

INDUSTRIAL TECHNOLOGY DEPARTMENT

Automotive Mechanics

COURSE 735 -
REV 11.5.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A 13A	*6A 6.B *7.A 13A *7.B *7.C	*6A 6.B *7.A 7B 18.B *7.C 12C 12D 13A 13B		
CONTENT	*Safety *Following Directions	*Engine theory **Tools & use Shop Safety	Wheels Tires Lubrication systems Starting & Charging	Cooling systems Body finishes Under car inspection	Under hood inspection Chassis Suspensions
SKILLS	*Pass safety exams and questions Demonstrate safe working habits	*Identify engine parts *Identify and demonstrate proper use of common mechanics tools	*R & R wheels *Mount & balance tires *Rotate tires *Patch & repair tires *Oil change and lube chassis *Test, troubleshoot & repair starting & charging systems	*Flush & service cooling system components *Wash, wax & maintain auto body *Complete under car inspection sheets	*Complete under hood inspection sheets *Examine and suspension & chassis components *R & R common suspension & Chassis parts
ASSESSMENT	*Teacher Observations *Student worksheets	*Teacher Observations *Student worksheets *Individual assignments *Individual projects *Group projects			

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Automotive Mechanics

COURSE 735 -
REV 11.5.03

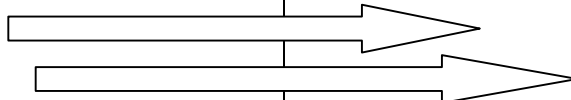
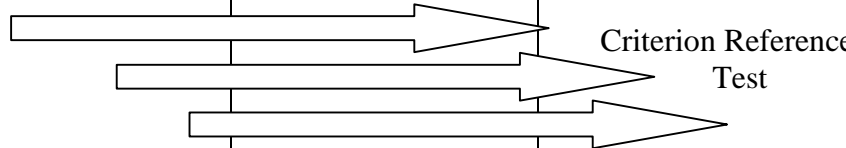
	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*6A 6.B *7.A 7B 18.B *7.C 12C 12D 13A 13B				
CONTENT	*Brake systems *Electrical Fundamentals	*Ignition systems *Drive Trains *Computer Controls	*Steering systems *Exhaust systems	*Automotive careers *ASE certification *Engine mechanics *Engine Overhaul	*Fuel Systems
SKILLS	*Inspect brake systems *R & R brake parts & components	*analyze ignition performance *R & R ignition parts *R & R drive shafts & U joints / CV Joints *Use computer scanner to access trouble codes R & R sensors & servos	*Inspect & evaluate steering components *R & R tie rod ends & idler arms *Inspect exhaust components *R & R mufflers, pipes & converters	*List classifications of automotive careers *Describe ASE certification processes *Tare down, analyze, measure and reassemble automobile engine	*Identify fuel system components *R & R fuel filters, pumps and lines
ASSESSMENT	*Teacher Observations *Student worksheets	*Teacher Observations *Student worksheets *Individual assignments *Individual projects *Group projects			

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Automotive Technology

COURSE 736 -
REV 12.3.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A 13A	*6A 6.B *7.A 13A *7.B *7.C	*6A 6.B *7.A 7B 18.B *7.C 12C 12D 13A 13B		
CONTENT	*Shop Safety *Following Directions	*Hoists *Jacks *Tools *Specifications / databases	*Four wheel alignment *Tires & Wheels *Balancing	*Electrical Theory *Circuits *Electrical Troubleshooting	*Brake systems *Brake Service & Repair
SKILLS	*Pass safety exams and questions Demonstrate safe working habits	*Set & use jacks & hoists safely *Locate information from texts and data bases	*Analyze alignment conditions *Perform 4-wheel alignment *Balance tires	*Read & interoperate wiring diagrams *Locate defective parts and components in an electrical system *Diagnose electrical problems	*Analyze brake systems *Perform brake repairs and service. *Machine rotors and drums *Replace defective brake parts
ASSESSMENT	*Teacher Observations *Student worksheets	*Teacher Observations *Quizzes *Student worksheets *Individual shop work *Group shop work			

