

---

# CAREERVISION ACADEMIES – TUCKER CENTER

---

The Career Technical Education programs through the CareerVision Academies offer students the opportunity for dual credit courses allowing students to earn high school credit and college credit as they begin to focus on a specific career cluster. Classes are open to Junior and Senior students with good academic standing and who are on course to graduate. These career technical programs focus on preparing students for post-secondary education and for the student's selected career cluster. Job keeping skills such as attendance, interpersonal skills, communication skills, ethics in the workplace, and professional attire will be based on current business practice.

## Prerequisites for dual credit classes:

- ASSET reading score of 38 or better
- IWCC one-time registration fee of \$25
- Completion of high school courses and prerequisites as outlined by individual programs
- Junior or Senior status with good academic standing and on course to graduate

## Programs may require the following fees:

- Health screenings
- Student organization fees
- Uniform purchases
- Equipment fees

---

## Location of programs

---

- Tucker Center: 815 North 18<sup>th</sup> Street
  - Automotive Technology
  - Hospitality and Culinary Management
  - Information Technology Academy
  - Medical Health Science Academy
  - Networking Technology (CISCO Networking)
- Kanesville High School: 807 Ave G
  - Early Childhood Careers
- Educational Service Center: 12 Scott Street
  - Electronic Media Studies

---

## COURSE DESCRIPTIONS FOR 2007-08

---

---

### AUTOMOTIVE TECHNOLOGY TUCKER CENTER

---

#### Automotive Technology I

AUT 503 Brake Systems  
AUT 112 Shop Practices

#### Automotive Technology II

AUT 155 Engine Design & Systems  
MAT 743 Technical Math

Students interested in a career in Automotive Technology learn about all of the mechanical aspects of the automobile. These areas are:

- Engine Systems
- Drive Axles
- Automotive Electricity & Electronics
- Brake Systems
- Transmission & Clutch Systems
- Steering & Suspension Systems
- Fuel Systems, Ignition Systems
- Heating & Air Conditioning

#### Prerequisites:

- High School Power Mechanics if available
- High School Science with a grade of C or higher
- High School Math with a grade of C or higher

#### Additional Requirements:

- Purchase of safety glasses and one set of approved work clothes. *(These will be available for purchase at a reasonable cost.)*
- Safety and industry work practices are stressed at all times.
- Body piercings that create a safety hazard will not be allowed.
- Students must have a C grade or higher in Automotive Technology I to continue to Automotive Technology II.

#### Credits Available:

- Automotive Technology 1 will offer IWCC credit for AUT 503 Brake Systems. (3 IWCC Credit hrs) AUT 112 Shop Practices (2 IWCC Credit hrs)
- Automotive Technology 2 will offer IWCC credit for AUT 155 Engine Design & Systems. (2 IWCC Credit hrs) MAT 743 Technical Math (3 IWCC credit hrs)
- High School Credit: 3 credits

### Automotive Technology III

AUT 881 Automotive Lab I

### Automotive Technology IV

AUT 882 Automotive Lab II

This course gives the student hands-on experience building on the knowledge from Automotive Technology I and II. The students will work in a shop environment diagnosing and repairing problems on customer vehicles. This "live shop" situation gives students an understanding of workplace expectations. Students will work on projects as they become available in all of the areas of study. Engine systems, transmission and clutch systems, drive axle systems, electrical and electronics, fuel systems, ignition systems, brake systems, suspension and steering systems, and heating /air conditioning systems.

Prerequisite:

- Students must have a grade of C or better in Automotive Technology I – II.

