

## CAREER PROGRAMS IN ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS

CAREER CLUSTER	Arts, Audio/Video Technology and Communications	Arts, Audio/Video Technology and Communications	Arts, Audio/Video Technology and Communications
CIP	10.0301	10.0202	50.0406
PROGRAM TITLE	Graphic Communications	Radio and Television Broadcasting Technology/ Technician	Commercial Photography
<b>GROUP 1: ORIENTATION COURSES (Minimum Selection: One course from Group 1 or 2)</b>			
ORIENTATION COURSES	Career Exploration	Career Exploration	Career Exploration
	Introduction to Technology and Engineering (Industrial)	Introduction to Technology and Engineering (Industrial)	Introduction to Technology and Engineering (Industrial)
	Transportation Technology	Transportation Technology	Transportation Technology
	Production Technology	Production Technology	Production Technology
	Communication Technology	Communication Technology	Communication Technology
	Energy Utilization Technology	Energy Utilization Technology	Energy Utilization Technology
<b>GROUP 2: INTRODUCTORY COURSES</b>			
INTRODUCTORY COURSES	Foundations of Technology	Foundations of Technology	Foundations of Technology
	Beginning Graphic Communication	Beginning Audio/Visual Production	Beginning Photography
	Beginning Digital Graphics		
<b>GROUP 3: SKILLS COURSE (Minimum Selection 1)</b>			
SKILLS COURSE	Graphic Communications I	Audio/Video Production I	Commercial Photography I
	Commercial & Advertising Art I	Radio Production	
	Digital Graphics		
<b>GROUP 4: ADVANCED COURSES</b>			
ADVANCED COURSES	Graphic Communications II	Audio/Video Production II	Commercial Photography II
	Commercial & Advertising Art II	Social Media	
	Social Media	Drone Operation and Maintenance	
	Computer Gaming and Design		
	Mobile Applications		
	Emerging Technologies		
<b>GROUP 5: WORKPLACE EXPERIENCE COURSES</b>			
WORKPLACE EXPERIENCE	Graphic Communications Workplace Experience	Graphic Communications Workplace Experience	Graphic Communications Workplace Experience

A quality CTE program delivers all required elements of Illinois' definition of Size, Scope, Quality. CTE program elements include: a sequence of courses, each educational entity offering approved courses provides assurance that the course content includes at a minimum the State course description, meets the State's minimum requirements for course offerings by program, curriculum aligned to state recognized learning standards & industry standards, career pathway guidance, resources to support program/course delivery (licensed & qualified staff, appropriate facilities, adequate equipment, instructional materials, work-based learning experiences, special populations support services, an active affiliated CTSO chapter), articulation/dual credit agreements, documentation of state agency certification or licensing requirements for occupations regulated by law or licensure, & content which prepare students for reflective of current labor & opportunity for workplace experience or a structured capstone course. **Orientation courses are suggested to be taught at the prior-to-secondary or 9th grade levels. Introductory level courses are suggested to be taught at the 9th-11th grade level. Skill level courses are suggested to be taught at the 10th – 12th grade levels. Workplace Experiences Courses are suggested to be taught at the 12th grade level.**

**CAREER PROGRAMS IN ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS**

<b>Group</b>	<b>State Course Code</b>	<b>State Course Title</b>	<b>State Course Description</b>
Group 1	22151A001	Career Exploration	Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.
Group 1	21052A002	Introduction to Technology and Engineering (Industrial)	Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, material sciences, technological impact and occupations encompassed by that system.
Group 1	13052A001	Production Technology	Production Technology is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing, and servicing. In construction, students are exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures.
Group 1	11002A001	Communication Technology	Communication Technology is a course designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications.
Group 1	20001A001	Transportation Technology	Transportation Technology is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities, students are exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology.
Group 1	20101A001	Energy Utilization Technology	Energy Utilization Technology is a course designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study include conversion of energy, electrical fundamentals, solar energy resources, alternate energy resources such as wind, water, and geothermal; fossil fuels, nuclear power, energy conservation, and computer uses in energy technology. Students use laboratory experiences to become familiar with current energy technologies.
Group 2	21052A001	Foundations of Technology	The course employs teaching/learning strategies that enable students to build their own understanding of new ideas. It is designed to engage students in exploring and deepening their understanding of “big ideas” regarding technology and apply technological processes to solve real problems and develop knowledge and skills to design, modify, use and apply technology in the following areas: engineering design, manufacturing technologies, construction technologies, energy & power, information & communication technologies and emerging technologies.