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Automotive Technology

COURSE 736 -
REV 12.3.03

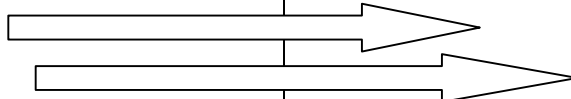
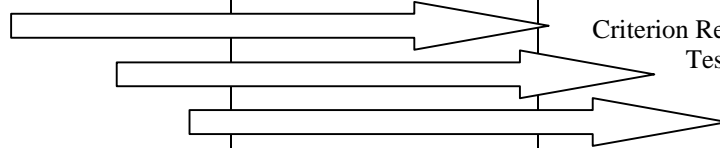
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	
STANDARDS	*6A 6.B *7.A 7B 18.B *7.C 12C 12D 13A 13B					
CONTENT	*Suspension Systems *Starting & Charging	*Ignition systems	*Fuel Systems *Drive Trains *Drive axles *Transmission Service	*Cooling Systems *Tire Service *	*Automotive Careers *ASE certification	
SKILLS	*Analyze suspension system parts *Diagnose & repair suspension systems *Test battery condition *Test automotive charging systems	*Identify ignition parts and describe how they function as a system *Diagnose, repair & maintain ignition systems. *Troubleshoot ignition systems	*Diagnose and repair fuel system problems and defective parts. *Analyze drive train problems and repair as necessary	*Test and repair cooling systems *Flush & recondition cooling system fluids *Change wheels and tires *	*Explain pay and flat rate schedules *Describe ASE certification and explain how it can advance one's career.	
ASSESSMENT	*Teacher Observations *Student worksheets *Quizzes *Individual assignments *Individual projects *Group projects					Criterion Reference Test

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Building Trades

COURSE 738 -
REV 12.2.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A 13A	*6A 6.B *7.A 13A *7.B *7.C	*6A 6.B *7.A 7B 18.B *7.C 9A 9B 12C 12D 13A 13B		
CONTENT	*Safety *Following Directions	* Tools *Hand Tools	*Portable Power Tools *Print Reading *Building Codes *Building Materials	*Estimating *Stationary Power *Fastening systems & Gluing *Cabinet & Counter construction	*Interior finishes *Site Development *Foundations /Forms & Concrete *Doors & Trim
SKILLS	*Pass safety exams and questions *Demonstrate safe working habits	*Use common hand tools skillfully and safely *Identify and demonstrate use of common layout tools	*Use portable power tools skillfully and safely *Interperate prints and plans *Identify characteristics of common building materials	*Estimate construction costs using multiple methods *Set up & use stationary power tools safely and skillfully *Construct cabinets and countertops	*Apply stains and finishes *Use transit and level *Describe the process and components in a foundation system *Install doors and windows and trim materials
ASSESSMENT	*Teacher Observations *Student worksheets	*Teacher Observations *Student worksheets *Individual assignments *Individual projects *Group projects			

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Building Trades

COURSE 738 -
REV 12.2.03

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*6A 6.B *7.A 7B 18.B *7.C 9A 9B 12C 12D 13A 13B				
CONTENT	*Welding & Metal cutting *Employment *Framing	*Stair Construction *Plumbing *Electrical systems	*HVAC	*Sheathing *Roofing *Exterior Finishes	*Energy conservation
SKILLS	*Use an arc welder *Use a MIG welder *Set up & use an acetylene torch *Frame common wall, floor, and roof components	*Construct scale and sample stairs *Assemble plumbing components *Wire common household circuits	*Form and assemble duct components	*Layout and apply shingles *Apply exterior paints and stains	*Identify energy saving processes and components in a home design
ASSESSMENT	*Teacher Observations *Student worksheets	*Teacher Observations *Student worksheets *Individual assignments *Individual projects *Group projects			