Additional Requirements:

- Safety and industry work practices are stressed at all times.
- Body piercings that create a safety hazard will not be allowed.
- Students will need to purchase safety glasses and approved work clothes for this class. (*Glasses and clothes used for Auto I-II are acceptable*)

Credits Available:

- IWCC: AUT 881 lab (Auto Tech III) (3 Credit hrs)
- IWCC: AUT 882 lab (Auto Tech IV) (3 Credit hrs)
- High School: 3 credits

---

## **HOSPITALITY AND CULINARY MANAGEMENT TUCKER CENTER**

---

### HCM 137 Food Preparation I

Semester course, fall semester only

Food Preparation I introduces students to basic cooking principles. Topics include an overview of kitchen equipment, safety, sanitation and basic preparation methods that includes soups, salads, sandwiches, breakfast items, vegetables and starches. Students will be exposed to the hospitality industry through textbook work and customer experiences.

Prerequisite:

- Foods I at the high school with a "C" or better. (*Foods 2 highly recommended*)

Additional Requirements:

- Students will also enroll in HCM 100 Sanitation and Safety.
- Students must wear shoes covering the toes.
- Students will purchase a chef's coat and IWCC cap, costing approximately \$30.
- Good attendance

Credits Available:

- IWCC: HCM 137 Food Preparation I (3 Credit hrs)
- High School: 3 credits (must be enrolled simultaneously in HCM 100 Sanitation and Safety.)

### HCM 100 Sanitation and Safety

Semester course, fall semester only

Sanitation and Safety presents basic food safety and sanitation requirements as well as employee safety in a food service facility. Emphasis focuses on inherent problems in maintaining a safe food supply and strategies to provide a wholesome product. The course outlines National Institute for the Food Industry (NIFI) standards and state food sanitation regulations. Topics include food spoilage and microbiology; government regulations regarding purchasing, storage, preparation and service of wholesome food; requirements for equipment and physical plant sanitation; and guidelines for employee safety.

Prerequisite:

- Foods I at the high school with a "C" or better. (Foods II is highly recommended)

Additional Requirements:

- Students will enroll in HCM 137 Food Preparation I
- Students must wear shoes covering the toes.
- Students will purchase a chef's coat and IWCC cap, costing approximately \$30.
- Good attendance

Credits Available:

- IWCC: HCM 100 Sanitation and Safety (2 Credit hrs)
- This course is not a stand alone course. The high school credit is issued for simultaneous enrollment in Food Preparation I

## HCM 142 Food Production (Lab)

Semester course, spring semester only

Food Production (Lab) introduces students to basic skills and techniques of cooking. Students prepare food items in the various stations of the professional kitchen, rotating through the kitchen to practice proper use of equipment, safety, sanitation, and to produce basic quality menu items. Students prepare to serve the customer by practice in catering and dining room service. Some job shadowing experiences may be available.

Prerequisite:

- Completion of HCM 137 Food Preparation I and HCM 100 Sanitation and Safety with a grade of C or higher

Additional Requirements:

- Students must wear shoes covering the toes.
- Students will purchase a chef's coat and IWCC cap, costing approximately \$30.
- Good attendance

Credits Available:

- IWCC: HCM 142 Food Production (4 Credit hrs)
- High School: 3 Credit Hours

---

## **INFORMATION TECHNOLOGY ACADEMY TUCKER CENTER**

---

### Introduction to Computers (One Semester)

CareerVision IT Academy – Tucker Center

This one-semester course is dual credit through Iowa Western Community College within the Information Technology CareerVision Academy. Students develop skills in the use of word processing, spreadsheets, databases, and presentation software. This is a gateway course to several programs of study at Iowa Western Community College, including Agriculture, Business Management and Marketing, Communication Arts, Computer Studies, Engineering Technology, Health Science, Human Services, etc.

Prerequisites:

- Successful completion of Computer Use & Applications at the high school with a grade of "B" or better.

Credits Available:

- IWCC: CSC 110 Introduction to Computers (3 Credit hrs)
- High School: 3 credits

### Comprehensive Spreadsheet Applications (One Semester)

CareerVision IT Academy – Tucker Center

This one-semester course is dual credit through Iowa Western Community College within the Information Technology CareerVision Academy. Students will extend their knowledge in spreadsheet and databases as they develop skills necessary to pursue Microsoft Office Specialist certification. Spreadsheet Applications deals with functions, file management, importing data from the web, interactive web worksheets, database functions, and charting.

