

# 24 CAREER PATHWAYS 2019-20

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# CAREER PATHWAYS GATEWAY COMMUNITY & TECHNICAL COLLEGE

Automotive – Diesel – Collision Repair
Building Technology
Logistics/Supply Chain

# Automotive – Diesel – Collision Repair Technology at Gateway Community and Technical College For Simon Kenton High School, Scott High School, and Dixie Heights High School

This pathway prepares individuals to apply technical knowledge and skills in Automotive, Diesel, and Collision Repair leading to Automotive Service Excellence (ASE) Certifications.

# Projected Freshman-Junior Schedule Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course						
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
	Traditional		English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health
9th	Accelerated		Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health
	Traditional		English 2	Geometry	Biology	World Civilizations	Humanities or Art Elective
10th	Accelerated		Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Humanities or Art Elective
	Traditional	Fall: ADX 120/121 Basic Automotive Electricity with Lab  Spring: ADX 260/261 Electrical Systems with Lab	English 3	Algebra 2	Concepts of Science		
11th	Accelerated	Fall: ADX 120/121 Basic Automotive Electricity with Lab  Spring: ADX 260/261 Electrical Systems with Lab	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus	Chemistry		
124	Traditional	Fall: ADX 150/151 Engine Repair with Lab  Spring: ADX 170/171 Climate Control with Lab	English 4 or ENG 100 & 120	CCR Math		US History	
12th	Accelerated	Fall: ADX 150/151 Engine Repair with Lab  Spring: ADX 170/171 Climate Control with Lab	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Calculus AB or Dual Credit Math		AP US History	

Industry Certifications offered: Automotive – Diesel – Collision Repair Technology complete the Automotive Service Excellence (ASE) Student Certification "Automotive Maintenance and Light Repair (MLR)

### Building Technology at Gateway Community and Technical College For Simon Kenton High School, Scott High School, and Dixie Heights High School

This pathway prepares individuals to apply technical knowledge and skills in residential and structural building. Including instruction in technical mathematics, blueprint reading, construction techniques, air conditioning, heating, plumbing, electrical, and applicable codes and standards.

# Projected Freshman-Junior Schedule Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course						
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
	Traditional		English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health
9th	Accelerated		Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health
	Traditional		English 2	Geometry	Biology	World Civilizations	Humanities or Art Elective
10th	Accelerated		Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Humanities or Art Elective
	Traditional	Fall: GCTC ISX 1001 & GCTC EET 154/155 Spring: GCTC CIT 105 & GCTC ACR 100/101	English 3	Algebra 2	Concepts of Science		
11th	Accelerated	Fall: GCTC ISX 1001 & GCTC EET 154/155  Spring: GCTC CIT 105 & GCTC ACR 100/101	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus	Chemistry		
	Traditional	Fall: GCTC PLB 100 & GCTC DUAL CREDIT Spring: GCTC CAR 126/127	English 4 or ENG 100 & 120	CCR Math		US History	
12th	Accelerated	Fall: GCTC PLB  100  & GCTC DUAL CREDIT  Spring: GCTC CAR  126/127	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Calculus AB or Dual Credit Math		AP US History	

Industry Certifications offered: Building Technology has Three Exams Required: OSHA 10, National Center for Construction Education Research (NCCER) – Core Curriculum and one of the following NCCER Level 1: Construction Carpentry, Electrical Technician, HVAC, and/or Plumbing

# Logistics/Supply Chain Pathway at Gateway Community and Technical College For Simon Kenton High School, Scott High School, and Dixie Heights High School

This pathway prepares individuals to apply technical knowledge and skills in Logistics/Supply Chain.

# Projected Freshman-Junior Schedule Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
	Traditional	Digital Literacy	English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health
9th	Accelerated	Digital Literacy	Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health
	Traditional	Introduction to Business with Aviation	English 2	Geometry	Biology	World Civilizations	Humanities or Art Elective
10th	Accelerated	Introduction to Business with Aviation	Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Humanities or Art Elective
	Traditional	Fall: LOM 100 Intro to Logistics Management & LOM 102 Supply Chain Management Spring: LOM 101 Transportation & LOM 210 Lean and Logistics	English 3	Algebra 2	Concepts of Science		
11th	Accelerated	Fall: LOM 100 Intro to Logistics Management & LOM 102 Supply Chain Management Spring: LOM 101 Transportation & LOM 210 Lean and Logistics	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus	Chemistry		
	Traditional	Logistics Internship (CVG, DHL, Atlas Air, & Southern Air)	English 4 or ENG 100 & 120	CCR Math		US History	
12th	Accelerated	Logistics Internship (CVG, DHL, Atlas Air, & Southern Air)	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Calculus AB or Dual Credit Math		AP US History	

Industry Certifications offered: Logistics/Supply Chain complete the Certified Logistics Associate (CLA) and the Certified Logistics Technician (CLT).



# **CAREER PATHWAYS**

BIOMEDICAL SCIENCES
COMPUTER SCIENCES
DESIGN
EDUCATION
ENGINEERING
PRE-NURSING

# Ignite Institute Pathway Alignment

### **Traditional Pathways**

All classes will be taught with the "flavor" of the career pathway scholars are in; teachers will be participating in externships in their specific career pathway areas to bring real-world application back to their classrooms. Scholar Individual Learning Plans (ILP's) should include desire to start college courses in high school. Health and PE will be taught online using Edgenuity (online self-paced learning platform).

### **Associate's Pathways**

All classes will be taught with the "flavor" of the career pathway scholars are in; teachers will be participating in externships in their specific career pathway areas to bring real-world application back to their classrooms. Scholar ILP's should include desire to start college courses in high school. Most scholars pursuing an Associate's will have plans to continue to Bachelor's, Master's, and Doctoral degrees. Health and PE will be taught online using Edgenuity.

### **Transitioning Between Pathways**

The classes in the curriculum guide for each Ignite College are set up to allow determined scholars in the traditional pathway to jump from traditional to Associate's in one year. The primary obstacle for students to overcome is taking an additional math class using Edgenuity or summer school offerings in order to transition into the Associate's pathway. Scholars struggling in the Associate's pathway would also be able to transition to the Traditional pathway if that is what would be best for them.

### **College Classes**

Many pathways include college classes as a part of the sophomore – senior curriculum. In the provided charts the college course abbreviation is listed, but an extended description can be found in the back of this section. If any classes pertain specifically to one career pathway, they will be listed with the appropriate pathway.

### **Ignite Institute - Biomedical Sciences Pathway**

**Associate's in Science Potential** 

Open to Scholars from Dixie Heights, Scott, & Simon Kenton High Schools

The courses are designed to give scholars the requisite skills to pursue a career in the field of biomedical sciences. Scholar work involves the study of human medicine, research processes, and an introduction to bioinformatics. Scholars investigate the human body systems and various health conditions including: heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. Scholars design innovative solutions for the health challenges of the 21st century.

### Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	World Language
Out	Traditional*	Principles of Biomedical Sciences	English 1	Algebra 1	Biology	Government	Spanish 1
9th	Associate's*	Principles of Biomedical Sciences	Accelerated English 1	Accelerated Geometry	Accelerated Biology	AP Government	
	Traditional	Human Body Systems	English 2	Geometry	Chemistry	World Civilizations	Spanish 101/102
10th	Associate's**	Human Body Systems	Accelerated English 2	Accelerated Algebra 2	Biology 114/115 & Chemistry 170/175	World Civilizations 101/102	
	Traditional	Medical Interventions	English 101/102	Algebra 2	History of Diseases	US History	
11th	Associate's**	Medical Interventions	English 101/102	Mathematics MAT 151 /MAT 175	Chemistry 180/185 & Biology 116/117	US History 108/109	Spanish 201/202

<sup>\*</sup>Health and PE will be taken online

<sup>\*\*</sup>Scholars in the Associate's in Science Degree track will also take Communications 181 in 10th grade & Introduction to Computer 105 in 11th grade

Track	Senior - Fall Semester	Senior - Spring Semester		
Traditional	Biomedical Sciences Capstone: Biomedical Innovations Biomedical Sciences Internship Senior Academic Seminar Statistics 205 Choice of at least 1 of the following: Nursing Assistant Skills I NAA 100 Emer. Medical Technician EMS 105 Phlebotomy & Clinical PHB 100 & 155 Art 100	Biomedical Sciences Capstone: Biomedical Innovations Biomedical Sciences Internship Senior Academic Seminar Statistics 205 Choice of at least 1 of the following: Nursing Assistant Skills I NAA 100 Emer. Medical Technician EMS 105 Phlebotomy & Clinical PHB 100 & 155 Music 160		
Associate's	Biomedical Sciences Capstone: Biomedical Innovations Biomedical Sciences Internship Senior Academic Seminar Choice of at least 1 of the following: Psychology 110 Art 100 Anatomy & Physiology 137	Biomedical Sciences Capstone: Biomedical Innovations Biomedical Sciences Internship Senior Academic Seminar Choice of at least 1 of the following: Sociology 101 Music 160 Medical Microbiology 225		

### **Industry Certifications Offered:**

NOCTI Biotechnology, Medicaid Nurse Aide, Emergency Medical Technician, Phlebotomist Certificate

### Ignite Institute - Biomedical Sciences (High-Demand Sector - Healthcare)

### **Diploma + Certification**

- a. NOCTI Biotechnology Builds scholar resume to obtain entry-level medical positions. Median salary \$20,000
- b. Medicaid Nurse Aide Median salary \$28,205
- Emergency Medical Technician Median salary \$34,343
- d. Phlebotomist Certificate Median salary \$30,828

### Associate's in Science Degree

- a. Industry Certification jobs same as above
- b. Gateway has programs/pathways established to transfer to 10 local colleges
  - i. Scholars can choose the degree they want to pursue post-Associate's
  - ii. Scholars can transfer courses to more than just those 10 colleges
- c. Scholars with Associate's in Science can pursue a Bachelor's degree and beyond in their choice of major at a university

### Future careers and salary depend on choice of certification, undergraduate, and graduate studies

Ex. Medicaid Nurse Aide, EMT, Phlebotomist, Lab Tech, Radiologist, Nurse, Nurse Practitioner, Physician, Surgeon, Anesthesiologist, Physical Therapist, Occupational Therapist, Medical Assistant, Dietitian, Dentist, Dental Assistant, Respiratory Therapist, Sonographer, Paramedic, Athletic Trainer, Nutritionist, Biomedical Scientist, Biomedical Engineer

### Career Area College Courses\*

*NAA 100 – Nursing Assistant Skills I.* Provides knowledge and skills for nurse aides to assume the role and responsibility required in a long-term care setting. The focus is communication, infection control, safety, resident/patient rights, and basic nursing skills.