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Computer Repair

COURSE 715 -
REV 11.12.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*13A	*6A 6.B *7.A 13A *7.B *7.C	*6A 6.B *7.A 7B 18.B *7.C		
CONTENT	*Safety *Following Directions	*Microcomputer fundamentals *PC Hardware	*System Boards *I / O devices	*Video displays Mass Storage systems	*Printers
SKILLS	*Pass safety exams and questions Demonstrate safe working habits	**Identify connectors, cables & uses Disassemble & reassemble a PC *R & R & test power supplies *R & R FDD's *R & R CD ROM drives *R & R HDD's	*R & R CPU's *R&R mother boards *Examine & change BOIS settings *Examine & set I/O addresses	*Explain video display technologies *Expalin how storage devices are organized and work *Partition HDDs *Format HDDs	*Set up & configure printers and drivers *Maintain & service printers *Expalin printer technologies
ASSESSMENT	*Teacher Observations *Student worksheets	*Teacher Observations of lab activities *Student worksheets *Individual assignments *Study guides *Quizzes	*Exams	*Exams	 Criterion Reference Test

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Computer Repair

COURSE 715 -
REV 11.12.03

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*6.A *13A	*6A 6.B *7.A 7B 18.B *7.C 13A 13B			
CONTENT	*Operating systems	*Windows 9x *Network Fundamentals *Data communications	*Windows ME *Windows 2000 Multimedia	*Windows XP *Preventive Maintenance	*Diagnostics
SKILLS	*Describe operating system fundamentals	*Install & set up windows operating systems *	*Set up user security *Set up & configure Audio cards Video capture Streaming video	*Use system tools	*Trouble shoot PC problems in both hardware and software *Correct diagnosed problems in PCs
ASSESSMENT	*Teacher Observations of lab activities *Student worksheets *Individual assignments *Study guides *Quizzes		*Exams		Criterion Reference Test

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

COURSE 748/749 -
REV 12.05.03

Interrelated Cooperative Education (ICE)

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*13A	*6A 6.B	*18B		
CONTENT	*Class organization *Following Directions	*Career Clusters *Finding & applying for jobs *Employee responsibilities Employer responsibilities	*Workplace ethics *Attitudes *Skills USA / VICA *Communication skills	*Time management *Skills USA Test preparation	*Technology & Industry *Leadership & job demonstration *Community involvement
SKILLS	*Student responsibilities *Develop personal commitment to employment	*Classifications of jobs Occupational outlook *Securing a Job *Recognizing employer expectations	*Honesty *Attitude *Participation in Skills USA competitions *Development of leadership skills	*Methods to organize ones life *Practice and preparation for Skills USA competitions	* *Job demonstration competitions *Community service projects
ASSESSMENT	*Teacher Observations *Student worksheets	*Teacher Observations of student activities *Student worksheets *Individual assignments *Study guides *Quizzes *Cooperative group assignments *Exams			Criterion Reference Test

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Interrelated Cooperative Education (ICE)

COURSE 748/749 -
REV 12.05.03

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*6.A 7A 7B *6B	*6A 6.B *7.A 7B 18.B *7.C 13B			
CONTENT	*Life skills / financial management *	*Applications *Forms	*Legal responsibilities *Job skills demonstrations	*Leaving employment	*Employer banquet
SKILLS	*Develop personal budgeting *Complete taxes / State /Federal *Compare insurance benefits Health Auto Life *Determine housing costs *Compare and analyze credit & installment costs	*Filling out applications for : College Trade schools Union membership	*Civil law *Criminal law *Ethical conduct *Student demonstrations of specific job related skills	*Job termination *Job resignation	*Public speaking *Appreciation award presentations to employers
ASSESSMENT	*Teacher Observations of student activities *Student worksheets *Individual assignments *Study guides *Quizzes *Cooperative group assignments *Exams				Criterion Reference Test