Prerequisites:

- Successful completion of Introduction to Computers CSC 110 – TC with a Grade of "B" or better. (IWCC dual credit course)

Credits Available:

- IWCC: BCA 152 Comprehensive Spreadsheet (3 Credit hrs)
- High School: 3 credits

### Comprehensive Webpage Design Software (One Semester)

CareerVision IT Academy – Tucker Center

This one-semester course is dual credit through Iowa Western Community College within the Information Technology CareerVision Academy. Comprehensive Webpage Design Software will allow students to extend their knowledge of Web Design, Web Site Management, HTML, CSS and other web languages. Students will explore expectations for a career as a web manager. Modern technologies and industry standard software packages, including Macromedia Dreamweaver, Macromedia Flash, Macromedia Fireworks will be used.

Prerequisites:

- Successful completion of Introduction to Web Site Design at the high school with a grade of "B" or better.

Credits available:

- IWCC: BCA 184 Comprehensive Web Design Software (3 Credit hours)
- High School: 3 credits

---

## MEDICAL HEALTH SCIENCE ACADEMY

### TUCKER CENTER

---

#### Health Science I-II

#### CareerVision Medical Health Science Academy

The first year curriculum includes allied health career exploration, health care professionalism, personal health and wellness, medical ethics, growth and development, applied anatomy and physiology, and introductory medical terminology. Students will receive two-year certification in CPR/First Aid Basic Life Support for Health Care Professionals through the American Heart Association and earn one semester hour of Dual Credit (IWCC PEH 130). Students will job-shadow with health care professionals at a local health care facility and must project a positive self-image according to the facility's policy regarding dress, body piercings, and tattoos. This includes personal integrity, honesty, positive interpersonal communication skills, and good attendance.

#### Prerequisites:

- A genuine interest in pursuing a career as a health care professional,
- Achievement of "C" in General Biology
- Current enrollment or completion of Human Biology (Anatomy and Physiology) with at least a "C".
- Advancement to second semester requires a first semester grade of at least a C (78%)

#### Additional Requirements:

- Become members of HOSA (*Health Occupations Student of America*) and participate in leadership, service learning, and competitive events activities on the local and state level.
- Attend the HOSA Spring Leadership Conference spring semester.
- Successfully complete a general health screen, which will include an immunization update (*current TB test and tetanus booster, if needed*).
- Background checks
- Pass a drug screen in order to remain in the class and participate in the required out-of-school clinical rotations
- Purchase hospital scrub uniforms and navy HOSA suit for conferences.

#### Credits available:

- IWCC: PEH 130 CPR/First Aid Basic Life Support (1 Cr hr)
- High School: 3 credits per semester

#### Health Science III-IV

#### CareerVision Medical Health Science Academy

This course provides students with the opportunity to earn two semester hours dual credit. Curriculum includes coursework in understanding the language of health care including a working knowledge of word roots, prefixes, and suffixes of commonly used terms related to anatomy, physiology, pathology, diagnostics, and therapies. Emphasis is placed on the correct spelling and pronunciation of the vocabulary.

#### Open to:

- Students who have completed Human Biology (Anatomy and Physiology) with at least a "B" OR Juniors and Seniors who have successfully completed Health Science I-II with a grade of "C" or better
- Students who are currently enrolled in, or have taken Human Biology (*Anatomy and Physiology*) with a grade of "C" or better

#### Requirements:

- Advancement to second semester requires a first semester grade of at least a C (78%)
- Successfully complete a general health screen, which will include an immunization update (current TB test and tetanus booster, if needed).
- Background checks
- Pass a drug screen in order to participate in internships and job-shadowing opportunities.
- Purchase hospital scrub uniforms and navy HOSA suit for conferences.
- Membership in HOSA (Health Occupations Students of America) is mandatory.
- Attendance at the HOSA Spring Leadership Conference is required.