EMS 105 - Emergency Medical Technician. Provides the first level of training in the career structure of Emergency Medical Services. Integrates didactic course material and the lab component necessary for the delivery of entry-level emergency medical care to individuals who are experiencing a disruption in normal body functions due to illness and/or injury and require intervention to prevent morbidity and mortality. Prepares the student to sit for the National Registry EMT examination that is required for Kentucky certification as an EMT. Focuses on basic anatomy and physiology, scene and patient assessment, airway and ventilation, cardiovascular and body systems support, motion limiting devices, wound and fracture management, administration of basic patient medications, extrication, transportation, and patient monitoring as well as medico-legal aspects and ambulance operations. Includes a minimum twenty-four (24) hour clinical observation in the emergency department and/or on a state licensed ambulance service.

PHB 100 - Phlebotomy. Prepares the student as an integral member of the health-care team to collect blood from patients/donors in hospitals, blood banks or clinics for analysis or other medical purposes. Includes standard precautions, record keeping, and therapeutic communication skills.

PHB 155 – Phlebotomy Clinical. This course is designed to build on the knowledge acquired in phlebotomy lecture and lab. In this course, the student will use external institutions for clinical experience to become more proficient in the performance of routine venipuncture and dermal collections. The student will gain the experience needed to handle routine venipuncture complications and the skills necessary to adequately perform the duties of a phlebotomist.

Anatomy & Physiology 137 - The interrelationship of structure and function of each body system will be presented in two semesters. The first semester will include basic chemistry, cell structure, cell physiology, metabolism, tissues, and integumentary, skeletal, muscular, and nervous systems.

Medical Microbiology 225 - The characteristics of microorganisms and their relation to health and disease are studied.

\*See "General Education College Courses" list for description of all other dual credit.

### **Ignite Institute - Computer Science Pathway**

**Associate's in Arts Potential** 

### Open to Scholars from Dixie Heights, Scott, & Simon Kenton High Schools

These courses will empower students to develop computational thinking skills while building confidence in their technological capabilities. Scholars use Python® as a primary tool, while they explore and become inspired by career paths that utilize computing, discover tools that foster creativity and collaboration, and use what they've learned to tackle challenges like app development and simulation. Scholars collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases, as well as creating a game for their friends or an app to serve a real need in the their community.

### Projected Freshman-Junior Schedule

**Denotes Dual-Credit Course OR AP Course** 

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	World Language
	Traditional*	Introduction to Computer Science	English 1	Algebra 1	Biology	Government	
9th	Associate's*	Introduction to Computer Science	Accelerated English 1	Accelerated Geometry	Accelerated Biology	AP Government	Spanish 1
104h	Traditional	Java Programming	English 2	Geometry	Chemistry	World Civilizations	Canadiah 101/102
10th	Associate's**	Elem. Prog. INF 120	Accelerated English 2	Accelerated Algebra 2	Accelerated Chemistry	World Civilizations 101/102	Spanish 101/102
	Traditional	Project-Based Programming	English 101/102	Algebra 2	Living Earth	US History	
11th	Associate's**	Obj. Orient. 1 (Java) CSC 260	English 101/102	MAT 151 /MAT 175	Biology 112/113 & Chem 120/125	US History 108/109	Spanish 201/202

<sup>\*</sup>Health and PE will be taken online

<sup>\*\*</sup>Scholars in the Associate's in Arts Degree track will also take Communications 181 in 10th grade and Introduction to Computer 105 in 11th grade

Track	Senior - Fall Semester	Senior - Spring Semester
Traditional	Computer Science Capstone: Introduction to the Web INF 286 Computer Science Internship Senior Academic Seminar Choice of at least 1 of the following: Computer Hardware & Software CIT 111 Intro. to Networking Concepts CIT 160 Security Fundamentals CIT 180 Art 100	Computer Science Capstone: Introduction to the Web INF 286 Computer Science Internship Senior Academic Seminar Choice of 1 of the following: Computer Hardware & Software CIT 111 Intro. to Networking Concepts CIT 160 Security Fundamentals CIT 180 Music 160
Associate's	Computer Science Capstone: Introduction to the Web INF 286 Computer Science Internship Senior Academic Seminar Psychology 110 Political Science 101 Art 100	Computer Science Capstone: Introduction to the Web INF 286 Computer Science Internship Senior Academic Seminar Sociology 101 Music 160

### **Industry Certifications Offered:**

Certiport Digital Literacy IC3, Microsoft Technology Associate, A+ Prep, Net+, Security+ Prep

### Ignite Institute - Computer Science (High-Demand Sector – Business and IT)

### **Diploma + Certification**

- a. Certiport Digital Literacy IC3 Median salary \$31,000
- b. Microsoft Technology Associate Median salary \$45,000
- c. A+ Prep Median salary \$50,000
- d. Net+ Median salary \$55,000
- e. Security+ Prep Median salary \$55,000

### Associate's in Arts Degree

- a. Industry Certification jobs same as above
- b. Gateway has programs/pathways established to transfer to 10 local colleges
  - i. Scholars can choose the degree they want to pursue post-Associate's
  - ii. Scholars can transfer courses to more than just those 10 colleges
- c. Scholars with Associate's in Arts can pursue a Bachelor's degree and beyond in their choice of major at a university

### Future careers and salary depend on choice of certification, undergraduate, and graduate studies

Ex. Software Developer, Software Test Engineer (STE), Senior Software Engineer, Software Development Manager, Software Architect, Programmer Analyst, Systems Developer, Web Developer, Application Support Analyst, Computer Systems Analyst, Database Administrator, Systems Administrator, Systems Engineer, Network Administrator, Network Engineer, Business Analyst, Program Manager, Information Technology Specialist

### Career Area College Courses\*

*INF 120 – Elementary Programming.* An elementary introduction to programming for those with no previous programming experience. Emphasis on understanding how to read and write basic procedural programs, and on understanding the concepts of algorithm and execution.

*INF 260 – Object Oriented Programming*. Elementary object-oriented programming concepts and practice: types, decisions, loops, methods, arrays, classes; design and problem-solving. An intensive introduction intended for students with programming experience.

*INF 286 – Introduction to Web Development.* An introduction to web design and development for majors in the informatics fields. Web page creation and HTML; site organization and best practices; e-business planning, models and strategies; overview of SML and CSS; introduction to client-side and server-side programming.

CIT 111 – Computer Hardware and Software. Presents a practical view of computer hardware and client operating systems. Covers computer hardware components; troubleshooting, repair, and maintenance; operating system interfaces and management tools; networking components; computer security; and operational procedures

CIT 160 – Intro to Networking Concepts. Introduces technical level concepts of non-vendor specific networking including technologies, media, topologies, devices, management tools, and security. Provides the basics of how to manage, maintain, troubleshoot, install, operate, and configure basic network infrastructure.

CIT 180 – Security Fundamentals. Introduces basic computer and network security concepts and methodologies. Covers principles of security; compliance and operational security; threats and vulnerabilities; network security; application, data, and host security; access control and identity management; and cryptography. Helps to prepare students for the COMPTIA Security+ examination.

\*See "General Education College Courses" list for description of all other dual credit.

### **Ignite Institute - Design Pathway**

**Associate's in Arts Potential** 

### Open to Scholars from Dixie Heights, Scott, & Simon Kenton High Schools

Scholars will be designing media arts experiences and products, including techniques, genres and styles from various and combined media and forms, including moving image, sound, interactive, spatial and/or interactive design. These courses will expose scholars to the materials, processes, and artistic techniques involved in creating video productions. Scholars learn about the operation of cameras, lighting techniques, camera angles, depth of field, composition, storyboarding, sound capture and editing techniques.

### **Projected Freshman-Junior Schedule**

Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	World Language / Art
9th	Traditional*	Introduction to Media Arts	English 1	Algebra 1	Biology	Government	Art 1
eth	Associate's*	Introduction to Media Arts	Accelerated English 1	Accelerated Geometry	Accelerated Biology	AP Government	Art 1
10th	Traditional	Moving Image Animation	English 2	Geometry	Chemistry	World Civilizations	Art 2
	Associate's**	Moving Image Animation	Accelerated English 2	Accelerated Algebra 2	Accelerated Chemistry	World Civ. 101/102	Art 2
11th	Traditional	Interactive Design	English 101/102	Algebra 2	Living Earth	US History	Spanish 101/102
1101	Associate's**	Interactive Design	English 101/102	MAT 151 /MAT 175	Biology 112/113 & Chem 120/125	US History 108/109	55411311 101/102

<sup>\*</sup>Health and PE will be taken online

<sup>\*\*</sup>Scholars in the Associate's in Arts Degree track will also take Communications 181 in 10th grade and Introduction to Computer 105 in 11th grade

Track	Senior - Fall Semester	Senior - Spring Semester		
Traditional	Interactive Media Capstone: Virtual Design Design Internship Senior Academic Seminar Political Science 101	Interactive Media Capstone: Virtual Design Design Internship Senior Academic Seminar Music 160		
Associate's	Interactive Media Capstone: Virtual Design Design Internship Senior Academic Seminar Psychology 110 Political Science 101 Art 100	Interactive Media Capstone: Virtual Design Design Internship Senior Academic Seminar Sociology 101 Music 160		

### **Industry Certifications Offered:**

Adobe Certified Associate: Photoshop, Flash, & Illustrator, Autodesk 3ds Max, Autodesk Maya

### Ignite Institute - Design (High-Demand Sector – Business and IT)

### **Diploma + Certification**

- a. Adobe Certified Associate: Photoshop, Flash, Illustrator Median salary \$38,000
- b. Autodesk 3ds Max Median salary \$50,000
- c. Autodesk Maya Median salary \$45,000

### Associate's in Arts Degree

- a. Industry Certification jobs same as above
- b. Gateway has programs/pathways established to transfer to 10 local colleges
  - i. Scholars can choose the degree they want to pursue post-Associate's
  - ii. Scholars can transfer courses to more than just those 10 colleges
- c. Scholars could take ACA training and become Adobe Certified Expert with a median salary of \$70,000
- d. Scholars with Associate's in Arts can pursue a Bachelor's degree and beyond in their choice of major at a university

### Future careers and salary depend on choice of certification, undergraduate, and graduate studies

Ex. Multimedia Specialist, Graphic Designer, Graphic Artist, Editor, Motion Graphic Designer, Design Specialist, Marketing Coordinator, Content Specialist, Web Specialist, Video Specialist, Technical Communications Specialist, Application Specialist, Social Media Manager, Art Director

See "General Education College Courses" list for description of all other dual credit.

