unit This is the second in a sequence of two courses, including basic integrated study of the structure and function of the human body. Levels of human body organization up to all eleven organ systems are studied within the completion of the sequence. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 9216

CHM 211 Organic Chemistry I (3-3-4) Prerequisite: MAT 102 and CHM 111 with a grade of "C" or better Credit: 1 Unit This is the first in a sequence of courses that includes nomenclature, structure and properties, and reaction mechanisms of basic organic chemistry. SDE Activity Code: 4230		

OCtech – Early College Social Studies Flow Chart

South Carolina requires high school students to take one unit of US History, ½ unit of Economics, ½ unit of government and one unit of another Social Studies.

US History

World History

US Government

Economics

Dual Credit Options: Must meet Course Prerequisites.

*HIS 201
American History to 1877

*HIS 101
Western Civilization to 1689

*PSC 201
American Government

*ECO 210
Macroeconomics

*HIS 202
American History to 1877 to Present

*HIS 102
Western Civilization Post 1689

*ECO 211
Microeconomics

Social Studies courses have been aligned with college courses. Students are encouraged to take dual enrollment courses if they meet all prerequisites.

ALL OCTECH HISTORY COURSES MAY ALSO BE USED AS A HUMANITIES ELECTIVE. SEE ELECTIVES FLOW CHART.

Social Studies Option

*HIS 115
African American History

* All OCtech courses listed above are three college credits (3-0-3). They each may equal one high school unit with the approval of the student's high school.

Updated 4-13-22

OCtech Early College
Program of Study: Social Studies Courses

Core Courses		
SOCIAL STUDIES	**SOCIAL STUDIES**	**SOCIAL STUDIES**
HIS 101 Western Civilization to 1689 (3-0-3) Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course is a survey of Western Civilization from ancient times to 1689, including the major political, social, economic, and intellectual factors shaping western cultural tradition. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3366 **HIS 102 Western Civilization Post 1689 (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course is a survey of Western Civilization from 1689 to the present, including major political, social, economic, and intellectual factors which shape the modern western world. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3367 **HIS 115 African American History (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course is a study of the history of African-Americans, including African heritage, American history, and significant contributions by individuals and groups. *This course transfers to most public and private universities in SC as an elective.* SDE Activity Code: 3316	**HIS 201 American History: Discovery to 1877 (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course is a survey of U.S. History from discovery to 1877. This course includes political, social, economic, and intellectual developments during this period. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3321 **HIS 202 American History: 1877 to the Present (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course is a survey of U.S. History from 1877 to the present. This course includes political, social, economic, and intellectual developments during this period. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3322 **PSC 201 American Government (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course is a study of national governmental institutions with emphasis on the Constitution, the functions of the executive, legislative and judicial branches, civil liberties, and the role of the electorate. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3331	**ECO 210 Macroeconomics (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course includes the study of the fundamental principles and policies of a modern economy to include markets and prices, national income, accounting cycles, employment theory and fiscal policy, banking and monetary controls, and the government's role in economic decisions and growth. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3357 **ECO 211 Microeconomics (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course includes the study of the behavior of households and firms including supply and demand, elasticity, price/input in different market structures, pricing of resources, regulations, and comparative advantage and trade. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3358

OCtech – Early College Transfer Electives, Computer Science, and Foreign Language Flow Chart

South Carolina requires high school students to take seven units of electives, one unit of foreign language (two units of the same language for university admission) or C.A.T.E., and one unit of Computer Science. University admission also requires that at least one elective be in a college prep area, such as the humanities, fine arts, or social sciences.

Computer Science	Fine Arts	Foreign Language	Humanities	Social Sciences

Suggested Dual Credit Options: Must meet Course Prerequisites.

Computer Science	Fine Arts	Foreign Language	Humanities	Social Sciences
*CPT 170 Microcomputer Applications *CPT 101 Intro to Computers **CPT 114 Computers & Prog. **EGR 130 Engineering Tech App. & Programming (PLTW)	*ART 101 Art History and Appreciation *MUS 105 Music Appreciation	*SPA 101 Elementary Spanish I *SPA 102 Elementary Spanish II (All language courses earn 4.0 college credits)	*PHI 101 Introduction to Philosophy *PHI 110 Ethics *ALL ENGLISH LIT AND *HISTORY COURSES (ENG 201, ENG 202, ENG 205, ENG 206, ENG 207, ENG 208, ENG 209, ENG 236, HIS 101, HIS 102, HIS 201, HIS 202, HIS 115. See English & Social Stud. Charts. REL 101 and REL 102 also transfer to many universities. ALL HUMANITIES COURSES (HSS 101 & 105)	*PSY 201 General Psychology PSY 203 Human Growth and Development *SOC101 Introduction to Sociology PSY 103 Human Relations

Elective courses have been aligned with college courses for dual enrollment. **See also the Career Pathways for C.A.T.E. elective options.**

*All OCtech courses listed above are three college credits (3-0-3) unless otherwise designated. They each may equal one high school unit with the approval of the student's high school. All courses are transferable to all public and most private universities in South Carolina.
**MEETS HIGH SCHOOL GRADUATION REQUIREMENT (CPT 114 and EGR 130 PLTW)

Updated 4-13-22

OCtech Early College
Program of Study: Transfer Electives, Foreign Language, and Computer Science Courses

Core Courses		
ELECTIVES	**ELECTIVES**	**ELECTIVES**
CPT 101 Introduction to Computers (3-0-3) Prerequisite: None Credit: 1 Unit This course covers basic computer history, theory and applications, including word processing, spreadsheets, data bases, and the operating system. SDE Activity Code: 4705 **CPT 114 Computers and Programming (3-0-3)** Prerequisite: None Credit: 1 Unit This course introduces computer concepts and programming. Topics include basic concepts of computer architecture, files, memory, and input/output devices. Programming is done in a modern high-level language. SDE Activity Code: 6721 **CPT 170 Microcomputer Applications (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course introduces microcomputer applications software, including word processing, data bases, spreadsheets, graphs, and their integration. *This course is transferable as an elective to most public 4-year institutions in SC.* SDE Activity Code: 5026 **ART 101 Art History and Apprec. (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This is an introductory course to the history and appreciation of art, including the elements and principles of the visual arts. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education*	**HIS 115 African American History (3-0-3)** Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course is a study of the history of African-Americans, including African heritage, American history, and significant contributions by individuals and groups. *This course transfers to most public and private universities in SC as an elective.* SDE Activity Code: 3316 **MUS 105 Music Appreciation (3-0-3)** Prerequisites: RDG 032 or appropriate placement Credit: 1 Unit This course is an intro to the study of music with a focus on the elements of music and their relationships, the musical characteristics of representative works and composers, common musical forms and genres of various western and non- western historical style periods, and appropriate listening experiences. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3565 **SPA 101 Elementary Spanish I (3-3-4)** Prerequisite: RDG 032 or RWR 032, grade of "C" or better. Credit: 1 Unit This course is a study of the four basic language skills: listening, speaking, reading, and writing, including an introduction to the Spanish culture. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3657	**SPA 102 Elementary Spanish II (3-3-4)** Prerequisites: SPA 101 with a grade of "C" or better Credit: 1 Unit This course continues development of the basic language skills and the study of the Spanish culture. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3358 **PHI 101 Introduction to Philosophy (3-0-3)** Prerequisites: RDG 032 or RWR 032 Credit: 1 Unit This course includes a topical survey of the three main branches of philosophy – Epistemology, Metaphysics, and Ethics – and the contemporary questions related to these fields. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3390 **PHI 110 Ethics (3-0-3)** Prerequisites: RDG 032 or RWR 032 Credit: 1 Unit This course is a study of the moral principles of conduct emphasizing ethical problems and modes of ethical reasoning. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3332

Statewide Articulation Agreement. SDE Activity Code: 3520 **PSY 103 Human Relations (3-0-3)** Prerequisites: RDG 032 or ENG 032 or RWR 032 Credit: 1 Unit This course deals with the personality factors as they relate to problems of adjustment. An understanding of personality dynamics and psychological bases of behavior, mental health, personality development, and interpersonal relations are covered. Stress is placed upon the importance of applying psychological principles and techniques to everyday life. SDE Activity Code: 3341	**EGR 130 Engineering Tech. Applications & Prog. (2-3-3)** Prerequisites: None Credit: 1 Unit This course covers the development and use of computer programs to solve engineering technology problems. SDE Activity Code: 6602	
ELECTIVES	**ELECTIVES**	**ELECTIVES**
PSY 201 General Psychology (3-0-3) Prerequisites: ENG 032 and RDG 032 or RWR 032 or placement Credit: 1 Unit This course includes the following topics: an introduction to the basic theories and concepts in the science of behavior, scientific method, biological bases for behavior, perception, motivation, learning, memory, development, and potential. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3371 **PSY 203 Human Growth and Development (3-0-3)** Prerequisites: PSY 201 Credit: 1 Unit This course is a chronological study of the physical, cognitive, and emotional factors affecting human growth, development, and potential. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3343	**ENG 201 American Literature I (3-0-3)** Prerequisites: ENG 102 with a grade of "C" or better Credit: 1 Unit This course is a study of American literature from the colonial period to the civil war. *This course is transferable to public 4-year institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3019 **ENG 202 American Literature II (3-0-3)** Prerequisites: ENG 102 with a grade of "C" or better Credit: 1 Unit This course is a study of American literature from the civil war to the present. *This course is transferable to public 4-year institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement*. SDE Activity Code: 3020 **ENG 205 English Literature I 3-0-3 (3-0-3)** Prerequisites: ENG 102 with a grade of "C" or better Credit: 1 Unit This course presents the following topics: the study of English literature	**ENG 207 Literature for Children (3-0-3)** Prerequisites: ENG 102, C or better Credit: 1 Unit This course provides an introduction to children's literature in America through an examination of picture books and novels that depict Americans of various backgrounds and experiences. It focuses on defining quality in children's book writing and illustration, and assessing concerns in the field. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4025 **ENG 208 World Literature I (3-0-3)** Prerequisites: ENG 102, C or better Credit: 1 Unit This course is a study of masterpieces of world literature in translation from the ancient world to the sixteenth century. Works studied are selected from various cultures throughout the world. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3017