#### Credit Available:

- IWCC: HSC 113 Medical Terminology TC (2 semester hours in Spring Semester)
- High School: 3 credits per semester

---

## NETWORKING TECHNOLOGY

### (CISCO NETWORKING ACADEMY PROGRAM)

### TUCKER CENTER

---

Networking Technology is a four-course program designed for individuals interested in developing skills in designing, installing, maintaining, and troubleshooting business computer networks. Students will work with network switches, routers and

patch cables. Each student will become a designer, installer and operator of networks. The curriculum is accessed over the Internet, which is updated constantly to ensure the students receive current information from leaders in the networking industry. The curriculum and assessments are accessed online.

### **CCNA1: NETWORKING BASICS (TC)**

NET 212 CISCO Networking

CCNA1: Networking Basics is a foundation course in understanding basic computer networking. In this course you will study the OSI model, industry standards, network topologies, IP addressing, networking components and basic network design.

Prerequisites:

- Successful completion of Algebra 1-2 with a 'C' or better
- Interest in Information Technology

Available Credit:

- IWCC: NET 212 CISCO Networking 3 Credit Hours
- High School: 3 Credits

### **CCNA2: ROUTERS & ROUTING BASICS (TC)**

NET 222 CISCO Routers

CCNA2: Routers & Routing Basics will allow you to gain a basic understanding of router and routing. You will practice setting up their configuration and how to manage routers to have a successful computer network environment.

Prerequisites:

- Successful completion of CCNA1: Networking Basics with a 'C' or better

Available Credit:

- IWCC: NET 222 CISCO Routers 3 Credit Hours
- High School: 3 Credits

### **CCNA3: SWITCHING BASICS & INTERMEDIATE ROUTING (TC) – NET 232 CISCO Switches**

CCNA3: Switching Basics & Intermediate Routing will allow you to work more efficiently with network routers in dealing with the shortage of IPv4 addresses and more complex routing protocols. You will practice on switches in setting up their configuration and how to manage switches to have a successful computer network design.

Open to: Seniors

Prerequisites:

- Successful completion of CCNA2: Routers & Routing Basics with a 'C' or better

Available Credit:

- IWCC: NET 232 CISCO Switches (3 Credit hrs)
- High School credit: 3 Credits

### **CCNA4: WAN TECHNOLOGIES (TC)**

NET 242 CISCO Wide Area Networks

CCNA4: WAN Technologies will allow you to work with a variety of Wide-Area Network technologies and gain a basic understanding of WANs. You will configure devices for different technologies, such as PPP, ISDN/DDR, and Frame Relay. You will learn how to effectively design a WAN, along with the proper standards and usage for each of these types of technologies.

Open to: Seniors

Prerequisites:

- Successful completion of CCNA3: Switching Basics & Intermediate Routing with a 'C' or better

Available Credit:

- IWCC: NET 242 CISCO Wide Area Networks (3 Credit hrs)
- High School credit: 3 Credits

---

## **EARLY CHILDHOOD CAREERS**

### **KANESVILLE**

---

Early Childhood Careers is designed for students who are interested in becoming child care providers, early childhood teachers, or elementary teachers. Students will investigate what is meant by "quality child care" and "best practices". Students will create teaching materials and experience working as volunteers in local child care centers and preschools. Students must project a positive self-image according to the facility's policy regarding dress, body piercings, and tattoos. This includes personal integrity, honesty, positive interpersonal communication skills, and good attendance.

### ECE 133 Child Health, Safety and Nutrition

Encompasses how to create and maintain a safe and healthy environment for young children. Proper nutrition for children and practices that contribute to the prevention of illness are examined. Included is a review of state laws and established policies related to health, nutrition, safety, and child abuse and neglect for licensed child care centers. (3/0)

Prerequisites:

- Students must have completed Child Development I at the high school with a grade of "C" or better. (*Child Development II is highly recommended.*)

The following must be completed prior to participating in on-site lab work:

- Complete Health Screen provided by IWCC at Alegent Hospital
- Immunization Update
  - Will include current DTP (*tetanus shot*) paid by student (*approx \$5*)
  - TB Skin Test -paid by student (*approx \$5*)
- Drug screen – with negative results-paid by IWCC
- Iowa Child Abuse Registry *Check (form completed in class)*
- IWCC Volunteer Statement (*form completed in class*)
- Good attendance is required

Available Credit:

- IWCC: ECE 133 Child Health, Safety and Nutrition (3 Credit hrs)
- High School: 3 Credits

### ECE 155 Curriculum and Activities I (4 college credits ~ Spring Semester)

An overview of best practices in early childhood education through planning and selection of resources, activities and materials. The emphasis is on the importance of the child as a learner through play in various educational settings. It includes an introduction to the teacher's role in planning and implementing curriculum and facilitating and supervising children.

Prerequisites:

- Must complete Child Health, Safety and Nutrition (ECE 133) with a grade of "C" or higher

The following must be completed prior to participating in on-site lab work:

- Complete Health Screen provided by IWCC at Alegent Hospital
- Immunization Update
  - Will include current DTP (*tetanus shot*) paid by student (*approx \$5*)
  - TB Skin Test -paid by student (*approx \$5*)
- Drug screen – with negative results-paid by IWCC
- Iowa Child Abuse Registry *Check (form completed in class)*
- IWCC Volunteer Statement (*form completed in class*)
- Good attendance is required

Available Credit:

- IWCC: ECE 155 Curriculum and Activities (4 Credit hrs)
- High School: 3 Credits

---

## **ELECTRONIC MEDIA STUDIES EDUCATIONAL SERVICE CENTER**

---

### MMS 111 Video Production

One semester dual credit course

Video production will introduce students to key components in the field of electronic media. Students will get experience in: camera composition, and television production, video production, digital video editing, news writing, reporting, electronic field production (EFP), and electronic news gathering (ENG). Students will write produce and edit multiple projects to gain knowledge in each of these areas. Students need to have good writing and reading skills and a basic understanding of computers.

Prerequisites:

- Juniors or Seniors will good academic standing on course to graduate
- Basic computer skills

Available Credit:

- IWCC: MMS 111 Video Production (3 Credit hrs)
- High School: 3 Credits

### Audio & Radio Production / Live Radio

One semester high school course

Radio/Audio production will introduce students to digital audio production, live radio, podcasts and basic audio engineering. Students will learn how to

make radio commercials, public service announcements, news, sports and entertainment segments for the radio and podcasts for the internet. Basic computer skills, good writing and reading skills are a must.

Prerequisites:

- Juniors or Seniors with good academic standing on course to graduate
- Open to Sophomores with good academic standing as space is available
- Basic computer skills
- Good reading and writing skills

Available Credit:

- High School: 3 Credits

### **Digital Photography**

One semester high school course, Fall semester only.

Students will learn the basics of digital photography, (composition, lighting and design). The class will concentrate on the digital format and using Photoshop, iPhoto and other digital imaging software to produce photos for print and the web (creating buttons, banners, images for the web). Students will also learn the basics of in-studio photography, some basic desktop publishing and will design a pamphlet and a magazine cover. Basic computer skills and creativity are a must.

Prerequisites:

- Juniors or Seniors with good academic standing on course to graduate

- Open to Sophomores with good academic standing as space is available
- Basic computer skills
- Good reading and writing skills

Available Credit:

- High School: 3 Credits

### **Multimedia for the Web**

One semester high school course, Spring semester only.

Video Production is highly recommended, but not required.

Students will be introduced to the basics of digital photography, digital video editing, streaming video, digital audio editing, streaming audio, podcasting, and flash animation. Students will also learn about the different file formats used on the web for video, audio, flash animation and still photography. Students will also be able to shoot, edit and use video and audio in electronic presentations and interactive DVD's.

Prerequisites:

- Juniors or Seniors with good academic standing on course to graduate
- Open to Sophomores with good academic standing as space is available
- Basic computer skills
- Good reading and writing skills

Available Credit:

- High School: 3 Credits