### **Ignite Institute - Education Pathway**

**Associate's in Arts Potential** 

### Open to Scholars from Dixie Heights, Scott, & Simon Kenton High Schools

The Education Pathway is designed to immerse scholars in the field of education by exploring careers in counseling, teaching, administration, and other support roles in the school system. Scholars will engage in activities designed to uncover their abilities and interests in becoming an educational professional. The courses help scholars understand how today's scholars learn. Topics include, but are not limited to: child psychology, lifespan and developmental psychology, multiple intelligences, and Bloom's Taxonomy. The courses also explore teaching techniques and strategies as they apply to 21st century inquiry-based learning.

### Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	World Language
	Traditional*	Education Basics	English 1	Algebra 1	Biology	Government	
9th	Associate's*	Introduction to Education EDU 104 / 305	Accelerated English 1	Accelerated Geometry	Accelerated Biology	AP Government	Spanish 1
	Traditional	Students Today	English 2	Geometry	Chemistry	World Civilizations	
10th	Associate's**	Human Growth & Development / EDU 300	Accelerated English 2	Accelerated Algebra 2	Accelerated Chemistry	World Civ. 101/102	Spanish 101/102
	Traditional	The Art of Teaching	English 101/102	Algebra 2	Living Earth	US History	
11th	Associate's**	EDU 316	English 101/102	MAT 151 /MAT 175	Biology 112/113 & Chem 120/125	US History 108/109	Spanish 201/202

<sup>\*</sup>Health and PE will be taken online

<sup>\*\*</sup>Scholars in the Associate's in Arts Degree track will also take Communications 181 in 10th grade and Introduction to Computer 105 in 11th grade

Track	Senior - Fall Semester Senior - Spring Semester		
Traditional/ Associate's	Education Capstone: Collaborative Clinical Experience Senior Academic Seminar Choice of at least 1 of the following: Psychology 110 Political Science 101 Art 100	Education Capstone: Collaborative Clinical Experience / EDU 294 Senior Academic Seminar Choice of at least 1 of the following: Sociology 101 Music 160	

### **Industry Certifications Offered:**

Kentucky Para educator Assessment, Educator's Rising Microcredentials, Praxis CORE

### Ignite Institute - Education

### **Diploma + Certification**

- a. Kentucky Paraeducator Assessment Median salary \$20,000
- b. Educator's Rising Microcredentials Builds scholar resume to obtain entry-level education positions. Median salary \$20,000
- c. PRAXIS Core Entrance into College of Education

### Associate's in Arts Degree

- a. Industry Certification jobs same as above
- b. Gateway has programs/pathways established to transfer to 10 local colleges
  - i. Scholars can choose the degree they want to pursue post-Associate's
  - ii. Scholars can transfer courses to more than just those 10 colleges
- c. Scholars with Associate's in Arts can pursue a Bachelor's degree and beyond in their choice of major at a university

### Future careers and salary depend on choice of certification, undergraduate, and graduate studies

Ex. Paraeducator, Teacher, Counselor, Principal, Superintendent, Curriculum Developer, Instructional Coach, Human Resources, Coach

### Career Area College Courses\*

EDU 104 – Education Profession Orientation. Designed to explore the education profession and programs of the Teacher Education Department; Teacher Education Handbook; KY New Teacher Standards; various teacher areas; and includes a field experience component.

EDU 305 –Introduction to Education. Examination of teaching as a profession and of schooling as it currently functions in the U.S.; inquiry into contemporary educational theory and practice to assist students in making realistic career decisions.

EDU 300 – Human Growth & Development. Life-span human development; physical, cognitive, social, and personal development especially as these relate to children in school and to the adults who influence them; individual study focusing on student development at specific levels of instruction.

EDU 316 – Racism & Sexism in Educational Institutions. Introduction to the role of educational institutions in perpetuating racism and sexism in the U.S.; theories of prejudice, assimilation, feminism, and cultural reproduction explain patterns of social, cultural, political, psychological, and economic exclusion.

\*See "General Education College Courses" list for description of all other dual credit.

### **Ignite Institute - Engineering Pathway**

**Associate's in Science Potential** 

### Open to Scholars from Dixie Heights, Scott, & Simon Kenton High Schools

The courses teach problem-solving skills by engaging scholars in the engineering process. Models of product solutions are created, analyzed, and communicated in a variety of ways including the use of solid modeling computer design software. In addition, scholars use 3D design software to design and document solutions for major course projects. Exploring various technology systems and manufacturing processes help scholars learn how engineers and technicians use an engineering problem solving process to benefit society.

### Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	World Language
Out	Traditional*	Introduction to Engineering Design	English 1	Accelerated Geometry	Biology	Government	Constitution 1
9th	Associate's*	Introduction to Engineering Design	Accelerated English 1	Accelerated Algebra 2	Accelerated Biology	AP Government	Spanish 1
	Traditional	Principles of Engineering	English 2	Accelerated Algebra 2	Chemistry	World Civilizations	
10th	Associate's**	Principles of Engineering	Accelerated English 2	MAT 171 / MAT 175	Chemistry 140/145 & Chemistry 170/175	World Civ. 101/102	Spanish 101/102
1144	Traditional	Computer Integrated Manufacturing	English 101/102	Accelerated Pre- Calculus	Physics	US History	Constitute 201/202
11th	Associate's**	Computer Integrated Manufacturing	English 101/102	MAT 185/MAT 275	Physics 231/232 & 241/242	US History 108/109	Spanish 201/202

<sup>\*</sup>Health and PE will be taken online

<sup>\*\*</sup>Scholars in the Associate's in Science Degree track will also take Communications 181 in 10th grade & Introduction to Computer 105 in 11th grade

Track	Senior - Fall Semester	Senior - Spring Semester		
Traditional	Engineering Capstone: Engineering Design and Development Engineering Internship Senior Academic Seminar Choice of at least 1 of the following: Circuits 1 ELT 110 Fund. of Mechatronics MFG 135 Art 100	Engineering Capstone: Engineering Design and Development Engineering Internship Senior Academic Seminar Choice of at least 1 of the following: Circuits 1 ELT 110 Fund. of Mechatronics MFG 135 Music 160		
Associate's	Engineering Capstone: Engineering Design and Development Engineering Internship Senior Academic Seminar Psychology 110 Art 100	Engineering Capstone: Engineering Design and Development Engineering Internship Senior Academic Seminar Sociology 101 Music 160		

### **Industry Certifications Offered:**

Autodesk Inventor Certified User, Autodesk AutoCAD Certified User, Fundamentals of Mechatronics Certificate

### Ignite Institute - Engineering (High-Demand Sector – Advanced Manufacturing, Construction)

### **Diploma + Certification**

- a. Autodesk Inventor Certified User Median salary \$40,000
- b. Autodesk AutoCAD Certified User Median salary \$44,000
- c. Fundamentals of Mechatronics Certificate Median salary \$48,000

### Associate's Degree in Science

- a. Industry Certification jobs same as above
- b. Gateway has programs/pathways established to transfer to 10 local colleges
  - i. Scholars can choose the degree they want to pursue post-Associate's
  - ii. Scholars can transfer courses to more than just those 10 colleges
- c. Scholars could take further AutoDesk training and become Autodesk Professionals with a median salary of \$55,000
- d. Scholars with Associate's in Science can pursue a Bachelor's degree and beyond in their choice of major at a university

### Future careers and salary depend on choice of certification, undergraduate, and graduate studies

Ex. Aerospace Engineer, Agricultural Engineer, Automotive Engineer, Biomedical Engineer, Chemical Engineer, Civil Engineer, Computer Engineer, Electrical Engineer, Environmental Engineer, Geological Engineer, Marine Engineer, Mechanical Engineer, Software Engineer

### Career Area College Courses\*

Physics 231/241 – General Physics I w/Lab. Focuses on the mechanics of matter as governed by Newton's Laws and by the conservation laws of energy, linear momentum, and angular momentum using calculus and trigonometry.

Physics 232/242 - General Physics II w/ Lab. Focuses on electromagnetic phenomena, circuits, and optics using vector calculus.

ELT 110 – Circuits I. Introduces application of basic DC and AC circuits, including circuit analysis techniques with discussion of introductory magnetism and transformer principles. Emphasizes design, construction, and troubleshooting of simple DC and AC circuits in laboratory exercises.

MFG 135 – Fundamentals of Mechatronics. Introduces the student to the basics of Mechatronic systems and the operation of electrical, mechanical, pneumatic/hydraulic, and Programmable Logic Control components in an advanced manufacturing system. Combines basic operational and analytical skills with critical thinking and applied troubleshooting. Teaches the students to troubleshoot a multitude of problems involved in typical electrical, mechanical, and hydraulic/ pneumatic systems.

\*See "General Education College Courses" list for description of all other dual credit.

### **Ignite Institute - Pre-Nursing Pathway**

**Associate's in Science Potential** 

### Open to Scholars from Dixie Heights, Scott, & Simon Kenton High Schools

This pathway prepares individuals for admission to a professional program in nursing. This pathway focuses on caring for residents in a long-term care facility. It is designed to promote an understanding of standard precautions necessary for personal and professional health maintenance and infection control. By relating terms to body systems, students identify proper use of words in a medical environment. Knowledge of medical terminology enhances the student's ability to successfully secure employment or pursue advanced education in health care.

### Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	World Language
011	Traditional*	Principles of Health Science	English 1	Algebra 1	Biology	Government	Constitute
9th	Associate's*	Principles of Health Science	Accelerated English 1	Accelerated Geometry	Accelerated Biology	AP Government	Spanish 1
101	Traditional	Emergency Procedures & Medical Terminology	English 2	Geometry	Chemistry	World Civilizations	
10th	Associate's**	Emergency Procedures & Medical Terminology	Accelerated English 2	Accelerated Algebra 2	Biology 112/113 & Chem 130/135	World Civ. 101/102	Spanish 101/102
4411	Traditional	Medicaid Nurse Aide	English 101/102	Algebra 2	Anatomy & Physiology	US History	c 11 201/202
11th	Associate's**	Medicaid Nurse Aide	English 101/102	MAT 151 /MAT 175	Anatomy & Phys 137/139	US History 108/109	Spanish 201/202

<sup>\*</sup>Health and PE will be taken online

<sup>\*\*</sup>Scholars in the Associate's in Science Degree track will also take Communications 181 in 10th grade & Introduction to Computer 105 in 11th grade

Track	Senior - Fall Semester	Senior - Spring Semester
Traditional	Allied Health Internship Senior Academic Seminar Choice of at least 1 of the following: Nursing Assistant Skills I NAA 100 Emergency Medical Technician EMS 105 Phlebotomy & Clinical PHB 100 & 155 Art 100	Allied Health Internship Senior Academic Seminar Choice of at least 1 of the following: Nursing Assistant Skills I NAA 100 Emergency Medical Technician EMS 105 Phlebotomy & Clinical PHB 100 & 155 Music 160
Associate's	Allied Health Internship Senior Academic Seminar Psychology 110 Art 100 Med Micro Bio 225	Allied Health Internship Senior Academic Seminar Sociology 101 Music 160 Medical Microbiology 225

### **Industry Certifications offered:**

State Registered Nursing Assistant (SRNA), Medicaid Nurse Aide (MNA), Emergency Medical Technician, Phlebotomist Certificate

### Ignite Institute - Pre-Nursing (High-Demand Sector - Healthcare)

### **Diploma + Certification**

- a. NOCTI Biotechnology Builds scholar resume to obtain entry-level medical positions. Median salary \$20,000
- b. Medicaid Nurse Aide Median salary \$28,205
- c. Emergency Medical Technician Median salary \$34,343
- d. Phlebotomist Certificate Median salary \$30,828

### Associate's Degree in Science

- a. Industry Certification jobs same as above
- b. Gateway has programs/pathways established to transfer to 10 local colleges
  - i. Scholars can choose the degree they want to pursue post-Associate's
  - ii. Scholars can transfer courses to more than just those 10 colleges
- c. Scholars with Associate's in Science can pursue a Bachelor's degree and beyond in their choice of major at a university

### Future careers and salary depend on choice of certification, undergraduate, and graduate studies

Ex. Medicaid Nurse Aide, EMT, Phlebotomist, Lab Tech, Radiologist, Nurse, Nurse Practitioner, Physician, Surgeon, Anesthesiologist, Physical Therapist, Occupational Therapist, Medical Assistant, Dietitian, Dentist, Dental Assistant, Respiratory Therapist, Sonographer, Paramedic, Athletic Trainer, Nutritionist, Biomedical Scientist, Biomedical Engineer

### Career Area College Courses\*

NAA 100 – Nursing Assistant Skills I. Provides knowledge and skills for nurse aides to assume the role and responsibility required in a long-term care setting. The focus is communication, infection control, safety, resident/patient rights, and basic nursing skills.

EMS 105 - Emergency Medical Technician. Provides the first level of training in the career structure of Emergency Medical Services. Integrates didactic course material and the lab component necessary for the delivery of entry-level emergency medical care to individuals who are experiencing a disruption in normal body functions due to illness and/or injury and require intervention to prevent morbidity and mortality. Prepares the student to sit for the National Registry EMT examination that is required for Kentucky certification as an EMT. Focuses on basic anatomy and physiology, scene and patient assessment, airway and ventilation, cardiovascular and body systems support, motion limiting devices, wound and fracture management, administration of basic patient medications, extrication, transportation, and patient monitoring as well as medico-legal aspects and ambulance operations. Includes a minimum twenty-four (24) hour clinical observation in the emergency department and/or on a state licensed ambulance service.

PHB 100 - Phlebotomy. Prepares the student as an integral member of the health-care team to collect blood from patients/donors in hospitals, blood banks or clinics for analysis or other medical purposes. Includes standard precautions, record keeping, and therapeutic communication skills.

PHB 155 – Phlebotomy Clinical. This course is designed to build on the knowledge acquired in phlebotomy lecture and lab. In this course the student will use external institutions for clinical experience to become more proficient in the performance of routine venipuncture and dermal collections. The student will gain the experience needed to handle routine venipuncture complications and the skills necessary to adequately perform the duties of a phlebotomist.

Anatomy & Physiology 137/139 - The interrelationship of structure and function of each body system will be presented in two semesters. The first semester will include basic chemistry, cell structure, cell physiology, metabolism, tissues, and integumentary, skeletal, muscular, and nervous systems.

Medical Microbiology 225 - The characteristics of microorganisms and their relation to health and disease are studied.

\*See "General Education College Courses" list for description of all other dual credit.

### **Ignite Institute - General Education College Courses**

English 101 - Focuses on academic writing. Provides instruction in drafting and revising essays that express ideas in Standard English, including reading critically, thinking logically, responding to texts, addressing specific audiences, researching and documenting sources. Includes review of grammar, mechanics and usage.

English 102 - Emphasizes argumentative writing. Provides further instruction in drafting and systematically revising essays that express ideas in Standard English. Includes continued instruction and practice in reading critically, thinking logically, responding to texts, addressing specific audiences, and researching and documenting credible academic sources.

MAT 151 - Introduction to Applied Statistics. Serves as an entry-level introduction to applied statistics useful for a variety of fields. Covers statistical terminology and the appropriate use of software for the calculation of descriptive statistics, basic probability, correlation and linear regression. Emphasizes understanding the uses and misuses of statistics in the real world.

*MAT 175* - Calculus I. Examines one-variable calculus including limits, differentiation and integration of algebraic, trigonometric, exponential, logarithmic, hyperbolic, and inverse trigonometric functions with applications.

MAT 185 - Calculus II. Includes applications of integration, advanced integration techniques, sequences and infinite series, and parametric and polar equations.

*MAT 275* - Calculus III. Examines multivariate calculus including parametric equations; rectangular, cylindrical, and spherical coordinate systems; vectors and vector-valued functions; limits and derivatives of functions of several variables; multiple integration; and line and surface integrals.

Biology 112/113 - Intro to Biology w/ Lab. Basic study of structure, function and interactions of living organisms including cell theory, genetics, energetics, evolution and ecology.

Biology 114/115 - Biology I w/ Lab. Examines basic biological concepts such as cell structure and function, metabolism, the chemical basis of biology, protein synthesis, genetics, and evolution with emphasis placed on the cellular level.

Biology 116/117 - Biology II w/ Lab. Examines basic biological concepts such as ecology, biological diversity (to include the kingdoms of life), reproduction, growth, and development, with emphasis placed on multicellular systems.

Chemistry 120/125 - Chemistry in Society. Introduces non-science majors to the main concepts and applications of chemistry in our society.

Chemistry 170/175 - General College Chemistry I. Focuses on major chemical topics, including stoichiometry, atomic structure, properties of matter and the relationship between molecular structure and chemical behavior. Emphasizes solving of mathematical problems, which illustrate the principles of chemistry.

Chemistry 180/185 - General College Chemistry II. Focuses on major chemical topics, including acid-base chemistry, kinetics, thermodynamics, and chemical equilibrium. Emphasizes solving of mathematical problems, which illustrate the principles of chemistry.

History 108 - Examines key political, economic, and social topics that have significantly influenced the American experience from the pre-colonial period through the Civil War era.

History 109 - Examine key political, economic, and social topics that have influenced significantly the American experience from Reconstruction through the contemporary era

World Civilizations 101 - Presents a multicultural survey of world cultures and global issues from ancient to medieval times.

World Civilizations 102 - Presents a multicultural survey of world cultures and contemporary global issues from 1600 to the present.

Spanish 101 - Introduces basic modes of communication in Spanish. Stresses speaking, listening, reading and writing as target skills. Emphasizes everyday language, which the students will learn by applying essential grammatical structures to vocabulary. Provides instructional assignments and self-correctional exercises that will be practiced in the classroom. Presents an overview of the culture of various Spanish-speaking countries.

Spanish 102 - Continues to highlight the basic modes of communication in Spanish, to include present and past tense. Stresses speaking, listening, reading and writing as target skills. Emphasizes everyday language, which the students will learn by applying essential grammatical structures to vocabulary. Presents an overview of the culture of various Spanish-speaking countries.

Spanish 201 - Focuses on intermediate level speaking, listening, reading, and writing skills with an emphasis on more advanced grammatical structures; emphasizes speaking the language to expand vocabulary; examines current issues, cultural nuances, and dominant Hispanic themes.

Spanish 202 - Continues intermediate level speaking, listening, reading, and writing skills from SPA 201 with an emphasis on more advanced grammatical structures; focuses on speaking the language to expand vocabulary; examines current issues, cultural nuances, and dominant Hispanic themes.

Communication 181 - Applies the basic principles and techniques in research, organization, and delivery of speeches for informative and persuasive speaking purposes. Provides practical platform experience in developing speaking abilities to enable the student to communicate orally in clear, coherent language appropriate to the purpose, occasion, and audience.

Introduction to Computer 105 - Provides an introduction to the computer and the convergence of technology as used in today's global environment. Introduces topics including computer hardware and software, file management, the Internet, e-mail, the social web, green computing, security and computer ethics. Presents basic use of application, programming, systems, and utility software.

Art 100 - Provides a basic overview of the study, language, history and cultural relevance of visual art and is designed primarily for non-art majors. Utilizes visually enhanced lectures and may include optional introductory studio experiences.

Music 160 - A geographic survey of selected music cultures throughout the world with hands-on experience playing the music of diverse cultures, audio/video examples of music-cultures in performances, reading and writing assignments, and attendance and reporting at live music events.

*Psychology 110*- Introduces the history, methods and content of modern psychology. Covers the history and systems of psychology, psychological research, physiological psychology, psychological processes, developmental psychology, personality, abnormal behavior and social psychology.

Philosophy 100 - Introduces students to philosophical studies with emphasis on issues of knowing, reality, and meaning related to human existence.

Political Science 101 - Examines national government and the political process in the United States, with emphasis on the Constitution, the President, Congress, and the judicial system. Focuses on the nature of American democracy, political challenges, and opportunities.