SOC 101 Introduction to Sociology (3-0-3) Prerequisites: ENG 032 and RDG 032 or RWR-032 or appropriate placement Credit: 1 Unit This course emphasizes the fundamental concepts and principles of sociology, including culture, socialization, interaction, social groups and stratification, effects of population growth on technology in society, and social institutions. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3347	from the old English period to the romantic period with emphasis on major writers and periods. *This course is transferable to public 4-year institutions as part of the South Carolina Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3037 **ENG 206 English Literature II (3-0-3)** Prerequisites: ENG 102 with a grade of "C" or better Credit: 1 Unit This course presents the following topics: the study of English literature from the romantic period to the present, with emphasis on major writers and periods*. This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3034	**ENG 209 World Literature II (3-0-3)** Prerequisites: ENG 102, C or better Credit: 1 Unit This course is a study of masterpieces of world literature in translation from the seventeenth century to the present. Works studied are selected from various cultures throughout the world. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3018
ELECTIVES	**ELECTIVES**	**ELECTIVES (TRANSFER BY AGREEMENT)**
ENG 236 African American Literature (3-0-3) Prerequisites: ENG 102, C or better Credit: 1 Unit This course is a critical study of African American literature examined from historical, social, and psychological perspectives. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 4032 **HIS 101 Western Civilization to 1689 (3-0-3)** Prerequisites: RDG 032 or RWR 032 with a grade of "C" or better Credit: 1 Unit This course is a survey of Western Civilization from ancient times to 1689, including the major political, social, economic, and intellectual factors shaping western cultural tradition. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation*	**HIS 102 Western Civilization Post 1689 (3-0-3)** Prerequisites: RDG 032 or RWR 032 with a grade of "C" or better Credit: 1 Unit This course is a survey of Western Civilization from 1689 to the present, including major political, social, economic, and intellectual factors which shape the modern western world. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3367 **HIS 201 American History: Discovery to 1877 (3-0-3)** Prerequisites: RDG 032 or RWR 032 with a grade of "C" or better Credit: 1 Unit This course is a survey of U.S. History from discovery to 1877. This course includes political, social, economic, and intellectual developments during	**REL 101 Introduction to Religion (3-0-3)** Prerequisites: RDG 032 or RWR 032 with a grade of "C" or better Credit: 1 Unit This course provides a study of religion - the nature of religious belief and practice. *This course is designed for transfer under special articulation agreement to Claflin University; courses will transfer to SC State University as a humanities credit.* SDE Activity Code: 4301 **REL 102 Introduction to Biblical Study (3-0-3)** Prerequisites: RDG 032 or RWR 032 with a grade of "C" or better Credit: 1 Unit This course is an introduction to the contemporary analysis of the Bible, including its historical background, writing and transmission, its principal persons and events, and its ideas and their significance for the present. *This course is designed for transfer*

Agreement. SDE Activity Code: 3366 **HIS 202 American History: 1877 to the Present (3-0-3)** Prerequisites: RDG 032 or RWR 032 with a grade of "C" or better Credit: 1 Unit This course is a survey of U.S. History from 1877 to the present. This course includes political, social, economic, and intellectual developments during this period. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3322	this period. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 3321	*under special articulation agreement to Claflin University; courses will transfer to SC State University as a humanities credit.* SDE Activity Code: 9366 **HSS 101 Introduction to Humanities (3-0-3)** Prerequisites: none Credit: 1 Unit This course includes an introduction to themes in, critical approaches to, and major contributions in the humanities. SDE Activity Code: 3368 **HSS 105 Technology and Culture (3-0-3)** Prerequisites: none Credit: 1 Unit This course provides a study of the history and impact of technological design and change on cultural values, society, and the individual. SDE Activity Code: 9367

OCtech – Early College STEM C.A.T.E Pathways and Other Elective Options

*South Carolina requires high school students to take seven units of electives, one unit of foreign language (two units of the same language for university admission) or C.A.T.E., and one unit of Computer Science. University admission also requires that at least one elective be in a college prep area, such as the humanities, fine arts, or social sciences. The following Pathways contain courses designed for OCtech Associate of Applied Science degrees and Associate of Arts/Sciences degrees. They may also enable students to earn OCtech certificates in high demand employment areas. (**Additional courses beyond those designated for Early College Pathways may be found in the OCtech catalog.**)*

Suggested STEM Dual Credit Pathways and Career Academies* with Transfer Options

- Health Sciences and Nursing*
- Engineering University Transfer*
- Electronics Engineering Technology*
- Advanced Manufacturing and Mechatronics*
- Computer Technology: Programming
- Computer Technology: Network Security/Cybersecurity
- MUSC Transfer*
- Engineering Design Technology*
- Criminal Justice and Forensics
- Business Administration: Accounting
- Agriculture: Soils and Sustainable Crops and Agriculture Education
- Business Administration: Enterprise Management
- Early Childhood and Associate of Arts Education

All OCtech Pathways contain courses that may equal one high school unit with the approval of the student's high school. Elective courses have been aligned with college courses. Students are encouraged to take dual enrollment courses if they meet all prerequisites.

Suggested STEM Dual Credit STEM Pathways with Non-Transfer Options

- Automotive Technology
- Machine Tool Technology
- Transportation and Logistics
- Welding Technology

Students Must Meet All Course Prerequisites

Updated 4-13-22

OCtech Early College

Programs of Study Courses: Health Sciences and Nursing, Engineering Technology, Engineering Transfer, Advanced Manufacturing, STEM Educator, Computer Programming/Coding, Network Security/Cybersecurity, Early Childhood and Education, Automotive Technology, Welding, Transportation and Logistics, Paralegal, Mechatronics/Advanced Manufacturing, and Machine Tool Technology

Pathway: Health Science and Nursing

Pathway courses should be combined with general education and other elective courses to earn college credentials.

AHS 104 Medical Vocabulary/ Anatomy (2.5-1.5-3)
Prerequisite: RDG 032 or RWR 032 with a grade of "C" or better.
Credit: 1 Unit
This course introduces the fundamental principles of medical terminology and includes a survey of human anatomy and physiology. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 5542

AHS 106 Cardiopulmonary Resuscitation (1-0-1)
Prerequisites: None
Credit: 0.25 Units
This course is a study of the principles of cardiopulmonary resuscitation. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 5543

AHS 140 Therapeutics for Health (2.5-1.5-3)
Prerequisites: None
Credit: 1 Unit
This course provides a basic study of therapeutic agents applicable to health science and nursing professions. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8524

AHS 119 Health Careers (3-0-3)
Prerequisites: RDG 031 or appropriate placement
Credit: 1 Unit
This course provides information on various health careers to include job responsibility and personal and education requirements as well as an overview of the health care system with its unique nomenclature and delivery of care. *This course does not transfer to any public 4-year*

AHS 163 Long Term Care (2-9-5)
Prerequisites: None
Credit: 1 Unit
This course emphasizes the basic skills needed to care for residents in the long-term care setting. Students will apply practical use of these skills through clinical experiences in a long-term care facility. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 5544

AHS 141 Phlebotomy for the Health Care Provider (1-6-3)
Prerequisites: RDG 032 or RWR 032 with a grade of "C" or better
Credit: 1 Unit
This course contains the essential theory, skills, and special procedures required to meet the venipuncture needs in hospitals, clinics, and other health care settings.
SDE Activity Code: 8532

AHS 144 Phlebotomy Practicum (0-15-5)
Prerequisite: ENG 032,
RDG 032 or RWR 032 with a grade of "C" or better.
Credit: 1 Unit
This course provides a detailed study and practice of phlebotomy procedures utilized
in hospital settings, clinical facilities, and physician's offices.
SDE Activity Code: 8529

AHS 145 Electrocardiography (1-3-2)
Prerequisites: None
Credit: 1 Unit
This course provides the basic skills necessary to perform ECG's in a hospital, physician's office or other health care setting. The student will be able to perform and interpret basic ECG's.
SDE Activity Code: 8547

Planning Notes:

Students planning to enter competitive Health Science and Nursing programs at OCtech may earn extra application points for a Certified Nursing Assistant (CNA) or an Emergency Medical Technician (EMT) certificate.

Students planning to enter OCtech's Associate of Applied Science Degree in Nursing should plan their general education and other elective courses for later Bachelor of Science in Nursing degree completion. OCtech maintains specialized RN to BSN agreements with the following colleges and universities:
USC Upstate
Clemson University
Claflin University
Charleston Southern University

Students planning to enter OCtech's Associate of Applied Science Degree in Radiologic Technology, Respiratory Care, or Physical Therapist Assistant should plan their general education and other elective courses for later Bachelor of Science degree completion. OCtech maintains specialized agreements with the following colleges and universities:
Newberry College
Coastal Carolina University
Columbia College
Medical University of South Carolina

Students planning to transfer upon high school graduation to a professional health science or nursing program at a 4-year college or university may use these courses as electives within the Associate of Science degree and the high school diploma.

OCtech's Health Science and Nursing degree programs are nationally accredited, as is the Licensed Practical Nursing Diploma program.

While students may complete EMS courses, they must be 18 years of age to sit for the EMT Certification Exam.

institutions.
SDE Activity Code: 5510

AHS 127 Basic Patient Care (2.5-1.5-3.0)
Prerequisites: RWR-032, MAT-032
Credit: 1 Unit
This course is a study of procedures for patient care for health professionals including vital signs, patient transport, patient care relations and patient communications.
SDE Activity Code: 8581

AHS 149 Health Care Skills I (3-0-3)
Prerequisites: None
Credit: 1 Unit
This course includes basic skills needed to care for residents in a long term care setting. *This course does not transfer to any public 4-year institutions.*

AHS 155 Special Topics in Health Care
(3-0-3)
Prerequisites: None
Credit: 1 Unit
This course emphasizes specialized job-related education in health care. *This course does not transfer to any public 4-year institutions.*

AHS 210 Nutrition for Healthcare Professionals
(3-0-3)
Prerequisites: ENG 032, ENG 155, or RWR-032
Credit: 1 Unit
This course focuses on aspects of both normal and clinical nutrition, including topics related to the essential principles of nutrition, assessment of nutritional status, weight control, life-cycle nutrition, health promotion/maintenance, disease prevention, and diet therapy. Emphasis is placed on the role of the health care professional and the complexities of nutrition. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.*
SDE Activity Code: SDE Paperwork

AHS 166 ECG in a Clinical Setting (0-6-2)
Prerequisites: None
Credit: 0.5 Unit
This course provides an opportunity to perform ECG's in a hospital, physician's office or other health care setting.
SDE Activity Code: 8525

EMS 110 Emergency Medical Technician (1-12-5)
Prerequisites: RWR-032
Corequisites: EMS-212
Credit: 1 Unit
This is an introductory course to the health care system and the function, role, and responsibility of emergency medical providers within the system. Emphasis is placed on legal and ethical practices and stress management. A team approach is emphasized in the study of the initial assessment and management of illness and injury. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: SDE Paperwork Required

