

**Early College and Career Academy
Program Guide
2016 - 2017**



 ***EDUCATION for EMPLOYMENT SYSTEM #330***

Automotive Technology - Year One



Course Description: This program introduces students to the skills needed to inspect, maintain, and repair automobiles and light trucks with internal combustion engines. Instructional units include: Automotive industry overview, careers, advanced training options, and workplace ethics; Vehicle safety, operation, inspection and maintenance; Hybrid vehicle operation and safety; Vehicle steering and suspension system operation, component inspection and repair, braking system operation, inspection and repair. Students who successfully complete both years of the automotive program will have completed the coursework necessary for the Parkland College Maintenance and Light Repair Certificate.

Parkland College Dual Credit Available

<u>Course Number</u>	<u>Course Name</u>	<u>Credit Hours</u>
AFD 110	Automotive Maintenance and Light Repair	4 Credit Hours
AFD 210	Automotive Work Experience Seminar	2 Credit Hours
AFD 113	Automotive Chassis Systems Maintenance and Light Repair	7 Credit Hours
		<hr/> 13 Total Credit Hours

Careers Available in this Industry

Automotive Service Technician
Service Manager
Parts Manager
Automotive Instructor
Product Engineer

Course Requirements/Prerequisites

- 2.0/4.0 GPA
- Placement into CCS 098
- Check with your counselor for any school-specific course prerequisites

Automotive Technology – Year Two



Course Description: This program introduces students to the skills needed to inspect, maintain, and repair automobiles and light trucks with internal combustion engines. Instructional units include: Engine operation, testing and performance. Automotive electrical/electronic system operation, inspection, testing and repair. Cooling system inspection, testing and maintenance; Drive axle inspection and service. Second year students will have the opportunity to earn ASE student certifications. Students who successfully complete both years of the automotive program will have completed the coursework necessary for the Parkland College Maintenance and Light Repair Certificate.

Parkland College Dual Credit Available

<u>Course Number</u>	<u>Course Name</u>	<u>Credit Hours</u>
AFD 111	Automotive Powertrain Maintenance and Light Repair	7 Credit Hours
AFD 115	Basic Chassis Electrical Systems	7 Credit Hours
		<u>14 Total Credit Hours</u>

Careers Available in this Industry

Automotive Service Technician
Service Manager
Parts Manager
Automotive Instructor
Product Engineer

Course Requirements/Prerequisites

- Successful completion of Automotive Technology Year One ECCA Program
- 2.0/4.0 GPA
- Check with your counselor for any school-specific course prerequisites

Computer Networking – Year One



Course Description: This program will cover an introduction to microcomputer operating systems. Topics will include everyday care and maintenance of your PC, introduction to computer operation and software use, networking fundamentals, programming, and logic. Also included will be an introduction to local area networks, wide area networks, and the Internet. Program objectives will prepare the student to sit for the CompTIA Network+ and CompTIA A+ Essentials Certification Exams. Upon successful completion of a two-year Academy program, student will have earned two certificates (Microsoft Administration, Computer Foundations) at Parkland College.

Parkland College Dual Credit Available

<u>Course Number</u>	<u>Course Name</u>	<u>Credit Hours</u>
CIS 137	Basic PC Maintenance/OS Concepts	3 Credit Hours
CIS 112	Computing Essentials	4 Credit Hours
CSC 130	Introduction to Computer Networks	3 Credit Hours
CSC 133	PC Hardware and OS Maintenance	4 Credit Hours
		14 Total Credit Hours

Careers Available in this Industry

Network Administrator
Network Systems Engineer
IT Manager
Programmer
Network Service Technician

Course Requirements/Prerequisites

- 2.5/4.0 GPA preferred, but exceptions can be made with departmental approval
- CCS 099 Placement
- Check with your counselor for any school-specific course prerequisites

Computer Networking – Year Two



Course Description: Topics will include a comprehensive study of Linux user commands and utilities. Also included will be the management of a Windows workstation including networking, operating system, installation, file system, profiles and policies, security, protocols, internetworking, remote access, printing, and troubleshooting. Other topics will include how to configure, customize, and troubleshoot Microsoft Network Operating Systems in a single-domain environment. Upon successful completion of a two-year Academy program, students will have earned two certificates (Microsoft Administration, Computer Foundations) at Parkland College. Second-year students will have completed the listed objectives for the Microsoft Windows Workstation Certification Exam and the Microsoft Certified Technology Specialist Exam.

Parkland College Dual Credit Available

<u>Course Number</u>	<u>Course Name</u>	<u>Credit Hours</u>
CSC 128	Introduction to Linux	3 Credit Hours
CSC 151	MS OS Workstation	3 Credit Hours
CSC 153	MS OS Server	3 Credit Hours
CIS 152	Web Design 1	3 Credit Hours
		<u>12 Total Credit Hours</u>

Careers Available in this Industry

Network Administrator
Network Systems Engineer
IT Manager
Programmer
Network Service Technician

Course Requirements/Prerequisites

- 2.5/4.0 GPA preferred, but exceptions can be made with departmental approval
- Successful completion of Computer Networking, year one ECCA Program

Criminal Justice



Course Description: This program provides a history of the development, philosophy, and constitutional aspects of criminal justice procedures and agencies. Included will be an overview of the juvenile delinquency system and the United States correctional system. Other topics will be criteria for criminal acts, requisite mental state, criminal parties, causation and defenses, common law crimes, and application of the Illinois Criminal Code.

