

**Video Communications I (36 weeks) PTV301**

This course is designed to introduce students to the concepts and equipment related to video production. Through a hands-on, project oriented approach, students will apply knowledge on filming, composition, linear/non-linear insert editing, lighting, storyboarding, audio and computer graphics/effects in order to communicate effectively using the video communication medium. A variety of instructional activities will be used so students can successfully apply the video communication concepts. Students will learn correct filming techniques and how to edit video and sound in order to communicate clearly. Students will also combine digital video footage with non-linear computer based editing in order to produce a video project of high quality. Computer graphics, transitions, and filter effects will also be incorporated into video productions. Students will explore the historical background, and career fields related to video/film production in order to decide if this is a career field they may be interested in.

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**Video Communications II (36 weeks) PTV401**

*PREPARATION: Video Communications I*

The Video Communications Seminar course will expand on the student's ability to apply concepts and skills learned in the first course. Students will continue to refine their video production skills while completing video communication projects at a quality level consistent with post secondary programs or entry level in the career field. Students will construct studio and/or on-site editing situations and assist others with the application of video communication concepts. Students will continue to refine their video communication skills by producing a wider variety of video productions for the school and community. Projects will emphasize the application of both basic and advanced computer based graphics and nonlinear computer based editing.

**Interactive Multimedia (36 weeks) PTI405Y**

The course is designed to provide students with instruction and skill in the use of technological resources and systems commonly found in the communications sector. The content includes, but is not limited to, digital photography, desktop publishing. The students work with digital photography, scanned photographs; and work extensively with Adobe Photoshop CS4 learning to do print manipulation and print design. Students will work with desktop publishing using Adobe InDesign CS4 learning how design, layout and print pages of student work. Instructional activities are provided in the technology education laboratory setting, using hands-on experiences with tools, equipment, and materials related to course content. Students will plan, design, and produce projects; develop solutions to problem solving activities, present ideas and information orally and in writing; and work cooperatively. *Students should have use of a digital camera; also it is suggested to take this class prior to taking Yearbook Production.*



*This brochure is a listing of a few technology classes offered at Lakenheath High School.*

# Career Technical Education



**Engineering Drawing/CAD (36 weeks)**

**Architectural Design/CAD (36 weeks)**

**App Arch Design/CAD (36 weeks)**

**Computer Animation (36 weeks)**

**Interactive Multimedia (36 weeks)**

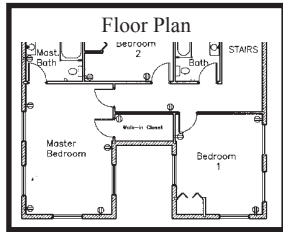
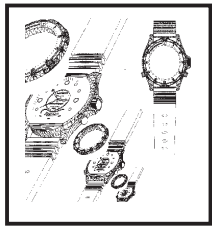
**Imaging Sfwr App (36 weeks)**

**Web Design (36 weeks)**

**Video Comm I (36 weeks)**

**Video Comm II (36 weeks)**

**Engineering Drawing/CAD (36 weeks) PTE303**  
 The engineering drawing/CAD (Computer Aided Drawing and Design) course is designed to provide beginning students with instruction and skills in drawing and designing fundamentals through the use of CAD workstations. The content includes, but is not limited to, orthographic projections, pictorial drawings, working drawings for construction, manufacturing and graphical solutions. It is strongly recommended that this course be taken by aspiring engineering students, architects, and drafting technicians. Students will be required to plan, design, and produce projects, present ideas and information orally and in writing, investigate content-related occupations, and work cooperatively. Skills learned in this class will prepare students to be successful in Architectural Drawing and Computer Animation.



**Architectural Design/CAD (36 weeks) PTE305**  
 The architectural drawing course is designed to provide students with instruction and skills in Computer Aided Drawing (CAD) fundamentals commonly used in the production of residential and commercial buildings. The course includes the study of the basic fundamentals of design, and the skills related to the production of architectural designs. The content includes, but is not limited to, designing interior and exterior elements of structures in both two-dimensional and three-dimensional representations. It is recommended that future architects, engineers, drafting technicians, interior decorators, and homeowners take this course. Students will be required to plan, design, and produce projects, present ideas and information orally and in writing, investigate content-related occupations, assume leadership roles and work cooperatively. *Students should have completed Engineering Drawing as preparation for Architectural Draw/CAD.*

**App Arch Design/CAD (36 weeks) PTE405**  
 Students will work in design teams on a realistic architectural design project. A variety of computer software programs will be used in developing a presentation of final project solutions. Students will be required to plan, design, and produce a project. The final projects will be presented to a review panel of peers for evaluation. Students will use the Internet as one of many tools in researching their project designs. This course is recommended for aspiring architects, designers, engineers, CAD technicians, and interior decorators. Students will be required to plan, design, and produce projects, develop solutions to problem solving activities, present ideas and information orally and in writing, investigate content-related occupations, assume leadership roles, and work cooperatively. *Students should have completed Engineering Drawing & Architectural Draw/CAD in preparation for Applied Architectural Drawing/CAD.*

**Computer Animation (36 weeks) PTI409**  
 This course is designed to provide students with the instruction and skills to create digital illustrations, modeling and animation, character animation, digital motion imagery, and game design. The content includes, but is not limited to, 3-D modeling using 3ds Max 2010, materials and textures, rendering, and computer animation. Students will also create, record, and edit digital audio, video, and photographic imagery. This course will utilize software programs to develop animation, morphing, 3-D graphics, and virtual reality projects. It is recommended that aspiring graphic designers, computer animators, electronic game designers, engineers, CAD technicians, architects, interior decorators take this course. Students will be required to plan, design, and produce projects, develop solutions to problem solving activities, present ideas and information orally and in writing, investigate content-related occupations, assume leadership roles, and work cooperatively. *Recommended for students to complete Engineering Drawing & Architectural Draw/CAD in preparation for Computer Animation.*

**Imaging Sfwr App (36 weeks) PTI307Y**  
 Imaging Software Applications provides students with the opportunity to develop professional level skills in imaging software using the Adobe CS4 programs. Instruction will be provided in a lab utilizing individualized instruction and electronic learning services. Students successfully completing this course will be to take at least one of the user or specialist exams for imaging software certification. Upon completion of the selected application, students will be able to demonstrate the following essential objectives: use imaging software to demonstrate a thorough understanding of file formats; using the work area and work spaces; importing, exporting and saving; working with sections; creating and using layers; using masks and channels; managing color, adjusting images; drawing and editing; painting; retouching; using actions; working with type; outputting to print; and outputting for the web. Analyze and evaluate solutions for project problems. *It is recommended for students to have taken Interactive Multimedia in preparation for this class.*



**Web Design (36 weeks) PTI407Y**  
 In this course, students will design and learn practical applications of a web site. This is a hands-on laboratory course designed to teach students the concepts, skills and processes involved in web site development. Students will work corroboratively to design, construct, and maintain an interactive web site based on a single theme or project idea utilizing Dreamweaver CS4 and other Adobe software programs to enhance their projects. Students will also demonstrate appropriate web site evaluative techniques. *It is recommended for students to have taken Interactive Multimedia or Engineer Drawing/CAD in preparation for Web Design.*