# **CAREER PATHWAYS**

ADMINISTRATIVE SUPPORT
E-COMMERCE
MANAGEMENT AND ENTREPRENEURSHIP
ANIMAL SCIENCE
HORTICULTURE AND PLANT SCIENCE SYSTEMS
PRE-LAW STUDIES

### **Dixie Heights - Administrative Support**

This pathway is designed to provide students an advanced level experience that will propel them into the 21st century business world as they serve in positions such as college interns, administrative assistants, graduate assistants, and office managers. Instruction includes areas of fundamental business procedures, human resource management, time management software, workstation management, travel planning, financial reporting, payroll, mail procedures, effective communication skills, and ethical decision-making skills.

Projected Freshman-Junior Schedule
Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
9th	Traditional	Business & Marketing Essentials A&B	English 1A, 1B, & 1C	Algebra 1A & 1B	Integrated Science A & B	Integrated Social Studies A & B	Health/PE  Optional:
9th	Accelerated	Business & Marketing Essentials A&B	Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Accelerated Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B
10th	Traditional	Digital Literacy A&B	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations A & B	Optional: Spanish 2A & 2B
	Accelerated	Digital Literacy A&B	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry A & B	AP European History	or German 2A & 2B
	Traditional	Accounting A&B EOP Required	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Chemistry A & B	US History A & B	Optional: Continued Spanish/German or NKU Dual credit
11th	Accelerated	Optional: Accounting A&B EOP Required Intro to Bus TMU BUA 105 Intro Leadership TMU ELS 215	Accelerated English 3A & 3B	Optional: Pre-calculus A & B Intro to Calculus Honors	Optional: AP or Dual Credit Biology, Chemistry Dual Credit: Physics	AP US History	
	Traditional	Business Communications A&B <b>Optional:</b> Business Internship	English 4A & 4B	Probability & Statistics	Robotics	Optional: Psychology, Sociology, Dictators & Tyrants or Political Science	Optional:
12th	Accelerated	Optional: Business Communications A&B Business Internship Intro to Bus TMU BUA 105 Intro Leadership TMU ELS 215	Optional: AP Literature TMU: ENG 255 NKU ENG 101, 102 or 200	Optional: AP Statistics NKU 205: Statistics NKU 114: Finite Math	Optional: AP or Dual Credit Biology, Chemistry Dual Credit: Physics	Optional: AP Comparative Politics  Dual Credit Psychology	Continued Spanish/German or NKU Dual credit

Industry Certifications offered: Administrative Support Services (KDE End of Course (EOP) Required), A.S.K. (Assessment of Skills and Knowledge of Business): Fundamental Business Concepts with 3 Microsoft Office Specialist (MOS) certifications: Word, Excel, PowerPoint, Access, or Outlook

Administrative Support future careers and median salary in the State of Kentucky: Administrative Assistant - \$33,359 • Office Manager - \$49,593 • Customer Service Assistant - \$29,300 • Data Entry Specialist - \$28,140 • Receptionist - \$25,840 • Stenographer - \$28,760 • Dispatcher - \$36,397 • Shipping & Receiving Assistant - \$30,330 • Medical Transcriptionist - \$32,750 • Legal Secretary - \$32,810 • Paralegal - \$43,810 • Billing and Account Collector - \$32,860 • Accountant - \$59,250 • Bookkeeper - \$35,810 • Auditor - \$59,250

### **Dixie Heights - E-Commerce**

This pathway focuses on the creation, execution, transmission, and evaluation of commercial messages in various media intended to promote and sell products, services, and brands; and that prepares individuals to function as advertising assistants, technicians, and managers. Includes instruction in advertising theory; marketing strategy; advertising design and production methods; campaign methods and techniques; media management; related principles of business management; and applicable technical and equipment skills.

Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

			Deflotes D	ual-Credit Course OF	CAI Course		
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
9th	Traditional	Business & Marketing Essentials A&B	English 1A, 1B, & 1C	Algebra 1A & 1B	Integrated Science A & B	Integrated Social Studies A & B	Health/PE  Optional:
7th	Accelerated	Business & Marketing Essentials A&B	Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Accelerated Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B
10th	Traditional	Digital Literacy A&B	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations A & B	Optional: Spanish 2A & 2B
	Accelerated	Digital Literacy A&B	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry A & B	AP European History	or German 2A & 2B
	Traditional	Marketing Principles A&B EOP Required	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2BC	Chemistry A & B	US History A & B	
11th	Accelerated	Optional: Marketing Principles A&B EOP Required Intro to Bus TMU BUA 105 Intro Leadership TMU ELS 215	Accelerated English 3A & 3B	Optional: Pre-calculus A & B Intro to Calculus Honors	Optional: AP or Dual Credit Biology, Chemistry Dual Credit: Physics	AP US History	Optional: Continued Spanish/German or NKU Dual credit
	Traditional	Fund of Social Media A & Advertising/ Promotions A <b>Optional:</b> Yearbook Bus. Internship	English 4A & 4B	Probability & Statistics	Robotics	Psychology	
12th	Accelerated	Optional: Fund of Social Media A & Advertising/ Promotions A Yearbook Bus. Internship Intro to Bus TMU BUA 105 Intro Leadership TMU ELS 215	Optional: AP Literature TMU: ENG 255 NKU ENG 101, 102 or 200	Optional: AP Statistics NKU 205: Statistics NKU 114: Finite Math	Optional: AP or Dual Credit Biology, Chemistry Dual Credit: Physics	Optional: Dual Credit in Psychology or Economics	Optional: Continued Spanish/German or NKU Dual credit

Industry Certifications offered: Marketing (KDE End of Course (EOP) Required), A.S.K. (Assessment of Skills and Knowledge of Business): Fundamental Marketing Concepts OR Fundamental Business Concepts with 3 Microsoft Office Specialist (MOS) certifications: Word, Excel, PowerPoint, Access, or Outlook

E-Commerce future careers and median salary in the State of Kentucky: Sales Representative - \$53,060 • E-Business Consultant - \$68,770 • Advertising Account Executive - \$75,540 • Advertising Copywriter - \$48,620 • Market Research Analyst - \$52,440 • Economist - \$62,850 • Logistics Specialist - \$68,230 • Sports Marketer - \$94,180 • Economic Development Officer - \$35,000 • Graphic Designer - \$38,330

### **Dixie Heights - Management and Entrepreneurship**

This pathway generally prepares individuals to plan, organize, direct, and control the functions and processes of a firm or organization. Includes instruction in management theory, human resources management and behavior, accounting and other quantitative methods, purchasing and logistics, organization and production, marketing, and business decision making.

Projected Freshman-Junior Schedule
Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course							
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes	
9th	Traditional	Business & Marketing Essentials A&B	English 1A, 1B, & 1C	Algebra 1A & 1B	Integrated Science A & B	Integrated Social Studies A & B	Health/PE  Optional:	
, Jui	Accelerated	Business & Marketing Essentials A&B	Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Accelerated Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B	
10th	Traditional	Digital Literacy A&B	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations A & B	<b>Optional:</b> Spanish 2A & 2B	
	Accelerated	Digital Literacy A&B	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2C	Chemistry A & B	AP European History	German 2A & 2B	
	Traditional	difficated	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2B	Chemistry A & B	US History A & B		
11th	Accelerated	Optional: Intro to Management A&B EOP Required Intro to Bus TMU BUA 105 Intro Leadership TMU ELS 215	Accelerated English 3A & 3B	Optional: Pre-calculus A & B Intro to Calculus Honors	Optional: AP or Dual Credit Biology, Chemistry Dual Credit: Physics	AP US History	Optional: Continued Spanish/German or NKU Dual credit	
	Traditional	Entrepreneurship A & B <b>Optional:</b> Bus. Internship	English 4A & 4B	Probability & Statistics	Robotics	Optional: Psychology, Sociology, Dictators & Tyrants or Political Science	Optional:	
12th	Accelerated	Optional: Entrepreneurship A & B Bus. Internship Intro to Bus TMU BUA 105 Intro Leadership TMU ELS 215	Optional: AP Literature TMU: ENG 255 NKU ENG 101, 102 or 200	Optional: AP Statistics NKU 205: Statistics NKU 114: Finite Math	Optional: AP or Dual Credit Biology, Chemistry Dual Credit: Physics	Optional: Dual Credit in Psychology or Economics	Continued Spanish/German or <mark>NKU Dual credit</mark>	

**Industry Certifications offered:** Management & Entrepreneurship (KDE End of Course (EOP) Required) and A.S.K. (Assessment of Skills and Knowledge of Business): Fundamental Business Concepts or Concepts of Entrepreneurship/Management

Management/Entrepreneurship future careers and median salary in the State of Kentucky: Financial Bank Managers - \$99,980 • Account Manager - \$36,180 • Money Manager - \$51,980 • Venture Capitalist - \$100,000 • Corporate Trainer - \$51,750 • Entrepreneur - \$35,000 • Restaurant Manager - \$31,509 • Association Manager - \$57,980 • Hotel Manager - \$54,550 • Management Consultant - \$71,030 • Recruiter - \$52,980

### **Dixie Heights - Animal Science**

This pathway focuses on the scientific principles that underline the breeding, care, and management of agricultural animals and the production, processing, and distribution of agricultural animal products. This includes developing better, more efficient ways of producing and processing meat, poultry, eggs and dairy products, as well as studying genetics, nutrition, reproduction, growth and development of animals.