EMS 111 Advanced Medical Care (1-12-5)
Prerequisites: AHS 104, EMS 110, EMS-212
Corequisite: EMS 219
Credit: 1 Unit
This course is a study of the concepts and skills related to the general patient assessment, initial management of life-threatening emergencies, airway management, pulmonary ventilation and oxygen administration, the pathophysiology of shock and treatment modalities for the shock syndrome, and pharmacological actions of groups of drugs and fluids. Emphasis is placed on administration of medication and fluid therapy, basic vehicle extrication, and rescue.
This course does not transfer to any public 4-year institutions.
SDE Activity Code: SDE Paperwork Required

Required	**EMS 212 EMS Field Internship (0-6-2)** Prerequisites: RWR-032 Corequisites: EMS 110 Credit: 1 Unit This course reviews knowledge and builds on skills gained in Basic Emergency Medical Care and includes pathophysiology of shock and shock management, IV initiation and fluid therapy, airway management, and advanced patient assessment. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: SDE Paperwork Required **EMS 219 Advanced EMS Field Internship II (0-6-2)** Prerequisites: AHS 104, EMS-110 EMS-212 Corequisites: EMS-111 Credit: 1 Unit This course builds in the knowledge and skills of advanced emergency medical practice in the pre-hospital environment. Focus is on situations involving complex patient problems including trauma, surgical and medical emergencies and the treatment modalities. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: SDE Paperwork Required	
Pathway: Engineering Transfer		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
EGR 130 Engineering Technology Applications and Programming (2-3-3) Prerequisites: None Credit: 1 Unit This course covers the development and use of computer programs to solve engineering technology problems. *This course is a Project Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Principles of Engineering course.* SDE Activity Code: 6602	**EET 140 Digital Electronics (3-0-3)** Prerequisites: None Credit: 1 Unit This course is a study of the fundamentals of logic theory and circuits. Circuits are analyzed mathematically and tested using simulation software and electronic instruments. *This course is a Project Lead the Way (PLTW) course. It transfers to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course.* SDE Activity Code: 6603	**Planning Notes:** **Students planning to enter one of the South Carolina College of Engineering programs (USC, SC State, Clemson, and the Citadel) should plan their general education and other elective courses for later Bachelor of Science in Engineering degree completion.** **The SC Commission on Higher Education recommends that students planning to transfer to one of the SC Colleges of Engineering should take the following general education courses:** MAT 140, CHM 110, CHM 111, PHY 201 & 202, or PHY 221 & 222 Physics 221 & 222 are calculus-based courses, as required in Engineering programs. Physics 201 & 202 are

EGT 152 Fundamentals of CAD (2-3-3) Prerequisites: None Credit: 1 Unit This course includes a related series of problems and exercises designed to give the student an understanding of the computer graphics station as a drafting tool. *This course is a Project Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course.* SDE Activity Code: 6178		algebra-based courses, but they on the CHE Universal Transfer Agreement list. **Students should consult with their advisors to review current requirements at the specific school of engineering they plan to attend.** **Students planning to transfer upon high school graduation to a professional engineering program at a 4-year college or university may use these courses as electives within the Associate of Science degree and the high school diploma.** **OCtech's Electronics Engineering Technology programs are nationally accredited by ABET.** **Students interested in the Engineering Transfer option should consult the Generic Engineering University Transfer Meta-Major in the OCtech College Catalog, found under the Associate of Arts and Sciences section.** **OCtech maintains specialized agreements for engineering transfer to SC State University's School of Engineering. Students should consult the Engineering SC State University Transfer Meta-Major in the OCtech College Catalog, found under the Engineering and Advanced Manufacturing section.**
Pathway: Engineering Technology		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
EGR 130 Engineering Technology Applications and Programming (2-3-3) Prerequisites: None Credit: 1 Unit This course covers the development and use of computer programs to solve engineering technology problems. *This course is a Project Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Principles of Engineering course.* SDE Activity Code: 6602	**CIM 131 Computer Integrated Manufacturing (3-0-3)** Prerequisites: None Credit: 1 Unit This course is a comprehensive overview of the total manufacturing operation. *This course is designed for transfer to SC State University under a specialized agreement with the School of Engineering. This course is the equivalent of the PLTW Computer Integrated Manufacturing course.* SDE Activity Code: 6239	**Planning Notes:** **Students planning to enter one of the South Carolina College of Engineering programs should plan their general education and other elective courses for later Bachelor of Science in Engineering degree completion.** **Students should consult with their advisors to review current requirements at SC State University for the specific School of Engineering program which they plan to enter.** **Students planning to transfer to a SC State professional engineering program may use these courses as**

EGT 152 Fundamentals of CAD (2-3-3)
Prerequisites: None
Credit: 1 Unit
This course includes a related series of problems and exercises designed to give the student an understanding of the computer graphics station as a drafting tool.
This course is a Project Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course.
SDE Activity Code: 6178

EET 140 Digital Electronics (3-0-3)
Prerequisites: None
Credit: 1 Unit
This course is a study of the fundamentals of logic theory and circuits. Circuits are analyzed mathematically and tested using simulation software and electronic instruments. *This course is a Project Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course.*
SDE Activity Code: 6603

EET 141 Electronic Circuits (3-3-4)
Prerequisite: EET 113
Credit: 1 Unit
This course is a study of electronic circuits using discrete and integrated devices, including analysis, construction, testing, and troubleshooting.
SDE Activity Code: SDE Paperwork Required

EET 227 Electrical Machinery (2-3-3)
Prerequisites: EET 113, EET 141, EET 145 or equivalent
Credit: 1 Unit
This course is a study of AC and DC electromechanical energy conversion devices,
theory, applications, and control. Devices are tested and verified using electrical instruments.

EGR 112 Engineering Programming (2-3-3)
Prerequisites: None
Credit: 1 Unit
This course covers interactive computing and the basic concepts of programming. *This course is designed for transfer to SC State University under a specialized agreement with the School of Engineering.*
SDE Activity Code: SDE Paperwork Required

EET 143 Digital Electronics Laboratory (0-3-1)
Prerequisites: EET 140
Credit: 1 Unit
This course provides an in-depth study of advanced digital electronics which include memory elements, flip-flops, synchronous and asynchronous counters, programmable logic arrays, read-only memories, eproms, and analog/digital conversion. The course also provides an introduction to microprocessors. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: SDE Paperwork Required

EET 145 Digital Circuits (3-3-4)
Prerequisites: EET 113, C or better
Credit: 1 Unit
This course is a study of number systems, basic logic gates, Boolean algebra, logic optimization, flip-flops, counters, and registers. Circuits are modeled, constructed and tested. *This course is designed for transfer to SC State University under a specialized agreement with the School of Engineering.*
SDE Activity Code: 6117

EIT 110 Principles of Instrumentation (2-3-3)
Prerequisites: EET 113, EET 141, PHY 201, C or better
Credit: 1 Unit
This course is a study of various types of instruments and gauges used by industrial facilities. Basic principles of pneumatic, electronic, and mechanically operated devices are

electives within the Associate of Science degree and the high school diploma. Students may also choose to complete an Associate of Applied Science degree in Electronics Engineering Technology (Electronic Instrumentation major or Engineering Technology Programming major) or the Associate of Applied Science in Engineering Design Technology.

Electronics Engineering Technology (EET) students may substitute EET 140 and EET 141 for EET 145.

OCtech's Electronics Engineering Technology programs are nationally accredited by ABET.

SDE Activity Code: SDE Paperwork Required **EET 235 Programmable Controllers (2-3-3)** Prerequisites: None Credit: 1 Unit This course is a study of relay logic, ladder diagrams, theory of operation, and applications. Loading ladder diagrams, debugging, and trouble-shooting techniques are applied to programmable controllers SDE Activity Code: 8027 **EIT 211 Introduction to Electronic Instrumentation I (3-6-5)** Prerequisite: EIT 110 Credit: 1 Unit This course is a study of single loop process control. It presents the fundamentals of temperature, flow, pressure, level, and analytical measurements and their applications in industrial process systems. Calibration and maintenance of electrical and pneumatic instruments will be stressed. SDE Activity Code: SDE Paperwork Required **EIT 212 Introduction to Electronic Instrumentation II (3-6-5)** Prerequisite: EIT 211 Credit: 1 Unit This course is a study of more complex control schemes. The fundamentals of ratio, cascade and feed forward control will be presented using pneumatic, electronic, and computer-controlled devices. SDE Activity Code: SDE Paperwork Required **EIT 220 Control Principles (2-3-3)** Prerequisite: EIT 211 Credit: 1 Unit This course is a study of the static and dynamic conditions of process control loops. Step-analysis method of finding time constants and frequency response analysis will be presented. SDE Activity Code: SDE Paperwork Required	covered. *This course is designed for transfer to SC State University under a specialized agreement with the School of Engineering.* SDE Activity Code: SDE Paperwork Required **EET 113 Electrical Circuits I (3-3-4)** Prerequisites: None Credit: 1 Unit This course is a study of direct and alternating currents, covering resistance and impedance in series, parallel, and series-parallel circuits using Ohm's law, Kirchhoff's laws and basic circuit theorems. Circuits are analyzed using mathematics and verified using electrical instruments. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8037	

EGR 108 Engineering Ethics (3-0-3) Prerequisites: None Credit: 1 Unit Topics include the professional, ethical, and social responsibilities of the engineer and technologist, the impact of ethics and knowledge of contemporary professional, societal and global issues (including respect for diversity) in the field of engineering and engineering technology. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8056 **EGR 194 Statics and Strength of Materials (3-3-4)** Prerequisite: MAT 175 Credit: 1 Unit This course covers external and internal forces in structures and/or machines, including conditions of equilibrium, systems of force, moments of inertia and friction. It also covers the stress/strain relationships in materials. SDE Activity Code: SDE Paperwork Required		

Pathway: Engineering Design Technology		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
EGR 130 Engineering Technology Applications and Programming (2-3-3) Prerequisites: None Credit: 1 Unit This course covers the development and use of computer programs to solve engineering technology problems. *This course is a Project Lead the Way (PLTW) course. It transfers to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Principles of Engineering course.* SDE Activity Code: 6602 **EGT 110 Engineering Graphics I (3-3-4**) Prerequisites: MAT 031, MAT 032, MAT 101, MAT 102, MAT 110, MAT	**CIM 131 Computer Integrated Manufacturing (3-0-3)** Prerequisites: None Credit: 1 Unit This course is a comprehensive overview of the total manufacturing operation. *This course is designed for transfer to SC State University under a specialized agreement with the School of Engineering. This course is the equivalent of the PLTW Computer Integrated Manufacturing course.* SDE Activity Code: 6239 **EGT 172 Electronic Drafting (2-0-2)** Prerequisites: None Credit: 1 Unit This course provides familiarization with a system to create electronic schematics and wiring diagrams.	**<u>Planning Notes:</u>** **Students planning to enter one of the South Carolina College of Engineering programs should plan their general education and other elective courses for later Bachelor of Science in Engineering degree completion.** **Students should consult with their advisors to review current requirements at SC State University for the specific School of Engineering program which they plan to enter.** **Students planning to transfer to a SC State professional engineering program may use these courses as electives within the Associate of Science degree and the high school diploma. Students may also choose to complete an Associate of Applied**