Parkland College Dual Credit Available

<u>Course Number</u>	<u>Course Name</u>	<u>Credit Hours</u>
CJS 101	Introduction to Criminal Justice	3 Credit Hours
CJS 104	Introduction to Corrections	3 Credit Hours
CJS 127	Juvenile Delinquency	3 Credit Hours
CJS 203	Criminal Law	3 Credit Hours
		12 Total Credit Hours

Examples of Careers in Criminal Justice

Police Officer
Lawyer
Crime Scene Investigator
Probation/Parole Officer
Department of Natural Resources Officer
Paralegal

Course Requirements/Prerequisites

- Seniors only unless you have approval of ECCA Director and Guidance Counselor
- 2.5/4.0 GPA preferred, but exceptions can be made with departmental approval
- Must finish first semester with C average or better to continue into second semester
- CCS 099 Placement

Health Professions - CNA

1st Semester

Orientation to Health Careers Course Description: The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice within the healthcare field. Course content will provide in-depth information regarding health occupations careers and trends, the occupational and educational opportunities and the educational, physical, emotional and attitudinal requirements of careers in the medical field.

Medical Terminology Course Description: The primary focus will be on developing both oral and written skills in the language used to communicate within health care professions.

Legal Issues in Healthcare Course Description: This course focuses on law as it pertains to health professionals; consent for medical services, invasion of privacy, malpractice, governmental regulations, actions for collecting patient bills, bioethical, and end of life issues.

2nd Semester

Certified Nursing Assistant Course Description: The Basic Nursing Assistant Training Program prepares students to care for patients under the direct supervision of a licensed nurse in a long-term care facility, a hospital, assisted living facility, or in the home. The course is approved by the Illinois Department of Public Health. After successful completion of the program, students are eligible to sit for the Illinois Nurse Assistants Certification exam.

Parkland College Dual Credit Available

<u>Course Number</u>	<u>Course Name</u>	<u>Credit Hours</u>
HCS 112	Orientation to Health Careers	2 Credit Hours
HCS 154	Medical Terminology	3 Credit Hours
HCS 174	Legal Issues in Healthcare	1 Credit Hour
NAS 111	Basic Nursing Assistant Training Program	6 Credit Hours
		<u>12 Total Credit Hours</u>

Examples of Careers in Healthcare

Doctors
Nurses
Physical Therapists
Athletic Trainers
X-Ray Technicians
Surgical Technologists

Course Requirements/Prerequisites

- 2.5/4.0 GPA
- Assessment: Placement into CCS 099, ENG 099, MAT 072
- Must have CPR card and background check completed before NAS 111 begins. CPR certification must be either American Heart Association Healthcare Provider or American Red Cross Professional Rescuer.
- Students will be able to sit for the state CNA licensing exam.

Emergency Medical Services



1st Semester

Orientation to Health Careers Course Description: The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice within the healthcare field. Course content will provide in-depth information regarding health occupations careers and trends, the occupational and educational opportunities and the educational, physical, emotional and attitudinal requirements of careers in the medical field.

Medical Terminology Course Description: The primary focus will be on developing both oral and written skills in the language used to communicate within health care professions.

Legal Issues in Healthcare Course Description: This course focuses on law as it pertains to health professionals; consent for medical services, invasion of privacy, malpractice, governmental regulations, actions for collecting patient bills, bioethical, and end of life issues.

2nd Semester

Emergency Medical Technician Course Description: The Emergency Medical Services-Basic course prepares the student to provide pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical services systems, roles and responsibilities of EMT-Basics, anatomy and physiology, medical emergencies, trauma, special considerations for working in the pre-hospital setting, and providing patient transport. This course prepares the student to take the State of Illinois EMT-Basic license examination.

Parkland College Dual Credit Available

<u>Course Number</u>	<u>Course Name</u>	<u>Credit Hours</u>
HCS 112	Orientation to Health Careers	2 Credit Hours
HCS 154	Medical Terminology	3 Credit Hours
HCS 174	Legal Issues in Healthcare	1 Credit Hour
EMS 110	Emergency Medical Services 1: EMT-B	5 Credit Hours
		<hr/>
		11 Total Credit Hours

Course Requirements/Prerequisites

- Seniors Only!!
- 2.5/4.0 GPA
- Assessment: Placement into CCS 099, ENG 099, MAT 072
- Students will be able to sit for the state exam upon graduation from high school and after reaching 18 years of age.

Manufacturing



Course Description: This program will include interpreting documentation for assembly and installation requirements; fundamentals of power transmission; basic and precision measuring tools; fasteners, tools, and torque specifications; bearing types and applications; seals; gaskets, and lubrication. It will also include introduction to theory and applications of fluid and pneumatic power transfer and control. Content will include the design process with practical and computer-aided evaluation of power transmission devices, including gears, shafts, belts, chains, and other components using SolidWorks software. Both first-year and second-year Manufacturing students will be enrolled in the courses listed below.

Parkland College Dual Credit Available

Course Number	Course Name	Credit Hours
WLD 111	Introduction to Welding	4 Credit Hours
MFT 113	Introduction to Hydraulics and Pneumatics	3 Credit Hours
MFT 110	Mechanical Assemblies	3 Credit Hours
CAD 113	Computer Aided Machine Design I	4 Credit Hours
		14 Total Credit Hours

Examples of Careers in Manufacturing

Machinists, including CNC machine operators and programmers

Welders

Electrical/Industrial/Mechanical Engineers

Industrial Maintenance Workers

Logistics Managers

Quality-Control Specialists

Course Requirements/Prerequisites

- 2.0/4.0 GPA
- CCS 098 Placement for first-year Manufacturing students
- Check with your counselor for any school-specific course prerequisites