Projected Freshman-Junior Schedule
Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course							
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes	
9th	Traditional	Agriscience A&B	English 1A, 1B, & 1C	Algebra 1A & 1B	Integrated Science A & B	Integrated Social Studies A & B	Health/PE  Optional:	
	Accelerated	Agriscience A&B	Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Accelerated Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B	
	Traditional Principles of Agriculture Science & ZA, 2B, & 2C 1B Biology Technology A&B	Biology A & B	World Civilizations A & B	Optional:				
10th	Accelerated	Principles of Agriculture Science & Technology A&B	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry A & B	AP European History	Spanish 2A & 2B or German 2A & 2B	
	Traditional	Animal Science A&B EOP Required	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Chemistry A & B	US History A & B	<b>Optional:</b> Continued	
11th	Accelerated	Animal Science A&B EOP Required	Accelerated English 3A & 3B	Optional: Pre-calculus A & B Intro to Calculus Honors	Anatomy & Physiology A&B	AP US History	Spanish/German or NKU Dual credit	
	Traditional	Veterinary Science A&B <b>Optional:</b> Animal Science Internship	English 4A & 4B	Probability & Statistics	Anatomy & Physiology A&B	Psychology	Optional:	
12th	Accelerated	Veterinary Science A&B <b>Optional:</b> Animal Science Internship	Optional: AP Literature TMU: ENG 255 NKU ENG 101, 102 or 200	Optional: AP or Dual Credit Calculus NKU MAT 129	Optional: NKU BIO 120 NKU BIO 150 NKU CHE 120	Dual Credit Psychology	Continued Spanish/German or NKU Dual credit	

Industry Certifications offered: Animal Science Systems (KDE End of Course (EOP) Required) and iCEV Elanco Fundamentals of Animal Science OR iCEV Elanco Veterinary Medical Applications

Animal Science future careers and median salary in the State of Kentucky: Veterinarian- \$79,250 • Veterinarian Technician - \$26,779 • Animal Trainer - \$24,750 • Zookeeper - \$22,430 • Zoologist - \$55,600 • Wildlife Technician - \$42,690 • Animal Services Worker - \$27,030 • Pet Groomer - \$22,430 • Biologist - \$72,360 • Butcher - \$28,610

### **Dixie Heights - Horticulture and Plant Science Systems**

This pathway focuses on the scientific principles that underlie the breeding, cultivation, and production of agricultural plants, and the production, processing, and distribution of agricultural plant products. Includes instruction in the plant sciences, crop cultivation and production, and agricultural and food products processing.

Projected Freshman-Junior Schedule

Denotes Dual-Credit Course

OR AP Course

		C D.I	Denotes D	ual-Credit Course OF	Car Gourse		
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
9th	Traditional	Agriscience A&B	English 1A, 1B, & 1C	Algebra 1A & 1B	Integrated Science A & B	Integrated Social Studies A & B	Health/PE <b>Optional:</b>
Jui	Accelerated	Agriscience A&B	Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Accelerated Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B
	Traditional	Principles of Agriculture Science & Technology A&B	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations A & B	<b>Optional:</b> Spanish 2A & 2B
10th	Accelerated	Principles of Agriculture Science & Technology A&B	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry A & B	AP European History	or German 2A & 2B
	Traditional	Agri-Biology A&B EOP Required	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Chemistry A & B	US History A & B	Optional:
11th	Accelerated	Agri-Biology A&B EOP Required	Accelerated English 3A & 3B	Optional: Pre-calculus A & B Intro to Calculus Honors	Environmental Science	AP US History	Continued Spanish/German or NKU Dual credit
	Traditional	Intro to Greenhouse & Crop Production A&B <b>Optional:</b> Horticulture Internship	English 4A & 4B	Probability & Statistics	Environmental Science	Elective	<b>Optional:</b> Continued
12th	Accelerated	Intro to Greenhouse & Crop Production A&B <b>Optional:</b> Horticulture Internship	Optional: AP Literature TMU: ENG 255 NKU ENG 101, 102 or 200	Optional: AP Statistics NKU STA 205	Optional: NKU BIO 150 NKU ENV 110	Elective	Spanish/German or NKU Dual credit

Industry Certifications offered: Horticulture and Plant Science Systems (KDE End of Course (EOP) Required) and iCEV Bayer Crop and Plant Science Horticulture and Plant Science careers and median salary in the State of Kentucky: Horticulturist - \$23,960 • Landscape Architect - \$61,320 •

Botanist - \$60,430 • Landscaper - \$27,521 • Florist - \$23,380 • Farmer - \$87,080 • Nursery/Greenhouse Grower - \$23,960 • Agricultural Technician - \$39,830 • Biotechnologist - \$42,690 • Agronomist - \$60,430 • Forest Conservation Officer - \$46,990 • Agricultural Educator - \$55,964 • Arborist - \$32,270 • Aquaculturist - \$87,080 • Food Scientist - \$60,530 • Agricultural Engineer - \$68,200

### **Dixie Heights - Pre-Law Studies**

Students will obtain skills in preparation for legal careers in law firms, courtrooms, government, and businesses. Instruction will cover legal vocabulary and ethics, the philosophy and history of criminal justice, effective and persuasive communications (oral and written), and the state and federal court systems.

Projected Freshman-Junior Schedule
Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course								
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes		
	Traditional	Business & Marketing Essentials A & Business Law	English 1A, 1B, & 1C	Algebra 1A & 1B	Integrated Science A & B	Integrated Social Studies A & B	Health/PE <b>Optional:</b>		
9th	Accelerated	Business & Marketing Essentials A & Business Law	Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Accelerated Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B		
10th	Traditional	Intro to Law TMU PLS 105	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations A & B	<b>Optional:</b> Spanish 2A & 2B		
	Accelerated	Intro to Law TMU PLS 105	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry A & B	AP European History	or German 2A & 2B		
	Traditional	Intro to Criminal Justice EKU CRJ 101	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Chemistry A & B	US History A & B	Optional:		
11th	Accelerated	Intro to Criminal Justice EKU CRJ 101	Accelerated English 3A & 3B	Optional: Pre-calculus A & B Intro to Calculus Honors	Forensics  Optional:  AP  or  Dual Credit  Science Elective	AP US History	Continued Spanish/German or NKU Dual credit		
	Traditional	Civil & Criminal Procedure TMU LAW 320	English 4A & 4B	Probability & Statistics	Forensics	Optional: Psychology, Sociology, Dictators & Tyrants or Political Science	Optional:		
12th	Accelerated	Civil & Criminal Procedure TMU LAW 320	Optional: AP Literature TMU: ENG 255 NKU ENG 101, 102 or 200	Optional: AP or Dual Credit Calculus  NKU MAT 129	<b>Optional:</b> AP or Dual Credit Science Elective	AP International Politics	Continued Spanish/German or NKU Dual credit		

Industry Certifications offered: NOCTI Criminal Justice – Advanced

Pre-Law Studies future careers and median salary in the State of Kentucky: Judge - \$135,080 • Lawyers - \$75,700 (Types: Corporate/Commercial • Criminal Lawyer • Civil Litigator) • Entry Level: Law Clerk (\$35,000-\$65,000) • Mid-Level: Associate Lawyer (\$60,000-\$180,000) • Experienced: General Counsel or Partner (\$150,000-\$500,000)



# **CAREER PATHWAYS**

CROP AND PLANT PRODUCTION
HOMELAND SECURITY
JROTC\*
PHARMACY TECHNICIAN
VETERINARIAN ASSISTANT

\*Open to Scholars from Dixie Heights, Scott, and Simon Kenton High Schools

### **Scott - Crop & Plant Production**

Students will focus on biology specific to plants, their ecology, and crop sciences. Curriculum will follow the iCEV course review for certification, including taxonomy and biochemistry of plants, cellular and physiological makeup of plants, basic plant identification, photosynthesis and mitosis, plant genetics, and plant ecology. Additionally, curriculum will also cover plant pests, crop production, and water management. This course follows iCEV guidelines for the Bayer Crop and Plant Science certification and is the first course in a two-course sequence that provides an opportunity to obtain national certification. Students will be in charge of a variety of plants in our greenhouse and on the green rooftop areas. Duties will include monitoring growth, water and temperature, deciding on new plants to introduce, pest management, and plant propagation. At the completion of this course, students will be prepared for the Bayer Crop and Plant Science certification.

# Projected Freshman-Junior Schedule Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
O.I.	Traditional		English 1A, 1B, & 1C	Algebra 1A & 1B	Intro to Science A & B	Intro to Social Studies A & B	Health/PE  Optional:
9th	Accelerated		Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B
10th	Traditional		English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations 1500 & 1812	<b>Optional:</b> Spanish 2A & 2B
10th	Accelerated	Ecology & Plant Science	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry 1A & 1B	AP European History	or German 2A & 2B
	Traditional	Ecology & Plant Science	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Applied Chemistry	US History 1865 & 1925	
11th	Accelerated	Greenhouse Management	Accelerated English 3A & 3B	Pre-calculus A, B & C	Chemistry 1A & 1B	History 102 & 103	Optional
	Traditional	Greenhouse Management	Speech & Communication/ Literacy for the Workplace	Applied Math or Personal Global Finance or College Algebra	Science Elective	Social Studies Elective	
12th	Accelerated	Crop & Plant Internship	ENG 101 & 102	AP Calculus or Dual Credit Stats	Anatomy or AP Biology or AP Chemistry or AP Physics	US History 108 & 109	Optional

Industry Certifications offered: Bayer Crop and Plant Science certification at the completion of Greenhouse Management

Crop and Plant Production careers and median salary in the State of Kentucky: Agricultural and Food Science Technicians - \$40,860 • Biochemists and Biophysicists - \$93,280 • Biological Technicians - \$44,500 • Chemical Technicians - \$48,160 • Conservation Scientists and Foresters - \$61,340 • Environmental Scientists and Specialists - \$71,130 • Farmers, Ranchers, and Other Agricultural Managers - \$61,950 • Microbiologists - \$71,650 • Veterinarians - \$93,830 • Zoologists and Wildlife Biologists - \$63,420

### **Scott - Homeland Security**

The courses are designed to give students the requisite skills to pursue a career in the field of in Homeland Security. Students work involves the study of National Incidents & Command Systems, Initial Actions in Emergency Incidents, Responding to National Emergencies, and Terrorism and Counterterrorism Operations & Internships.

Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
	Traditional	National Incidents & Command Systems	English 1A, 1B, & 1C	Algebra 1A & 1B	Intro to Science A & B	Intro to Social Studies A & B	Health/PE
9th	Accelerated	National Incidents & Command Systems	Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Biology A & B	AP Government	Optional: Spanish 1A & 1B or German 1A & 1B
10th	Traditional	Initial Actions in Emergency Incidents	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations 1500 & 1812	<b>Optional:</b> Spanish 2A & 2B
1001	Accelerated	Initial Actions in Emergency Incidents	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry 1A & 1B	AP European History	or German 2A & 2B
	Traditional	Responding to National Emergencies	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Applied Chemistry	US History 1865 & 1925	
11th	Accelerated	Responding to National Emergencies	Accelerated English 3A & 3B	Pre-calculus A, B & C	Chemistry 1A & 1B	History 102 & 103	Optional
	Traditional	Terrorism & Counterterrorism Operations Homeland Security Internship	Speech & Communication/ Literacy for the Workplace	Applied Math or Personal Global Finance or College Algebra	Science Elective	Social Studies Elective	
12th	Accelerated	Terrorism & Counterterrorism Operations  Homeland Security Internship	ENG 101 & 102	AP Calculus or Dual Credit Stats	Anatomy or AP Biology or AP Chemistry or AP Physics	US History 108 & 109	Optional

Industry Certifications Offered: (A) National Incidents & Command Systems (B) Initial Actions in Emergency Incidents (C) Responding to National Emergencies (D) Terrorism and Counterterrorism Operations & Internships (E) First Responder

Homeland Security careers and median salary in the State of Kentucky: Law Enforcement Careers - \$65,400 • Immigration and Travel Security Careers - \$50,430 • Prevention and Response Careers - \$70,338 • Mission Support Careers - \$51,581

### Scott - JROTC

### Open to Scholars from Dixie Heights, Scott, & Simon Kenton High Schools

The courses are designed to give students the requisite skills to pursue a career in the field of in Homeland Security. Students work involves the study of National Incidents & Command Systems, Initial Actions in Emergency Incidents, Responding to National Emergencies, and Terrorism and Counterterrorism Operations & Internships.

Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
Oak	Traditional	Leadership Education & Training I	English 1A, 1B, & 1C	Algebra 1A & 1B	Intro to Science A & B	Intro to Social Studies A & B	Health/PE  Optional:
9th	Accelerated	Leadership Education & Training I	Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B
10th	Traditional	Leadership Education & Training II	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations 1500 & 1812	<b>Optional:</b> Spanish 2A & 2B
10011	Accelerated	Leadership Education & Training II	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry 1A & 1B	AP European History	or German 2A & 2B
	Traditional	Leadership Education & Training III	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Applied Chemistry	US History 1865 & 1925	Ontional
11th	Accelerated	Leadership Education & Training III	Accelerated English 3A & 3B	Pre-calculus A, B & C	Chemistry 1A & 1B	History 102 & 103	Optional
	Traditional	Leadership Education & Training IV	Speech & Communication/ Literacy for the Workplace	Applied Math or Personal Global Finance or College Algebra	Science Elective	Social Studies Elective	
12th	Accelerated	Leadership Education & Training IV	ENG 101 & 102	AP Calculus or Dual Credit Stats	Anatomy or AP Biology or AP Chemistry or AP Physics	US History 108 & 109	Optional

Industry Certifications Offered: First Responder Certification

Military careers and median salary in the State of Kentucky: Military - \$65,147 • Law Enforcement Careers - \$65,400 • Immigration and Travel Security Careers - \$50,430 • Prevention and Response Careers - \$70,338 • Mission Support Careers - \$51,581

### **Scott - Pharmacy Technician**

This course is designed for juniors or seniors to provide the knowledge and basic training to prepare students for entry-level pharmacy work as well as support to ultimately obtain a Pharmacy Technician certificate. Course content will include medication review, aseptic techniques, calculations, and pharmacy operations.

Students pursuing a Pharmacy Technician certificate will enroll in the online Edgenuity Pharmacy Technician A and B courses and this face-to-face course will serve as a lab practical to augment the online course. Upon successful completion of this course and an internship at a local pharmacy, students may be eligible to take the Pharmacy Technician Certification.

# Projected Freshman-Junior Schedule Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
a.i.	Traditional		English 1A, 1B, & 1C	Algebra 1A & 1B	Intro to Science A & B	Intro to Social Studies A & B	Health/PE  Optional:
9th	Accelerated		Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B
10th	Traditional	Office Assistant	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations 1500 & 1812	<b>Optional:</b> Spanish 2A & 2B
10th	Accelerated		Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry 1A & 1B	AP European History	or German 2A & 2B
	Traditional	Pharmacy Tech	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Applied Chemistry	US History 1865 & 1925	Optional
11th	Accelerated	Pharmacy Tech	Accelerated English 3A & 3B	Pre-calculus A, B & C	Chemistry 1A & 1B	History 102 & 103	
	Traditional	Pharmacy Tech Internship	Speech & Communication/ Literacy for the Workplace	Applied Math or Personal Global Finance or College Algebra	Science Elective	Social Studies Elective	
12th	Accelerated	Pharmacy Tech Internship	ENG 101 & 102	AP Calculus or Dual Credit Stats	Anatomy or AP Biology or AP Chemistry or AP Physics	US History 108 & 109	Optional

Industry Certifications Offered: Pharmacy Technician

Pharmacy Technician careers and median salary in the State of Kentucky: Certified Pharmacist Technician - \$33,104 • Customer Service Representative - \$31,720 • Pharmacist - \$121,500 • Pharmaceutical Sales Associate - \$101,000

### **Scott - Veterinarian Assistant**

Veterinarian Assistant Program offers students the opportunity to explore the Human-Animal Bond, Veterinary Terminology, Basic Canine and Feline Anatomy, Dog/Cat/Livestock Breeds, Animal Nutrition, Zoonotic Diseases, and Animal Behavior. These courses will follow National Association of Veterinary Technicians in America (NAVTA) guidelines, and provides an opportunity to obtain national certification as an Approved Veterinary Assistant.

# Projected Freshman-Junior Schedule Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
0.1	Traditional		English 1A, 1B, & 1C	Algebra 1A & 1B	Intro to Science A & B	Intro to Social Studies A & B	Health/PE  Optional:
9th	Accelerated		Accelerated English 1A & 1B	Accelerated Geometry 1A & 1B	Biology A & B	AP Government	Spanish 1A & 1B or German 1A & 1B
	Traditional	Office Assistant	English 2A, 2B, & 2C	Geometry 1A & 1B	Biology A & B	World Civilizations 1500 & 1812	Optional: Spanish 2A & 2B
10th	Accelerated	Principles of Veterinary Assistance	Accelerated English 2A & 2B	Accelerated Algebra 2A & 2B	Chemistry 1A & 1B	AP European History	or German 2A & 2B
	Traditional	Principles of Veterinary Assistance	English 3A, 3B, & 3C	Algebra 2A, 2B, & 2C	Applied Chemistry	US History 1865 & 1925	Optional
11th	Accelerated	Advanced Veterinarian Assistance	Accelerated English 3A & 3B	Pre-calculus A, B & C	Chemistry 1A & 1B	History 102 & 103	
	Traditional	Advanced Veterinarian Assistance & Internship	Speech & Communication/ Literacy for the Workplace	Applied Math or Personal Global Finance or College Algebra	Science Elective	Social Studies Elective	
12th	Accelerated	Veterinarian Internship	ENG 101 & 102	AP Calculus or Dual Credit Stats	Anatomy or AP Biology or AP Chemistry or AP Physics	US History 108 & 109	Optional

Industry Certifications Offered: Veterinary Assistant

**Veterinarian Assistant careers and median salary in the State of Kentucky:** Veterinary Assistant - \$27,540 • Animal Care and Service Workers - \$23,950 • Medical and Clinical Laboratory Technologists and Technicians - \$52,330 • Phlebotomists - \$34,480 • Radiologic and MRI Technologists - \$61,240 • Surgical Technologists - \$47,300 • Veterinarians - \$93,830



# **CAREER PATHWAYS**

ACCOUNTING
ADMINISTRATIVE SUPPORT
ANIMAL SCIENCE
HORTICULTURE
MARKETING
PHARMACY TECHNICIAN

### Simon Kenton - Accounting

The pathway generally prepares individuals to practice the profession of accounting and to perform related business functions. Includes instruction in accounting principles and theory, financial accounting, managerial accounting, cost accounting, budget control, tax accounting, legal aspects of accounting, auditing, reporting procedures, statement analysis, planning & consulting, business information systems, accounting research methods, professional standards and ethics, and applications to specific for-profit, public, and non-profit organizations.

## Projected Freshman-Junior Schedule Denotes Dual-Credit Course OR AP Course

Grade	Track	Career Pathway	English	Math	Science	Social Studies	Other Classes
		Elective			Interpreted	Internated Corda	
	Traditional	Principles of Marketing	English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health
9th	Accelerated	Principles of Marketing	Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health
	Traditional	Digital Literacy	English 2	Geometry	Biology	World Civilizations	Spanish 1 or French 1
10th	Accelerated	Digital Literacy	Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Accelerated Spanish 1 or French 1
1146	Traditional	Financial Accounting EOP Required	English 3	Algebra 2 or (Class of 2023+ Personal Finance Business Math)	Concepts of Science	US History	Spanish 2 or French 2
11th	Accelerated	Financial Accounting EOP Required	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus OR <mark>AP Calculus AB</mark>	Chemistry	AP US History	Accelerated Spanish 2 or French 2
	Traditional	Advanced Computers	English 4 or ENG 100 & 120	CCR Math or AP Accounting	Optional Elective	Optional Elective	Humanities or Art Elective
12th	Accelerated	Advanced Computers	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Accounting	Optional Elective	Optional Elective	Humanities or Art Elective

Industry Certifications offered: Accounting (KDE End of Course (EOP) Required), A.S.K. (Assessment of Skills and Knowledge of Business): Concepts of Finance with 3 Microsoft Office Specialist (MOS) certifications: Word, Excel, PowerPoint, Access, or Outlook

Accounting future careers and median salary in the State of Kentucky: Administrative Assistant - \$33,359 • Office Manager - \$49,593 • Customer Service Assistant - \$29,300 • Data Entry Specialist - \$28,140 • Receptionist - \$25,840 • Stenographer - \$28,760 • Dispatcher - \$36,397 • Shipping & Receiving Assistant - \$30,330 • Medical Transcriptionist - \$32,750 • Legal Secretary - \$32,810 • Paralegal - \$43,810 • Billing and Account Collector - \$32,860 • Accountant - \$59,250 • Bookkeeper - \$35,810 • Auditor - \$59,250

### **Simon Kenton - Administrative Support**

This pathway is designed to provide students an advanced level experience that will propel them into the 21st century business world as they serve in positions such as college interns, administrative assistants, graduate assistants, and office managers. Instruction includes areas of fundamental business procedures, human resource management, time management software, workstation management, travel planning, financial reporting, payroll, mail procedures, effective communication skills, and ethical decision-making skills.