120, MAT 130, MAT 140, MAT 170 OR MAT 178 Credit: 1 Unit This is an introductory course in engineering graphics science, which includes beginning drawing techniques and development of skills to produce basic technical drawings. SDE Activity Code: 8038 **EGT 115 Engineering Graphics II (3-3-4)** Prerequisites: None Credit: 1 Unit This course in engineering graphics science includes additional drawing techniques for industrial applications. SDE Activity Code: 8444 **EGT 151 Introduction to CAD (2-3-3)** Prerequisites: None Credit: 1 Unit This course includes instruction in operating a computer-aided drafting system. The student will interact with a CAD station to produce technical drawings. SDE Activity Code: 6172 **EGT 152 Fundamentals of CAD (2-3-3)** Prerequisites: None Credit: 1 Unit This course includes a related series of problems and exercises designed to give the student an understanding of the computer graphics station as a drafting tool. *This course is a Project Lead the Way (PLTW) course. It transfers to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course.* SDE Activity Code: 6178 **AET 101 Building Systems (2-3-3)** Prerequisites: None Credit: 1 Unit This course will enable the student to understand the basics of parametric building information, modeling fundamentals and create residential architectural drawing sets. *This course is a Project Lead the Way (PLTW) course. It transfers to the state's Colleges of Engineering under*	SDE Activity Code: SDE Paperwork Required **EGT 220 Structural and Piping Applications (2-6-4)** Prerequisites: None Credit: 1 Unit This is an advanced drawing course on structural steel and process piping applications SDE Activity Code: SDE Paperwork Required **EGT 251 Principles of CAD (2-3-3)** Prerequisites: None Credit: 1 Unit This course includes the additional use of CAD software for production of technical drawings and related documentation. SDE Activity Code: SDE Paperwork Required **EGT 252 Advanced CAD (2-3-3)** Prerequisites: None Credit: 1 Unit This course covers advanced concepts of CAD software and applications. SDE Activity Code: 8020 **EGT 259 Advanced Architectural CAD (2-3-3)** Prerequisites: None Credit: 1 Unit This course will enable the student to understand the basics of Parametric Building Information Modeling Fundamentals and create Commercial Architectural drawing sets. SDE Activity Code: SDE Paperwork Required **EGT 265 CAD/CAM Applications (2-3-3)** Prerequisites: None Credit: 1 Unit This course includes applications using CAD/CAM routines. SDE Activity Code: 8034	**Science degree in Engineering Design Technology.**

specialized agreement. This course is the equivalent of the PLTW Civil Engineering course. SDE Activity Code: 6691		
Pathway: Mechatronics/Advanced Manufacturing		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
AMT 105 Robotics and Automated Control I **(2-3-3)** Prerequisites: None Credit: 1 Unit This course includes assembling, testing, and repairing equipment used in automation. Concentration is on connecting, testing, and evaluating automated controls and systems. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6137 **AMT 205 Robotics and Automated Control II** **(2-2-3)** Prerequisites: None Credit: 1 Unit This course covers installation, testing, troubleshooting, and repairing of automated systems. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8044 **CIM 131 Computer Integrated Manufacturing** **(3-0-3)** Prerequisites: None Credit: 1 Unit This course is a comprehensive overview of the total manufacturing operation. *This course is designed for transfer to SC State University under a specialized agreement with the School of Engineering. This course is a PLTW course.* SDE Activity Code: 6239 **EET 140 Digital Electronics** **(3-0-3)** Prerequisites: None Credit: 1 Unit This course is a study of the fundamentals of logic theory and circuits. Circuits are analyzed mathematically and tested using simulation software and electronic instruments. *This course is a Project*	**EGT 152 Fundamentals of CAD** **(2-3-3)** Prerequisites: None Credit: 1 Unit This course includes a related series of problems and exercises designed to give the student an understanding of the computer graphics station as a drafting tool. *This course is a Project Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course.* SDE Activity Code: 6178 **EGR 130 Engineering Technology Applications and Programming** **(2-3-3)** Prerequisites: None Credit: 1 Unit This course covers the development and use of computer programs to solve engineering technology problems. *This course is a Project Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Principles of Engineering course.* SDE Activity Code: 6050 **IMT 131 Hydraulics and Pneumatics** **(3-3-4)** Prerequisites: None Credit: 1 Unit This course covers the basic technology and principles of hydraulics and pneumatics. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 5245 **IMT 170 Statistical Process Control** **(2-3-3)** Prerequisites: None Credit: 1 Unit This course is a study of the concepts	**EET 113 Electrical Circuits I** **(3-3-4)** Prerequisites: None Credit: 1 Unit This course is a study of direct and alternating currents, covering resistance and impedance in series, parallel, and series-parallel circuits using Ohm's law, Kirchhoff's laws and basic circuit theorems. Circuits are analyzed using mathematics and verified using electrical instruments. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8037 **IMT 210 Basic Industrial Skills I** **(2-3-3)** Prerequisites: None Credit: 1 Unit This course is designed to give students an introduction to basic safety, construction math, and hand tools as related to industrial applications. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6246 **IMT 211 Basic Industrial Skills II** **(2-3-3)** Prerequisites: None Credit: 1 Unit This course is designed to give students an introduction to power tools, blueprints, and rigging. Students will learn basic communication and employability skills as related to industrial applications. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6247 **<u>Planning Notes:</u>** **Students planning to enter an OCtech Associate of Applied Science degree in Mechatronics Technology should plan their general education and other elective courses for later**

Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course. SDE Activity Code: 6603 **EEM 235 Power Systems (2-3-3)** Prerequisite: EEM 116 or EEM 118 Credit: 1 Unit This course is a study of the design, operation, and installation of power distribution applications. Load analysis, rate and power economics are covered. SDE Activity Code: SDE Paperwork Required **EEM 252 Programmable Controller Applications (2-3-3)** Prerequisite: EEM 251. Corequisite: EEM 145 Credit: 1 Unit This course covers the principles of operation and application of programmable controller theories and operation procedures. Topics such as inter-facing, data manipulation, and report generation are covered. Programmable controller projects are constructed, operated, and tested. SDE Activity Code: 6612	and charts used in quality control. SDE Activity Code: 8276 **EEM 145 Control Circuits (2-3-3)** Prerequisite: EEM 113 or EEM 116 or EEM 118 Credit: 1 Unit This course covers the principles and applications of component circuits and methods of motor control. SDE Activity Code: 6614 **EEM 215 DC/AC Machines (2-3-3)** Prerequisite: EEM 113 or EEM 116 or EEM 118 Credit: 1 Unit This course is a study of applications, operations, and construction of DC and AC machines. SDE Activity Code: 6608	**Bachelor of Science degree completion.** **Industry certification tests are available for students to earn industry-recognized credentials. Students may earn Manufacturing Skill Standards Council (MSSC) and National Center for Construction Education and Research (NCCER) industry credentials.**

Pathway: Education Transfer		
Pathway courses should be combined with general education and other elective courses to earn college credentials. Students should pursue the Mid-Level Education Bachelor of Science Transfer Model under the OCtech Associate of Arts Program.		
EDU 230 Schools in Communities (3-3-4) Prerequisites: ENG 032, RDG 032 or appropriate placement Credit: 1 Unit This course provides students with a basic understanding of the social, political, and historical aspects of diverse educational institutions in American culture with an emphasis on families, schools, and communities. *This course is designed for transfer to SC State University, USC Columbia, and Claflin University under specialized agreements with*	**ECD 270 Foundation in Early Childhood Education (3-0-3)** Prerequisites: None Credit: 1 Unit This course is the foundation of early childhood education. Emphasis is on the roles, programs, history, and current trends in early childhood education. The course includes service learning hours in Preschool and K-Primary schools. SDE Activity Code: 8819 **EDU 201 Classroom Inquiry with Technology (3-0-3)**	**<u>Planning Notes:</u>** **Students planning to enter an OCtech Education Transfer program should plan their general education and other elective courses for later Bachelor of Science degree completion. See OCtech catalog for a specific transfer model.** **Students should consult with their advisors to review current requirements for the specific university program which they plan to enter.**

the Schools of Education. SDE Activity Code: 6813 **EDU 241 Learners and Diversity (3-3-4)** Prerequisites: MAT 032, RDG 032 or appropriate placement Credit: 1 Unit This course is a study of lifespan development and learning with an emphasis on individual and group diversity. The students are required to participate in a field experience. *This course is designed for transfer to SC State University, USC Columbia, and Claflin University under specialized agreements with the Schools of Education.* SDE Activity Code: 6814	Prerequisites: CPT 101 or CPT 170 Credit: 1 Unit This course explores teaching as a data driven, reflective practice. The students will use research tools to understand teaching and learning with a classroom context and reflect on the relationship among and between technology, theory, student learning, and instructional practices. *This course is designed for transfer to SC State University, USC Columbia, and Claflin University under specialized agreements with the Schools of Education.* SDE Activity Code: 6818	