**CAREER PROGRAMS IN ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS**

Group 2	11154A003	Beginning Graphic Communication	Beginning Graphic Communication course will teach students to use artistic techniques to effectively communicate ideas via illustration and other forms of digital or printed media. Topics covered may include concept design, layout, paste -up and techniques such as engraving, etching, silkscreen, lithography, offset, drawing, collage and computer graphics.
Group 2	10202A002	Beginning Digital Graphics	Beginning Digital Graphics course provides students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV /video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching.
Group 2	11051A003	Beginning Audio/Visual Production	Beginning Audio/Visual Production course provide students with the basic knowledge and skills necessary for television, video, film, and/or radio production. Camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within this course.
Group 2	11052A003	Beginning Photography	Beginning Photography course provides instruction in the use of conventional and digital cameras and laboratory film processing techniques. Topics covered in the course include composition and color dynamics; contact printing; enlarging; developing film and use of camera meters.
Group 3	11154A001	Graphic Communications I	Graphic Communications I provides learning experiences common to all graphic communications occupations. Instruction should include use of color, balance and proportion in design; three - dimensional visualization; sketching; design procedures; layout; selection of type styles; selection of appropriate drawing tools and media; and the use of the computer as a communication tool. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to the graphic arts industry.
Group 3	11155A001	Commercial & Advertising Art I	This course is designed to provide students with the skills needed for a career in the fields of advertising, commercial art, graphic design, web site development, and graphic illustrator. Students learn to apply artistic design and layout principles along with text, graphics, drawing, rendering, sound, video, and 2D/3D animation integration to develop various print, video, and digital products. Students use hardware and software programs to create, manipulate, color, paint, and layer scanned images, computer graphics, and original artwork. Students use hardware and software to capture, edit, create, and compress audio and video clips. Students use animation and 2D/3D hardware and software to create animated text, graphics, and images. Students apply artistic techniques to design and create advertisements, displays, publications, technical illustrations, marketing brochures, logos, trademarks, packaging, video graphics, and computer-generated media.
Group 3	10202A001	Digital Graphics	Digital Graphics course provides students with the opportunity to use the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Course topics include modeling, simulation, animation, and image retouching.
Group 3	11051A001	Audio/Video Production I	This course is designed to provide students with the skills needed for a career in the technical aspects of radio and television broadcasting. Instruction includes camera operations, basic audio and video editing, sound and lighting techniques, and sound mixing. Students learn the operation and maintenance of video recording equipment, video /digital cameras, microphones, computers, lighting/grip equipment, and other production equipment used in the video and audio production of

**CAREER PROGRAMS IN ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS**

			broadcast programs. Students also learn to use and maintain various types of audio recorders, amplifiers, transmitters, receivers, microphones, and sound mixers to record and broadcast radio programs.
Group 3	11107A001	Radio Production	Radio Production courses address practices related to the management and operation of a broadcasting station. Students are introduced to the radio industry, news reporting, and broadcast engineering. In these courses, students learn basic electricity and electronics, including all aspects of safety. Topics typically include operating audio boards, announcing, creating and producing audio scripts, and using digital audio software. Advanced courses may explore direct programming, on-air performance, and analysis of radio markets.
Group 3	11052A001	Commercial Photography I	This course provides students with experiences related to the photography field including conventional and digital cameras. Planned experiences give students a clear and concise introduction in the following areas: safety and proper housekeeping of the photo studio, photography of visual and communicative discipline, constructing a usable cardboard camera and develop printing, learning basic terms, understanding how film/paper work, proper exposure, working in the darkroom and knowing all necessary darkroom activities, safe use of photo chemicals, using dyes, and mounting and matting a completed photographic image. In addition, students are introduced to photographic terms, using light meters to measure natural and artificial lighting, using various lighting sources, manipulating basic backgrounds with different light sources, conducting shop operations, performing camera work, processing film and performing darkroom work on black and white and color film, printing photographic images, purchasing equipment and supplies, and the selection and use of cameras, film, lenses, accessories, tripods and filters
Group 4	11154A002	Graphic Communications II	Graphic Communications II provides learning experiences related to the tools, materials, processes and practices utilized in the printing industry. Instruction is provided in industrial safety; stencil preparation and duplicating equipment operation; print screen preparation and printing; machine typesetting; ink and color preparation; assembly, binding, and trimming operations; layout, digital paste up and copy preparation. In addition, the course provides the student with learning experiences in the use of cameras and photographic equipment, development and processing of photographic negatives and prints, negative stripping and related platemaking procedures, photocomposition, photoengraving, lithography, and offset presswork. Use of the computer in graphic arts occupations should be emphasized.
Group 4	11155A002	Commercial & Advertising Art II	This course continues to build on the concepts and skills introduced in Commercial and Advertising Art I. In addition to expanding on the activities explored in Commercial and Advertising Art I, students work in a project -based environment to create a variety of interactive online and CD/DVD-based products such as web sites, catalogs, publications, marketing materials, presentations, and educational/training programs. Students create dynamic web pages and sites using HTML, HTML editors, and graphic editors. Students create graphic sketches, designs, and copy layouts for online content. Instruction includes how to determine size and arrangement of illustrative material and copy, select style and size of type, and arrange layout based upon available space. Students learn how to capture and edit images, sound, and video, and combine them with text and animation. Instruction