Projected Freshman-Junior Schedule
Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course							
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes	
	Traditional	Principles of Marketing	English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health	
9th	Accelerated	Principles of Marketing	Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health	
	Traditional	Digital Literacy	English 2	Geometry	Biology	World Civilizations	Spanish 1 or French 1	
10th	Accelerated	Digital Literacy	Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Accelerated Spanish 1 or French 1	
11th	Traditional	Financial Accounting or Workplace Readiness EOP Required	English 3	Algebra 2 or (Class of 2023+ Personal Finance Business Math)	Concepts of Science	US History	Spanish 2 or French 2	
11	Accelerated	Financial Accounting or Workplace Readiness EOP Required	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus OR <mark>AP Calculus AB</mark>	Chemistry	AP US History	Accelerated Spanish 2 or French 2	
	Traditional	Advanced Computers	English 4 or ENG 100 & 120	CCR Math or AP Accounting	Optional Elective	Optional Elective	Humanities or Art Elective	
12th	Accelerated	Advanced Computers	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Accounting	Optional Elective	Optional Elective	Humanities or Art Elective	

Industry Certifications offered: Administrative Support Services (KDE End of Course (EOP) Required), A.S.K. (Assessment of Skills and Knowledge of Business): Fundamental Business Concepts with 3 Microsoft Office Specialist (MOS) certifications: Word, Excel, PowerPoint, Access, or Outlook

Administrative Support future careers and median salary in the State of Kentucky: Administrative Assistant - \$33,359 • Office Manager - \$49,593 • Customer Service Assistant - \$29,300 • Data Entry Specialist - \$28,140 • Receptionist - \$25,840 • Stenographer - \$28,760 • Dispatcher - \$36,397 • Shipping & Receiving Assistant - \$30,330 • Medical Transcriptionist - \$32,750 • Legal Secretary - \$32,810 • Paralegal - \$43,810 • Billing and Account Collector - \$32,860 • Accountant - \$59,250 • Bookkeeper - \$35,810 • Auditor - \$59,250

### **Simon Kenton - Animal Science**

This pathway focuses on the scientific principles that underlie the breeding, care and management of agricultural animals, and the production, processing, and distribution of agricultural animal products. This includes developing better, more efficient ways of producing and processing meat, poultry, eggs and dairy products, as well as studying genetics, nutrition, reproduction, growth and development of animals.

Projected Freshman-Junior Schedule
Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course						
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes
	Traditional	Principles of Agricultural Science & Technology	English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health
9th	Accelerated	Principles of Agricultural Science & Technology	Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health
	Traditional	Agriscience	English 2	Geometry	Biology	World Civilizations	Spanish 1 or French 1
10th	Accelerated	Agriscience	Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Accelerated Spanish 1 or French 1
	Traditional	Agribusiness or Animal Science (Classes rotate yearly) EOP Required	English 3	Algebra 2 or (Class of 2023+ Agriculture Math)	Concepts of Science	US History	Spanish 2 or French 2
11th	Accelerated	Agribusiness or Animal Science (Classes rotate yearly) EOP Required	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus	Chemistry	AP US History	Accelerated Spanish 2 or French 2
	Traditional	Agribusiness or Animal Science (Classes rotate yearly)*	English 4 or ENG 100 & 120	CCR Math	Science Elective	Psychology or PSY 100	Humanities or Art Elective
12th	Accelerated	Agribusiness or Animal Science (Classes rotate yearly)*	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Calculus AB or Dual Credit math	Science Elective	Psychology or <mark>PSY 100</mark>	Humanities or Art Elective

Industry Certifications offered: Animal Science Systems (KDE End of Course (EOP) Required) and iCEV Elanco Fundamentals of Animal Science OR iCEV Elanco Veterinary Medical Applications

Animal Science future careers and median salary in the State of Kentucky: Veterinarian- \$79,250 • Veterinarian Technician - \$26,779 • Animal Trainer - \$24,750 • Zookeeper - \$22,430 • Zoologist - \$55,600 • Wildlife Technician - \$42,690 • Animal Services Worker - \$27,030 • Pet Groomer - \$22,430 • Biologist - \$72,360 • Butcher - \$28,610

### Simon Kenton - Horticulture & Plant Science

This pathway focuses on the scientific principles that underlie the breeding, cultivation, and production of agricultural plants, and the production, processing, and distribution of agricultural plant products. Includes instruction in the plant sciences, crop cultivation/production, & food products.

Projected Freshman-Junior Schedule
Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course								
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes		
	Traditional	Principles of Agricultural Science & Technology	English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health		
9th	Accelerated	Principles of Agricultural Science & Technology	Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health		
	Traditional	Agriscience	English 2	Geometry	Biology	World Civilizations	Spanish 1 or French 1		
10th	Accelerated	Agriscience	Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Accelerated Spanish 1 or French 1		
11th	Traditional	Floral Design or Greenhouse Technology (Classes rotate yearly) EOP Required	English 3	Algebra 2 or (Class of 2023+ Agriculture Math)	Concepts of Science	US History	Spanish 2 or French 2		
1101	Accelerated	Floral Design or Greenhouse Technology (Classes rotate yearly) EOP Required	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus	Chemistry	AP US History	Accelerated Spanish 2 or French 2		
	Traditional	Floral Design or Greenhouse Technology (Classes rotate yearly)	English 4 or ENG 100 & 120	CCR Math	Science Elective	Psychology or PSY 100	Humanities or Art Elective		
12th	Accelerated	Floral Design or Greenhouse Technology (Classes rotate yearly)	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Calculus AB or Dual Credit Math	Science Elective	Psychology or PSY 100	Humanities or Art Elective		

Industry Certifications offered: Horticulture and Plant Science Systems (KDE End of Course (EOP) Required) and iCEV Bayer Crop and Plant Science

Horticulture and Plant Science careers and median salary in the State of Kentucky: Horticulturist - \$23,960 • Landscape Architect - \$61,320 •

Botanist - \$60,430 • Landscaper - \$27,521 • Florist - \$23,380 • Farmer - \$87,080 • Nursery/Greenhouse Grower - \$23,960 • Agricultural

Technician - \$39,830 • Biotechnologist - \$42,690 • Agronomist - \$60,430 • Forest Conservation Officer - \$46,990 • Agricultural Educator - \$55,964 •

Arborist - \$32,270 • Aquaculturist - \$87,080 • Food Scientist - \$60,530 • Agricultural Engineer - \$68,200

### **Simon Kenton - Marketing**

This pathway generally prepares individuals to undertake and manage the process of developing consumer audiences and moving products from producers to consumers. Includes instruction in buyer behavior dynamics, principle of marketing research, demand analysis, cost-volume and profit relationships, pricing theory, marketing campaign and strategic planning, market segments, advertising methods, sales operations and management, consumer relations, retailing, and applications to specific products and markets.

Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course							
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes	
	Traditional	Principles of Marketing	English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health	
9th	Accelerated	Principles of Marketing	Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health	
	Traditional	Digital Literacy	English 2	Geometry	Biology	World Civilizations	Spanish 1 or French 1	
10th	Accelerated	Digital Literacy	Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Accelerated Spanish 1 or French 1	
	Traditional	Financial Accounting EOP Required	English 3	Algebra 2 or (Class of 2023+ Personal Finance Business Math)	Concepts of Science	US History	Spanish 2 or French 2	
11th	Accelerated	Financial Accounting EOP Required	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus OR AP Calculus AB	Chemistry	AP US History	Accelerated Spanish 2 or French 2	
	Traditional	Advanced Marketing or Pioneer Pride Shop	English 4 or ENG 100 & 120	CCR Math or AP Accounting	Optional Elective	Optional Elective	Humanities or Art Elective	
12th	Accelerated	Advanced Marketing or Pioneer Pride Shop	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Accounting	Optional Elective	Optional Elective	Humanities or Art Elective	

Additional Career Pathway Electives: Sports & Entertainment Marketing - Travel & Tourism Marketing Industry Certifications offered: Marketing (KDE End of Course (EOP) Required), A.S.K. (Assessment of Skills and Knowledge of Business): Fundamental Marketing Concepts

### **Simon Kenton - Pharmacy Technician**

This course is designed for juniors or seniors to provide the knowledge and basic training to prepare students for entry-level pharmacy work as well as support to ultimately obtain a Pharmacy Technician certificate. Course content will include medication review, aseptic techniques, calculations, and pharmacy operations. Upon successful completion of this course and an internship at a local pharmacy, students may be eligible to take the Pharmacy Technician Certification.

Projected Freshman-Junior Schedule

Denotes Dual-Credit Course OR AP Course

	Denotes Dual-Credit Course OR AP Course								
Grade	Track	Career Pathway Elective	English	Math	Science	Social Studies	Other Classes		
	Traditional		English 1	Algebra 1	Integrated Science	Integrated Social Studies	PE/Health Spanish 1 or French 1		
9th	Accelerated		Accelerated English 1 or Honors English 1	Accelerated Geometry or Accelerated Algebra 2	Accelerated Integrated Science	AP Government	PE/Health Spanish 1 or French 1		
	Traditional		English 2	Geometry	Biology	World Civilizations	Spanish 2 or French 2		
10th	Accelerated		Accelerated English 2 or Honors English 2	Accelerated Algebra 2 or Accelerated Pre-Calculus	Accelerated Biology	AP European History	Accelerated Spanish 2 or French 2		
	Traditional	GCTC AHS 115 Medical Terminology	English 3	Algebra 2	Concepts of Science	US History	Spanish 3 or French 3		
11th	Accelerated	GCTC AHS 115 Medical Terminology	Accelerated English 3 or AP LANG & Comp	Accelerated Pre-Calculus OR AP Calculus AB	Chemistry	AP US History	Accelerated Spanish 3 or French 3		
	Traditional	Biochemistry*	English 4 or ENG 100 & 120	CCR Math or MAT 115	Science Elective	Optional Elective	AP Spanish 4 or AP French 4		
12th	Accelerated	Biochemistry*	Accelerated English 4 or AP Lit & Lang or ENG 100 & 120	AP Calculus AB or BC or AP Statistics or Dual Credit Math	AP Chemistry or Dual Credit Science	AP Psychology or PSY 100	AP Spanish 4 or AP French 4		

**Industry Certifications Offered: \*Pharmacy Technician** 

Pharmacy Technician careers and median salary in the State of Kentucky: Certified Pharmacist Technician - \$33,104 • Customer Service Representative - \$31,720 • Pharmacist - \$121,500 • Pharmaceutical Sales Associate - \$101,000