Pathway: Criminal Justice/Forensics		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
CRJ 101 Introduction to Criminal Justice (3-0-3) Prerequisites: ENG 032, RDG 032 or appropriate placement Credit: 1 Unit This course includes an overview of the functions and responsibilities of agencies involved in the administration of justice to include police organizations, court systems, correctional systems, and juvenile justice agencies. *This course may transfer to SC State University, USC Upstate, and the Citadel under a specialized articulation agreement.* SDE Activity Code: 6510 **CRJ 102 Introduction to Security (3-0-3)** Prerequisites: MAT 032, RDG 032 or appropriate placement Credit: 1 Unit This course includes an introduction to the philosophy and application of security. The protection of personnel, facilities, and other assets, as well as administrative, legal, and technical problems of loss prevention and control will be analyzed. *This course*	**CRJ 202 Criminalistics (3-0-3)** Prerequisites: CRJ 101, LEG 231, CRJ 230 Credit: 1 Unit This course covers an introduction to investigative techniques which stress the examination of questioned documents, fingerprint techniques, polygraph examinations, firearms identification, pathology, toxicology, ballistics, and clandestine operations. *This course may transfer to SC State University, USC Upstate, and the Citadel under a specialized articulation agreement.* SDE Activity Code: 6551 **CRJ 224 Police Community Relations (3-0-3)** Prerequisites: RDG 032, ENG 032, appropriate placement Credit: 1 Unit This course is a study of the importance of two-way communication be-tween the criminal justice system and the community to foster a working relationship to control crime. A	**CRJ 115 Criminal Law I (3-3-3)** Prerequisites: None Credit: 1 Unit This course covers the development of criminal law in America. The basic elements of specific criminal offenses, criminal defenses, and various legal principles upon which criminal law is established are reviewed. SDE Activity Code: 6523 **<u>Planning Notes:</u>** **Students planning to enter the OCtech Associate of Applied Science degree in Criminal Justice program should plan their general education and other elective courses for later Bachelor of Science degree completion. See OCtech catalog for specific transfer models to the Citadel, SC State, and USC Upstate.** **Students should consult with their advisors to review current requirements for the specific university program which they plan to enter.**

may transfer to SC State University, USC Upstate, and the Citadel under a specialized articulation agreement. SDE Activity Code: 6530 **CRJ 110 Police Patrol** **(3-0-3)** Prerequisites: None Credit: 1 Unit This course provides an understanding of the duties, extent of authority, and responsibilities of the uniformed patrolman. Special emphasis is placed on patrol function-line activities including traffic control and investigation, community relations, vice control, tactical units, civil disturbances, and preventative patrol. *This course may transfer to SC State University, USC Upstate, and the Citadel under a specialized articulation agreement.* SDE Activity Code: 6535	variety of topics is studied, including citizen involvement in crime prevention and police officer interpersonal relations. *This course may transfer to SC State University, USC Upstate, and the Citadel under a specialized articulation agreement.* SDE Activity Code: 6540 **CRJ 238 Industrial and Retail Security** **(3-0-3)** Prerequisites: MAT 032, RDG 032 or appropriate placement Credit: 1 Unit This course is a study of the proper methods of reducing losses caused by shoplifting, employee theft, and industrial espionage. The proper use of security hardware such as alarm systems, CCTV, and fencing are also studied in the course. *This course may transfer to SC State University, USC Upstate, and the Citadel under a specialized articulation agreement.* SDE Activity Code: 6531	**CRJ 101 Introduction to Criminal Justice and CRJ 202 Criminalistics are also required in the OCtech Forensics Certificate.** **CRJ 101 Introduction to Criminal Justice, CRJ 102 Introduction to Security, CRJ 224 Police Community Relations, and CRJ 238 Industrial and Retail Security are also required in the OCtech Security Certificate.**

Pathway: Soils and Sustainable Crops (Agriculture)		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
ACC 101 Accounting Principles I **(3-0-3)** Prerequisites: ENG 032, RDG 032 or appropriate placement Credit: 1 Unit This course introduces basic accounting procedures for analyzing, recording and summarizing financial transactions; adjusting and closing the financial records at the end of the accounting cycle; and preparing financial statements. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 6730 **AGR 201 Introduction to Sustainable Agriculture** **(3-0-3)** Prerequisites: None Credit: 1 Unit This course provides an evaluation of the main goals of sustainable agriculture to include environmental health, economic profitability, and	**AGR 203 Introduction to Animal Science** **(3-3-4)** Prerequisites: None Credit: 1 Unit This course covers a survey of animal industries and their roles and importance to man and society from past to present. Lab will examine the basic principles in the handling of livestock and techniques of farm animal production. *This course is designed for transfer to Clemson University under a specialized articulation agreement.* SDE Activity Code: SDE Paperwork Required **AGR 204 Introduction to Plant Sciences** **(3-0-3)** Prerequisites: None Credit: 1 Unit This course will present the fundamentals of plant sciences, including agronomic and horticultural	**Planning Notes:** **Students planning to enter the OCtech Associate of Science degree with concentrations in either Soils and Sustainable Crops or Agriculture Education should plan their general education and other elective courses for later Bachelor of Science degree completion at Clemson University. See OCtech catalog for specific transfer models. The Dean of Arts and Sciences serves as a specialized advisor for agriculture transfer to Clemson University.**

social and economic equity. It will evaluate management and technological approaches and policies that influence agricultural practices. *This course is designed for transfer to Clemson University under a specialized articulation agreement.* SDE Activity Code: 6821 **AGR 202 Soils** **(3-3-4)** Prerequisites: None Credit: 1 Unit This course introduces land resources, soil formation, classification and mineralogy, and focuses on basic chemical and physical properties of soil. Soil microorganisms, plant nutrients, and fertilization are discussed along with applications of soil properties in relation to plant growth. *This course is designed for transfer to Clemson University under a specialized articulation agreement.* SDE Activity Code: SDE Paperwork Required **AGR 206 Basic Farm Maintenance** **(3-3-4)** Prerequisites: None Credit: 1 Unit This course is a study of practical techniques for basic maintenance and repair in an agricultural environment. Students will learn applications and uses of hand tools, basic metal work and machinery maintenance. *This course is designed for transfer to Clemson University under a specialized articulation agreement.* SDE Activity Code: SDE Paperwork Required	crops of the major agricultural areas of the world. Emphasis will be given to crops of the Southeastern Region of the U.S. *This course is designed for transfer to Clemson University under a specialized articulation agreement.* SDE Activity Code: 8420 **AGR 205 Integrated Pest Management** **(3-0-3)** Prerequisites: None Credit: 1 Unit Students will study major pests (weeds, insects, and disease) of the major South Carolina crops. Theory and practices of integrated pest management will be explored and compared to conventional pest management strategies. *This course is designed for transfer to Clemson University under a specialized articulation agreement.* SDE Activity Code: SDE Paperwork Required **AGR 211 Applied Agriculture Calculations** **(3-0-3)** Prerequisites: None Credit: 1 Unit This course is a study of basic mathematical applications in crop and livestock production, agribusiness and financial management. Mastery of these concepts will assist students in understanding the importance of such applications in the agricultural industry. *This course does not transfer to any public 4-year institutions, but is included in the Sustainable Agriculture Certificate and the Associate Degree in Applied Science General Technology Agribusiness program.* SDE Activity Code: 6823	

Pathway: Computer Programming/Coding		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
CPT 104 Introduction to Information Technology **(3-0-3)**	**CPT 236** Introduction to Java Programming 3-0-3 Prerequisite: CPT 167	**Planning Notes:** **Students planning to enter an OCtech Associate of Applied Science**

Prerequisites: None
Credit: 1 Unit
This course is a study of basic computer components and peripherals, basic computer functions, i/o concepts, storage concepts, data communications, distributed processing, and programming language concepts. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: SDE Paperwork Required

CPT 114 Computers and Programming (3-0-3)
Prerequisites: CPT 167 with a "C" or better.
Credit: 1 Unit
This course introduces computer concepts and programming. Topics include basic concepts of computer architecture, files, memory, and input/output devices. Programming is done in a modern high-level language.
SDE Activity Code: 6721

CPT 167 Introduction to Programming Logic (3-0-3)
Prerequisites: RDG 032 or appropriate placement
Credit: 1 Unit
This course introduces foundation concepts in structured programming. Problem solving and algorithm development through pseudocode and flowcharting is emphasized. Solutions are developed using the basic control structures of sequence, decision, and iteration. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6768

CPT 170 Microcomputer Applications (3-0-3)
Prerequisites: COL 107 or keyboarding experience
Credit: 1 Unit
This course introduces microcomputer applications software, including word processing, data bases, spreadsheets, graphs, and their integration. *This course is transferable to public 4-year*

Credit: 1 Unit
This course is an introduction to Java programming. Topics will cover Java syntax and classes for use in the development of Java applications and applets.
SDE Activity Code: 5373

IST 226 Internet Programming (3-0-3)
Prerequisites: None
Credit: 1 Unit
This course is a study of how to design and program pages and applications on the World Wide Web using tools such as HTML, JAVA and VRML. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8765

IST 235 Handheld Computer Programming (3-0-3)
Prerequisites: None
Credit: 1 Unit
This course is a survey of the techniques of rapid application development for handheld devices. Topics include setup of development environment, creation and deployment of programs, and design strategies to overcome memory and interface limitations. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8763

CPT 200 Database Design I (3-0-3)
Prerequisite: CPT 104 with a grade of "C" or better.
Credit: 1 Unit
This course introduces the concepts of entities, attributes, and relationships to create data models that represent the "ideal database system" by generating ER Diagrams, Business rules, and Normalization. Prerequisite:
SDE Activity Code: SDE Paperwork Required

IST 166 Network Fundamentals (3-0-3)
Prerequisite: CPT 101 or CPT 104 with a "C" or better
Credit: 1 Unit
This course is a study of local area networking concepts through discussions on connectivity,

degree in Computer Technology: Programming should plan their general education and other elective courses for later Bachelor of Science degree completion.

Industry certification tests are available for students to earn industry-recognized credentials. Both the Associate of Applied Science in Computer Technology: Programming and a Database and Programming Certificate (Oracle) are offered.

institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement. SDE Activity Code: 5026	communications and other networking fundamentals. The course is designed to prepare the student to be successful in completing industry network fundamental certification exams. SDE Activity Code: 6759	
Pathway: Network Security/Cybersecurity		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
CPT 104 Introduction to Information Technology (3-0-3) Prerequisites: None Credit: 1 Unit This course is a study of basic computer components and peripherals, basic computer functions, i/o concepts, storage concepts, data communications, distributed processing, and programming language concepts. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: SDE Paperwork Required **CPT 170 Microcomputer Applications (3-0-3)** Prerequisites: COL 107 or keyboarding experience Credit: 1 Unit This course introduces microcomputer applications software, including word processing, data bases, spreadsheets, graphs, and their integration. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 5026 **CPT 114 Computers and Programming (3-0-3)** Prerequisite: CPT 167 with a "C" or better. Credit: 1 Unit This course introduces computer concepts and programming. Topics include basic concepts of computer architecture, files, memory, and input/output devices. Programming is done in a modern high-level language. SDE Activity Code: 6721	**IST 115 Human Aspects in Cybersecurity (3-0-3)** Prerequisite: CPT 104 or CPT 101. Credit: 1 Unit This course studies the human aspect of cybersecurity and the motivation behind cybercrimes. Topics include ethics, laws, policies, and psychology as it applies to cybersecurity. SDE Activity Code: SDE Paperwork Required **IST 166** Network Fundamentals 3-0-3 Prerequisite: CPT 101 or CPT 104 with a "C" or better. Credit: 1 Unit This course is a study of local area networking concepts through discussions on connectivity, communications and other networking fundamentals. The course is designed to prepare the student to be successful in completing industry network fundamental certification exams. SDE Activity Code: 6759 **CPT 167 Introduction to Programming Logic (3-0-3)** Prerequisites: RDG 032 or appropriate placement Credit: 1 Unit This course introduces foundation concepts in structured programming. Problem solving and algorithm development through pseudocode and flowcharting is emphasized. Solutions are developed using the basic control structures of sequence, decision, and iteration. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6768	**Planning Notes:** **Students planning to enter an OCtech Associate of Applied Science degree in Computer Technology: Network Security and Information Assurance should plan their general education and other elective courses for later Bachelor of Science degree completion.** **Industry certification tests are available for students to earn industry-recognized credentials. The Associate of Applied Science degree in Computer Technology: Network Security and Information Assurance is offered, as well as certificates in Internetworking, Network Engineering, and Network Specialist.**