**CAREER PROGRAMS IN ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS**

			includes client interviewing skills, product proposal development, and product presentation techniques. Students also learn how to create a product portfolio.
Group 4	11004A001	Social Media	Social Media courses expose students to various types of social media and how social media has influenced society. These courses emphasize the forms, functions, regulations, implications, and utilization of social media.
Group 4	10205A001	Computer Gaming and Design	Computer Gaming and Design courses prepare students to design computer games by studying design, animation, artistic concepts, digital imaging, coding, scripting, multimedia production, and game play strategies. Advanced course topics include, but are not limited to, level design, environment and 3D modeling, scene and set design, motion capture, and texture mapping.
Group 4	10206A001	Mobile Applications	Mobile Applications courses provide students with opportunities to create applications for mobile devices using a variety of commercial and open source software. These courses typically address the installation and modification of these applications, as well as customer service skills to handle user issues.
Group 4	21053A001	Emerging Technologies	Emerging Technologies courses emphasize students' exposure to and understanding of new and emerging technologies. The range of technological issues varies widely but typically include lasers, fiber optics, electronics, robotics, computer technologies (software engineering), Game Art and Design, CAD/CAM, communication modalities, and transportation technologies.
Group 4	11051A002	Audio/Video Production II	This course is for students who have completed Audio/Video Production I. In addition to expanding on the activities explored in the first course, students work in a team-based environment to create a variety of video and audio related broadcasts. Instruction includes single and multi-camera operations, linear and nonlinear video editing, production and post -production processes, animation graphics, sound mixing, multi-track production, audio editing, and special effects. Students learn how to use digital editing equipment and software to electronically cut and paste video and sound segments together, as well as how to regulate and monitor signal strength, volume, sound quality, brightness, and clarity of outgoing signals. This course also provides students with an understanding of the FCC and other governmental agencies regulations related to radio and television broadcasting.
Group 4	20099A001	Drone Operation and Maintenance	Drone Operation and Maintenance courses introduce students to the fundamentals of flying drones. Topics covered typically include FAA rules and regulations; types and capabilities of unmanned aircraft; drone piloting; aerial photography and videography; maintenance and preflight procedures; and aeronautical decision-making.
Group 4	11052A002	Commercial Photography II	This course provides learning experiences related to the tools, materials, processes and practices utilized in the photography industry including conventional and digital cameras. Instruction includes arranging photography sessions, selecting and using cameras, film, lenses, and accessories, calculating and setting shutter speed, preparing darkroom equipment, mixing chemicals, processing film both black and white and color, printing photographic images such as enlargements, sandwich negatives, and copying slides. In addition, Commercial Photography II provides students with a better understanding of photographic images and their application in design. Students shoot photographs specifically for design layouts and in the process develop a better visual language, enhancing photo

**CAREER PROGRAMS IN ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS**

			selection and editing skills. Students learn to visualize not only the look of the design, but also the structure and form of the photographs they shoot
<b>Group 5</b>	<b>11048A001</b>	<b>Graphic Communications Workplace Experience</b>	<b>Graphic Communications Workplace Experience</b> courses provide students with work experience in a field related to communication. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Group 5</b>	<b>11998A001</b>	<b>Broadcast Technology Workplace Experience</b>	<b>Broadcast Technology Workplace Experience</b> courses provide students with work experience in a field related to communication or audio/visual technology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
<b>Group 5</b>	<b>11098A001</b>	<b>Commercial Photography Workplace Experience</b>	<b>Commercial Photography Workplace Experience</b> courses provide students with work experience in a field related to audio/visual technology and/or film. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.