Pathway: Early Childhood and Education		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
ECD 101 Introduction to Early Childhood **(3-0-3)** Prerequisites: None Credit: 1 Unit This course includes an overview of the history, theories, and curriculum models of early education. Emphasis is on current trends/issues, with a review of state/national regulations. Characteristics of quality programs and professional teachers are explored in the course. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 5708 **ECD 102 Growth & Development I (2.5-1.5-3)** Prerequisites: ENG 032 and RDG 032 or RWR 032, C or better Credit: 1 Unit This course is an extensive study of philosophies and theories of growth and development of infants/toddlers. Focus is on "total" development of the child, with emphasis on physical, social, emotional, cognitive, and nutritional areas. Developmental tasks and appropriate activities are explored in the course. Special admission requirements. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 5709 **ECD 105 Guidance - Classroom Management (2.5-1.5-3)** Prerequisites: ENG 032 and RDG 032 or RWR 032, C or better Credit: 1 Unit This course is an overview of developmentally appropriate effective guidance and classroom management techniques for the teacher of young children. A positive proactive approach is stressed in the course. Special admission requirements. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8813	**ECD 131 Language Arts** **(3-0-3)** Prerequisites: ENG 032, RDG 032 Credit: 1 Unit This course is a study of methods and materials in age-appropriate language experiences. Opportunities are provided to develop listening, speaking, pre- reading, and pre-writing skills through planning, implementation and evaluation of media, methods, techniques, and equipment. Methods of selection, evaluation, and presentation of children's literature are included. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8814 **ECD 135 Health, Safety, and Nutrition** **(3-0-3)** Prerequisite: ENG 032 and RDG 032 or RWR 032 with a grade of "C" or better. Credit: 1 Unit This course covers a review of the health/safety practices recommended for child care and includes information on common diseases and health problems. Certification preparation is provided in pediatric safety, CPR, and first aid. Guidelines and information on nutrition and developmentally-appropriate activities are also studied in the course. SDE Activity Code: 8811 **ECD 203 Growth and Development II (2.5-1.5-3)** Co-requisite: ECD 102 Credit: 1 Unit This course is an in-depth study of pre-school children growing and developing in today's world. Focus is on "total" development of the child with emphasis on physical, social, emotional, cognitive, and nutritional areas of development. Developmental tasks and appropriate	**<u>Planning Notes:</u>** **Students planning to enter an OCtech Associate of Applied Science degree in Early Childhood Education should plan their general education and other elective courses for later Bachelor of Arts degree completion.** **The Early Care and Education program at OCtech is accredited by the National Association for the Education of Young Children (NAEYC). The program also offers an ECD Diploma option.**

	activities are explored in the course. SDE Activity Code: 6812	

Pathway: Automotive Technology		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
AUT 111 Brakes (or AUT-112) (1-6-3) Prerequisites: None Credit: 1 Unit This course is a study of the fundamentals of hydraulics and brake components in their application to automotive brake systems. *This course does not transfer to any public 4-year institutions.* AUT-112 SDE Activity Code: 6362 AUT-111 SDE Activity Code: Paperwork Required **AUT 159 Tools, Equipment and Reference Manuals (2-3-3)** Prerequisites: None Credit: 1 Unit This course is a study of the proper selection, care, and use of tools and equipment, including proper use of service and reference manuals and guides. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6034 **AUT 124 Steering, Suspension, and Alignment (2-6-4)** Prerequisites: None Credit: 1 Unit This course is the study of the fundamentals of steering, suspension and alignment and includes inspection, diagnostics, maintenance and repair of systems. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8334	**AUT 131 Electrical Systems (1-6-3)** Prerequisites: None Credit: 1 Unit This course is a study of the individual systems and components that when combined form the entire automobile electrical system. The course includes starting and charging systems, ignition, engine, chassis, and accessory systems as well as instruction in the proper use of electrical schematics. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8322 **AUT 161 Introduction to Automotive Maintenance (1-0-1)** Credit: 0.25 Units Prerequisites: None This course is an introduction into automotive maintenance. Topics will include basic tool usage, shop safety, fluid service, tires, basic electrical and automotive systems theory. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8331 **AUT 112 Brakes (1-6-4)** Prerequisites: None Credit: 1 Unit This course covers hydro-boost and vacuum power brakes, as well as master cylinders and caliper rebuilding. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 5026	**AUT 132 Automotive Electricity (2-6-4)** Prerequisites: None Credit: 1 Unit This course is a study of electricity as used in automotive applications. This course includes DC and AC principles and their various uses in the automobile. The relationship between Ohm's Law and actual automotive circuits is demonstrated. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6363 **Planning Notes:** **Industry certification tests are available for students to earn industry-recognized credentials. The Associate of Applied Science degree in Automotive Technology is nationally accredited by the National Automotive Technicians Education Foundation (NATEF). The program also offers an Undercar Specialist certificate, as well as a Basic Diesel certificate.**

Pathway: Welding

Pathway courses should be combined with general education and other elective courses to earn college credentials.

WLD 101 Cutting Processes (0.5-1.5-1.0)
Prerequisites: None
Credit: 1 Unit
This course covers the fundamentals of cutting processes commonly used in the welding industry. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6353

WLD 111 Arc Welding I (2-6-4)
Prerequisites: None
Credit: 1 Unit
This course covers the safety equipment and skills used in the shielded metal arc welding process. Fillet welds are made to visual criteria in several positions. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6351

WLD 106 Gas and Arc Welding (2-6-4)
Prerequisites: None
Credit: 1 Unit
This course covers the basic principles and practices of oxyacetylene welding, cutting and electric arc welding. Emphasis is placed on practice in fundamental position welding and safety procedures. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6350

WLD 103 Print Reading I (0.5-1.5-1.0)
Prerequisites: None
Credit: 1 Unit
This is a basic course which includes the fundamentals of print reading, the meaning of lines, views, dimensions, notes, specifications, and structural shapes. Welding symbols and assembly drawings as used in fabrication work are also covered. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6365

IMT 210 Basic Industrial Skills I (2-3-3)
Prerequisites: None
Credit: 1 Unit
This course is designed to give students an introduction to basic safety, construction math, and hand tools as related to industrial applications. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6246

IMT 211 Basic Industrial Skills II (2-3-3)
Prerequisites: None
Credit: 1 Unit
This course is designed to give students an introduction to power tools, blueprints, and rigging. Students will learn basic communication and employability skills as related to industrial applications. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6247

WLD 115 Arc Welding III (2-6-4)
Prerequisite: WLD 111
Credit: 1 Unit
This course covers the techniques used in preparation for structural plate testing according to appropriate standards. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6367

WLD 118 Gas Metal Arc Welding Ferrous I 2-6-4
Prerequisites: None
Credit: 1 Unit
This course covers the equipment set-up and fundamental techniques for gas metal arc welding on ferrous materials.
This course does not transfer to any public 4-year institutions.
SDE Activity Code: 8346

WLD 120 Flux Cored Arc Welding I (2-6-4)
Prerequisite: WLD 118
Credit: 1 Unit
This course covers the equipment set-up and fundamental techniques for flux cored arc welding. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8344

Planning Notes:

Industry certification tests are available for students to earn industry-recognized credentials. Students may earn the National Center for Construction Education and Research (NCCER) industry credentials.

OCtech certificates and degree are available:

- **Basic Welding Certificate**
- **Intermediate Welding Certificate**
- **Associate in Applied Science in General Technology: Welding Technology**

The OCtech Welding program is accredited by the American Welding Society (AWS).

Pathway: Transportation and Logistics (Online) and Truck Driving Preparation

Pathway courses should be combined with general education and other elective courses to earn college credentials.

LOG 110 Introduction to Logistics (3-0-3)
Prerequisites: None
Credit: 1 Unit
This course is a basic overview of logistics management. Logistics involves the flow of goods and services involving such aspects as warehousing, materials handling, inventory control, and transportation from the raw material to the end user. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: SDE Paperwork Required

LOG 111 Warehouse and Distribution Center Operations (2-3-3)
Prerequisites: None
Credit: 1 Unit
This course examines warehouse distribution centers and the information systems that are used. The student will understand the factors that determine the location of facilities, safety requirements and practices, concepts of warehouse design, material flow, inventory management and packaging. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: SDE Paperwork Required

LOG 112 Automated Storage and Retrieval Systems (2-3-3)
Prerequisites: LOG 110
Credit: 1 Unit
This course examines Automated Storage and Retrieval Systems. The student will study the benefits of AS/RS and AS/RS design, be able to recognize the various AS/RS systems, and apply the learned knowledge to troubleshoot and maintain these systems. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: SDE Paperwork Required

CPT 170 Microcomputer Applications (3-0-3)

LOG 113 Material Handling Technology (2-3-3)
Prerequisites: LOG 110
Credit: 1 Unit
This course is a study of the various material handling technologies that are found in warehouses and distribution centers. The course will examine manual and automated equipment. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: SDE Paperwork Required

LOG 114 GPS and GIS Applications in TDL (3-0-3)
Prerequisite: LOG 110
Credit: 1 Unit
This course examines GPS (Global Positioning System)/GIS (Geographic Information System) and its role in TDL (Transportation, Distribution, and Logistics). The student will understand how GPS/GIS systems work, how they are used in TDL, and how to maintain and troubleshoot these systems.
SDE Activity Code: SDE Paperwork Required

LOG 235 Traffic Management (3-0-3)
Prerequisite: LOG 110
Credit: 1 Unit
This course examines the flow of various traffic activities within an organization's supply chain. The student will be able to compare transportation service providers, understand the issues facing transportation managers, and describe the impact of decisions on total supply chain costs.
SDE Activity Code: 8338

MGT 101 Principles of Management (3-0-3)
Prerequisites: ENG 032 and RDG 032 or RWR 032 with grade of "C" or better.
Credit: 1 Unit
This course is a study of management theories, emphasizing the management

Truck Driving Preparation (CDL)

TDR 101 Introduction to Truck Driving Training (5-0-5)
Prerequisites: None
Credit: 1 Unit
This course is an introduction to truck driving training. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8341

TDR 105 The Business of Truck Driving (3-0-3)
Prerequisites: None
Credit: 1 Unit
This course is an introduction to the business aspects of truck driving, as well as personal life skills, health effects, and customer service. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8363

Planning Notes:

Industry certification tests are available for students to earn industry-recognized credentials. Students may earn the Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) certification or Certified Logistics Technician (CLT) certification.

These courses may be used in the Associate in Applied Science in Business Administration options:

- **Associate in Applied Science in Business Administration: Accounting**
- **Associate in Applied Science in Business Administration: Enterprise Management**

Prerequisites: COL 107 or keyboarding experience Credit: 1 Unit This course introduces microcomputer applications software, including word processing, data bases, spreadsheets, graphs, and their integration. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 5026	functions of planning, decision making, organizing, leading, and controlling. SDE Activity Code: 6740 **MGT 206 Management Spreadsheets (3-0-3)** Prerequisite: CPT 170 Credit: 1 Unit This course emphasizes the use of spreadsheet software to support managerial decision-making through the analysis of data. SDE Activity Code: SDE Paperwork Required	

Pathway: Business Administration Enterprise Management		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
BAF 101 Personal Finance (3-0-3) Prerequisites: RDG 032 or RWR 032 and MAT 031, C or better Credit: 1 Unit This course includes the practical applications of concepts and techniques used in used in managing personal finances. Major areas of study include financial planning, budgeting, credit use, housing, insurance, and retirement planning. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 5280 **BUS 101 Introduction to Business (3-0-3)** Prerequisites: RDG 032 or RWR 032 and MAT 032, C or better Credit: 1 Unit This course is a study of nature of business activity in relation to the economic society, including how a business is owned, organized, managed, and controlled. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6700 **CPT 170 Microcomputer Applications (3-0-3)** Prerequisites: RDG 032 or RWR 032, C or better. Credit: 1 Unit	**LEG 122 Business Law II (3-0-3)** Prerequisites: RDG 032 or RWR 032, C or better Credit: 1 Unit This course an in-depth study of the uniform commercial code with special emphasis on the essentials of Article 3, commercial paper, and Article 9, secured transactions. Business partnerships and corporations are studied. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8881 **LOG 110 Introduction to Logistics (3-0-3)** Prerequisites: None Credit: 1 Unit This course is a basic overview of logistics management. Logistics involves the flow of goods and services involving such aspects as warehousing, materials handling, inventory control, and transportation from the raw material to the end user. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: SDE Paperwork Required ***ACC 101* Accounting Principles I (3-0-3)** Prerequisite: RDG 032 or RWR 032 and MAT 032 with a grade of "C" or	satisfaction, and repeat sales. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8741 **<u>Planning Notes:</u>** **Students planning to enter an OCtech Associate of Applied Science degree Business Administration: Enterprise Management should plan their general education and other elective courses for later Bachelor of Arts or Science degree completion.** **The Associate of Applied Science degree in Business Administration: Enterprise Management is nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).** **The Business Administration program has a specialized articulation agreement with SC State University, Claflin University, and the Citadel.**

This course introduces microcomputer applications software, including word processing, data bases, spreadsheets, graphs, and their integration. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 5026 **MGT 101 Principles of Management (3-0-3)** Prerequisites: RDG 032 or RWR 032, C or better Credit: 1 Unit This course is a study of management theories, emphasizing the management functions of planning, decision making, organizing, leading, and controlling. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6740 ***MGT-206*** **Management Spreadsheets (3-0-3)** Prerequisite: CPT 170 Credit: 1 Unit This course emphasizes the use of spreadsheet software to support managerial decision-making through the analysis of data SDE Activity Code: SDE Paperwork Required	better. Credit: 1 Unit This course introduces basic accounting procedures for analyzing, recording and summarizing financial transactions; adjusting and closing the financial records at the end of the accounting cycle; and preparing financial statements. SDE Activity Code: 6730 **MKT 101 Marketing (3-0-3)** Prerequisites: ENG 032 and RDG 032 or RWR 032, C or better Credit: 1 Unit This is an introductory course to the field of marketing with a detailed study of the marketing concept and the processes of product development, pricing, promotion, and marketing distribution. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 6710 **MKT 135 Customer Service Techniques (3-0-3)** Prerequisites: ENG 032 and RDG 032 or RWR 032, C or better Credit: 1 Unit This course is a study of the techniques and skills required for providing customer service excellence, including illustrations to turn customer relations into high standards of customer service,	
Pathway: Business Administration Accounting		
Pathway courses should be combined with general education and other elective courses to earn college credentials.		
ACC 101 Accounting Principles I (3-0-3) Prerequisites: RDG 032 or RWR 032 and MAT 032, C or better Credit: 1 Unit This introduces basic accounting procedures for analyzing, recording, and summarizing financial transaction; adjusting and closing the financial records at the end of the accounting cycle; and preparing financial statements. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.* SDE Activity Code: 6730 **ACC 102 Accounting Principles II (3-0-3)**	**LEG 122 Business Law II (3-0-3)** Prerequisites: RDG 032 or RWR 032, C or better Credit: 1 Unit This course an in-depth study of the uniform commercial code with special emphasis on the essentials of Article 3, commercial paper, and Article 9, secured transactions. Business partnerships and corporations are studied. *This course does not transfer to any public 4-year institutions.* SDE Activity Code: 8881 **MGT 101 Principles of Management (3-0-3)** Prerequisites: ENG 032 and RDG 032, or RWR 032, C or better	**Planning Notes:** **Students planning to enter an OCtech Associate of Applied Science degree Business Administration: Accounting should plan their general education and other elective courses for later Bachelor of Arts or Science degree completion.** **The Associate of Applied Science degree in Business Administration: Accounting is nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).** **The Business Administration program has a specialized articulation agreement with SC State**

Prerequisites: ACC 101
Credit: 1 Unit
This emphasizes managerial accounting theory and procedures in basic accounting, cost accounting, budgeting, cost-volume analysis, and financial statement analysis. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6731

BUS 101 Introduction to Business (3-0-3)
Prerequisites: RDG 032 or RWR 032 and MAT 032, C or better
Credit: 1 Unit
This course is a study of nature of business activity in relation to the economic society, including how a business is owned, organized, managed, and controlled. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6700

CPT 170 Microcomputer Applications (3-0-3)
Prerequisites: RDG 032 or RWR 032, C or better.
Credit: 1 Unit
This course introduces microcomputer applications software, including word processing, data bases, spreadsheets, graphs, and their integration. *This course is transferable to public 4-year institutions as part of the SC Commission on Higher Education Statewide Articulation Agreement.*
SDE Activity Code: 5026

Credit: 1 Unit
This course is a study of management theories, emphasizing the management functions of planning, decision making, organizing, leading, and controlling. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6740

***MGT-206* Management Spreadsheets (3-0-3)**
Prerequisite: CPT 170
Credit: 1 Unit
This course emphasizes the use of spreadsheet software to support managerial decision-making through the analysis of data
SDE Activity Code: SDE Paperwork Required

BAF 101 Personal Finance (3-0-3)
Prerequisites: RDG 032 or RWR 032 and MAT 031, C or better
Credit: 1 Unit
This course includes the practical applications of concepts and techniques used in used in managing personal finances. Major areas of study include financial planning, budgeting, credit use, housing, insurance, and retirement planning. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6730

MKT 135 Customer Service Techniques (3-0-3)
Prerequisites: ENG 032 and RDG 032 or RWR 032, C or better
Credit: 1 Unit
This course is a study of the techniques and skills required for providing customer service excellence, including illustrations to turn customer relations into high standards of customer service, satisfaction, and repeat sales. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8741

University, Claflin University, and the Citadel.

Pathway: Machine Tool Technology

Pathway courses should be combined with general education and other elective courses to earn college credentials.

CIM 131 Computer Integrated Manufacturing
(3-0-3)
Prerequisites: None
Credit: 1 Unit
This course is a comprehensive overview of the total manufacturing operation. *This course is designed for transfer to SC State University under a specialized agreement with the School of Engineering. This course is a PLTW course.*
SDE Activity Code: 6239

EGT 152 Fundamentals of CAD
(2-3-3)
Prerequisites: None
Credit: 1 Unit
This course includes a related series of problems and exercises designed to give the student an understanding of the computer graphics station as a drafting tool. *This course is a Project Lead the Way (PLTW) course. It transfer to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course.*
SDE Activity Code: 6178

MTT 105 Machine Tool Math Applications
(3-0-3)
Prerequisites: None
Credit: 1 Unit
This course is a study of shop math relevant to the machine tool trade. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6236

MTT 120 Machine Tool Print Reading
(2-3-3)
Prerequisites: None
Credit: 1 Unit
This course is designed to develop the basic skills and terminology required for visualization and interpretation of common prints used in machine tool trades. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6046

MTT 123 Machine Tool Theory I
(1-6-3)
Prerequisites: MTT 111
Credit: 1 Unit
This course covers the principles involved in machining parts using machine tools, including lathes, mills, drill presses, jig bores, and the attachments for each. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 6242

MTT 249 Introduction to CAM
(2-3-3)
Prerequisites: None
Credit: 1 Unit
This course covers the basic commands necessary to create a single part program for CNC machines using a graphics programming software. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: SDE Paperwork Required

MTT 111 Machine Tool Theory and Practice I
(2-9-5)
Prerequisites: None
Credit: 1 Unit
This course is an introduction to the basic operation of machine shop equipment. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8230

MTT 112 Machine Tool Theory and Practice II
(3-6-5)
Prerequisites: Permission of the Program Coordinator
Credit: 1 Unit
This course is a combination of the basic theory and operation of machine shop equipment. *This course does not transfer to any public 4-year institutions.*
SDE Activity Code: 8231

Planning Notes:
Students planning to enter an OCtech Associate of Applied Science degree in Machine Tool Technology should plan their general education and other elective courses for later Bachelor of Science degree completion.

Other Elective Courses

COL 101 Skills for Life-Long Learning (1-0-1)
Prerequisites: None
Credit: 1 Unit
This course is a study of critical thinking, reading, and writing skills, quantitative reasoning, technology competency, oral communication and career exploration.
SDE Activity Code: 4801100CW

COL 103 College Skills 3-0-3

COL 120 STEM College and Career Readiness 3-0-3
Prerequisites: None
Credit: 1 Unit
This course builds skills and habits of mind for college and work success. Students will accomplish academic and job tasks using problem-solving and teamwork, apply personal responsibility, use learning strategies, explore STEM careers, and earn a skill award appropriate for entry-level work. *This course is designed for*

IDS 103 Critical Thinking (3-0-3)
Prerequisites: None
Credit: 1 Unit
This course is an introduction to the difference between valid and invalid reasoning. The students will learn the skills necessary both to distinguish the sound from the unsound argument and to improve their own ability to think critically.
SDE Activity Code: 481400CW

Prerequisites: None Credit: 1 Unit This course may include selected topics such as career planning, study skills, stress management, tutoring, group guidance, and other subjects to facilitate student success. *This course is a Project Lead the Way (PLTW) course. It transfers to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Digital Electronics course.* 481000CW SDE Activity Code:	*transfer to SC State University under a specialized agreement with the School of Engineering. This course is the equivalent of the PLTW Computer Integrated Manufacturing course.* SDE Activity Code: 4818 **IDS 112 Employability Skills for Careers 1-0-1** Prerequisites: None Credit: 1 Unit This course develops employability skills including resume writing, interviewing, presentation delivery and soft skills. *This course is a Project Lead the Way (PLTW) course. It transfers to the state's Colleges of Engineering under specialized agreement. This course is the equivalent of the PLTW Civil Engineering course.* SDE Activity Code: SDE Paperwork Required	

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Appendix

Appendix A - College Admission Requirements

Appendix B - OCtech Placement Guide

Appendix C - List of 86 courses that transfer among public colleges and universities in South Carolina

College Admission Requirements

College admissions may have additional requirements beyond the high school graduation requirements. Students who plan to attend a 4 year public or private institution should refer to the college admissions website for a list of course requirements. In addition to course requirements, colleges look at high school GPA and class rank as well as College Entrance Examination scores such as the SAT or ACT.

Since the fall of 1988, public higher education institutions in South Carolina have required that applicants for admissions must have completed certain high school courses before being admitted. The required courses are as follows:

English	4 Units	All four units must have strong reading (including works of fiction and non fiction), writing, communicating, and researching components. It is strongly recommended that students take two units that are literature based, including American, British, and World Literature.
Mathematics	4 Units	These units must include Algebra 1, Algebra II and Geometry. A fourth higher level mathematics unit should be taken before or during the senior year
Laboratory Science	3 Units	Two units must be taken in two different fields of physical, earth or life sciences and selected among biology, chemistry, physics or earth science. The third unit may be from the same field as one of the first two units (biology, chemistry, physics, or earth science) or from any laboratory science for which biology, chemistry, physics and/or earth science is a prerequisite. Courses in general or introductory science for which one of these four units is not a prerequisite will not meet with requirement. It's strongly recommended that students desiring to pursue careers in science, mathematics, engineering or technology take one course in all four fields: biology, chemistry, physics, and earth science.
Foreign Langugage	2 Units	Two units of the same foreign language with heavy emphasis on language acquisition.
Social Science	3 Units	One unit of U.S. History, a half unit of Economics, and a half unit of Government are required. World History or Geography is strongly recommended.
Electives:		Two units must be taken as electives. A college preparatory course in Computer Science (i.e. one involving significant programming content, not simply keyboarding or using applications) is strongly recommended for this elective. Other acceptable electives include college preparatory courses in English; fine arts; foreign languages; social science; humanities; mathematics; physical education; and laboratory science (courses for which biology, chemistry or earth science is a prerequisite)
Physical Education or ROTC	1 Unit	One unit of physical education to include one semester of personal fitness and another semester in lifetime fitness. Exemption applies to students enrolled in Junior ROTC and for students exempted because of physical disability or for religious reasons.
Fine Arts	1 Unit	One unit in appreciation of, history of, or performance in one of the fine arts. This unit should be selected from among media/digital arts, dance, music, theater, or visual and spatial arts

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OCTECH ACADEMIC COURSE PLACEMENT CRITERIA

These scores are effective as of 01/14/19 *(Rev. Date: 05.26.20)*

	COURSE PLACEMENT	NEXTGEN - Accuplacer	ACCUPLACER	WORKKEYS	PSAT	ACT/SAT	HS GPA Waiver	DECISION ZONE
		Expires After 5 Yrs.	Expires After 5 yrs.	Effective Date 11/17/16 (Expires After 5 yrs.)	Does Not Expire	Does Not Expire	Weighted GPA Used in Calculation	Using Accuplacer NEXT GEN
MATH	031	AR: 200-236	Arithmetic: 20-56					AR: 197-199
	032	AR: 237-249	Arithmetic: 57-112	App Math: 3				AR: 234-236
	Non-Transfer Math							
	101/155	QAS: 237-249	Elementary Algebra: 25-108	App Math: 4+		ACT Math: 17 SAT Math: 480	eligible for waiver	QAS: 234-236
	102/175	QAS: 250-262	College Level Math: 20-49			ACT Math: 18 SAT Math: 515	eligible for waiver	QAS: 247-249
	Transfer Math							
	110/120	QAS: 263-300	College Level Math: >=50		PSAT Math: 530	ACT Math: 20 SAT Math: 515	High School Weighted GPA of 3.0 or higher with C or better in Algebra I or higher.	QAS: 260-262
	130/140	**Instructor Approval**	**Instructor Approval**					**Instructor Approval**
ENGLISH	031		20-40 Sentence Skills					
	RWR 032	Writing: <236	41-60 Sentence Skills	Rdg for Info: 3 & Loc Info: 3 (Must use lower of 2 scores)				Writing: 234-236
	155	Writing: 237-249	61-70 Sentence Skills	Rdg for Info: 4+ & Loc Info: 4+	PSAT Reading & Writing: 480	ACT English: 17 SAT Reading: 24	eligible for waiver	Writing: 234-236
	101	Reading: 250>	>=71 Sentence Skills		PSAT Reading & Writing: 480	ACT English: 18 SAT Reading: 26	High School Weighted GPA of 3.0 or higher with C or better in Algebra I or higher.	Reading: 247-249
READING	031		34-43 Reading					
	RWR 032	Reading: 221-249	44-70 Reading	Rdg for Info: 3 & Loc Info: 3 (Must use lower of 2 scores)				Reading: 218-220
	College Level	Reading: 250>	>=71 Reading	Rdg for Info: 4+ & Loc Info: 4+	PSAT Reading & Writing: 480	ACT Reading: 19 SAT Reading: 26	High School Weighted GPA of 3.0 or higher with C or better in Algebra I or higher.	Reading: 247-249
BIOLOGY 210 (Effective 10/25/17)	High School GPA of 3.0 or higher with successful completion of 2 high school math coursea above the Algebra II level and required English courses and with a high school College Prep, Honors, AP or IB biology course; Placement into ENG 101 and successful completion of a college level laboratory science; or a 4 Year college degree with successful completion of a laboratory science.							

Students with a NextGen Reading score 220 or below, an Accuplacer Reading score of 20-33 or a COMPASS Reading score of 0-35 will be referred to Adult Education for skills upgrade.

High School Weighted GPA of 2.0 or higher with successful completion of 2 high school math courses above the Algebra II level and all 4 English courses. (April - May 2020: COVID-19 Interim measures)

AR - Arithmetic, QAS - Quantative Reasoning, Algebra & Statistics, AAF - Advances Algebra Functions

06.04.20

Statewide Articulation Agreement: 86 Courses that Transfer Among and Between the Public Colleges and Universities in South Carolina

Universally Transferable Course	Credit Hours	Universally Transferable Course	Credit Hours
ACC 101 - Accounting Principles I	3	HIS 102 - Western Civilization Post 1689	3
ACC 102 - Accounting Principles II	3	HIS 201 - Am. History Discovery to 1877	3
ANT 101 - General Anthropology	3	HIS 202 - Am. History 1877 to Pres.	3
ART 101 - History and Appreciation of Art	3	MAT 110 - College Algebra	3
ART 105 - Film as Art	3	MAT 111 - College Trigonometry	3
AST 101 - Solar System Astronomy	4	MAT 120 - Probability and Statistics	3
AST 102 - Stellar Astronomy	4	MAT 122 - Finite College Mathematics	3
BIO 101 - Biological Science I	4	MAT 130 - Elementary Calculus	3
BIO 102 - Biological Science II	4	MAT 140 - Analytical Geo. and Calc. I	4
BIO 210 - Anatomy and Physiology I	4	MAT 141 - Analytical Geo. and Calc. II	4
BIO 211 - Anatomy and Physiology II	4	MAT 240 - Analytical Geo. and Calc. III	4
BIO 225 - Microbiology	4	MAT 242 - Differential Equations	4
CHM 110 - College Chemistry I	4	MUS 105 - Music Appreciation	3
CHM 111 - College Chemistry II	4	PHI 101 - Introduction to Philosophy	3
CHM 112 - College Chemistry II	4	PHI 105 - Introduction to Logic	3
CHM 211 - Organic Chemistry I	4	PHI 106 - Logic II Inductive Reasoning	3
CHM 212 - Organic Chemistry II	4	PHI 110 - Ethics	3
ECO 210 - Macroeconomics	3	PHI 115 - Contemporary Moral Issues	3
ECO 211 - Microeconomics	3	PHY 201 - Physics I	4
ENG 101 - English Composition I	3	PHY 202 - Physics II	4
ENG 102 - English Composition II	3	PHY 221 - University Physics I	4
ENG 201 - American Literature I	3	PHY 222 - University Physics II	4
ENG 202 - American Literature II	3	PHY 223 - University Physics III	4
ENG 203 - American Literature Survey	3	PSC 201 - American Government	3
ENG 205 - English Literature I	3	PSC 215 - State and Local Government	3
ENG 206 - English Literature II	3	PSY 201 - Introduction to Psychology	3
ENG 208 - World Literature I	3	PSY 203 - Human Growth & Development	3
ENG 209 - World Literature II	3	PSY 208 - Human Sexuality	3
ENG 214 - Fiction	3	PSY 212 - Abnormal Psychology	3
ENG 218 - Drama	3	SOC 101 - Introduction to Sociology	3
ENG 222 - Poetry	3	SOC 102 - Marriage and the Family	3
ENG 230 - Women in Literature	3	SOC 205 - Social Problems	3
ENG 236 - African American Lit	3	SOC 206 - Social Psychology	3
ENG 260 - Adv. Tech. Communication	3	SOC 210 - Juvenile Delinquency	3

FRE 101 - Elementary French I	4	SOC 220 - Sociology and the Family	3
FRE 102 - Elementary French II	4	SOC 235 - Thanatology	3
FRE 201 - Intermediate French I	3	SPA 101 - Elementary Spanish I	4
FRE 202 - Intermediate French II	3	SPA 102 - Elementary Spanish II	4
GEO 101 - Intro to Geography	3	SPA 201 - Intermediate Spanish I	3
GEO 102 - World Geography	3	SPA 202 - Intermediate Spanish II	3
GER 101 - Elementary German I	4	SPC 205 - Public Speaking	3
GER 102 - Elementary German II	4	SPC 210 - Oral Interp. of Literature	3
HIS 101 - Western Civilization to 1689	3	THE 101 - Introduction to Theatre	3