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Material Processing

COURSE 714 -
REV 9.15.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A	*6.B 9.A *7.A 9.B *7.B *7.C	*7.A 9.A 13.B *7.B 9.B *7.C 13.A	⇒ ⇒	⇒ ⇒
CONTENT	Safety Measurement Following directions	Measurement Use of basic layout tools Use of hand cutting tools Basic operations of power tools & machines Assembly Quality control Applying finishing	Safe use of power tools Reading plans Assembly procedures Precision & quality control Manufacturing processes Cutting & forming metal	Synthetics and plastics	
SKILLS	Measure to 1/4" Measure to 1/8" Follow directions Read & interpret plans	Measurement Use of basic layout tools Use of hand cutting tools Use drill press Use scroll saw Use of chop saw Gluing and clamping Quality control Band saw use Applying finishing	Use jigs and fixtures Use jointer Use screws and fasteners Ripping on the table saw Crosscutting on the radial arm saw		
ASSESSMENT	Teacher observations Student worksheets Student drawings	Individual projects Group projects Safety quizzes			Criterion reference test

NOTES: The majority of the instructional time of this course is spent developing student skill & knowledge by constructing projects and demonstrating processes.

INDUSTRIAL TECHNOLOGY DEPARTMENT

Material Processing

COURSE 714 -
REV 9.15.03

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS					
CONTENT	Safety Following written procedures Interpreting plans Construction projects Demonstrating processes	Drawing or modifying plans Writing procedure lists Cost analysis Safe use of machines Jointing procedures Portable power tools	Safe use of power tools Reading plans Assembly procedures Precision & quality control Metalworking processes Manufacturing processes	Cutting & forming metal Synthetics and plastics Career exploration	
SKILLS		Plate jointing Dovetails Use of Surfacer Precision & quality Routers sanders etc. Wood & metal turning	Welding Metal cutting Cutting feeds & speeds Using metal sheers & breaks	Rotational casting Injection molding Vacuum forming	
ASSESSMENT	Teacher observations Student worksheets Student drawings	Individual projects Group projects Tests & quizzes Safety quizzes			Criterion reference test

NOTES: The majority of the instructional time of this course is spent developing student skill & knowledge by constructing projects and demonstrating processes.

INDUSTRIAL TECHNOLOGY DEPARTMENT

Mechanics & Technology

COURSE 710 -
REV 10.15.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A	*6.B 9.A *7.A 9.B *7.B *7.C	*7.A 9.A 13.B *7.B 9.B 18.B *7.C 13.A 13.B 12.C 12.D 13.A		
CONTENT	*Safety *Following directions *Measuring to 1/4" *Basic drafting tool use	*Basic hand tool use *Drafting *Measuring to 1/8" *Technical reading	*Cooperative learning *Pneumatics module *Mechanical mod *Mill (CNC) *Digital imaging *CAD processes *Multi-view drawings		*Reading plans *Quality control *Plan sequence and procedures *Product Assembly *Product finishing
SKILLS	*Follow directions *Measure to 1/4" *Board drafting skills	*Read technical materials *Follow directions *Use plans and diagrams *Measure to 1/8" *Use of drafting tools *Use of basic woodworking tools	*Read & follow directions *Solve problems cooperatively Manipulate & adjust tools and mechanisms *Computer operation Analyze & predict *Demonstrate physics properties *Explain force & energy concepts		*Layout processes *Use coping saw *Use jig saw *Use pneumatic nailers *Apply finishes *Use adhesives correctly *Use sanders (hand & power)
ASSESSMENT	*Teacher Observations of applications *Student worksheets *Student drawings	*Teacher Observations *Individual assignments *Individual projects *Group projects			

NOTES: The majority of the course content is presented in cooperative group instruction using a modular instructional approach

INDUSTRIAL TECHNOLOGY DEPARTMENT

Mechanics & Technology

COURSE 710 -
REV 10.15.03

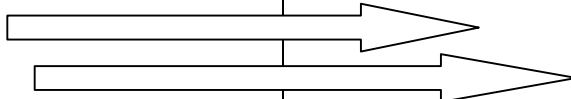
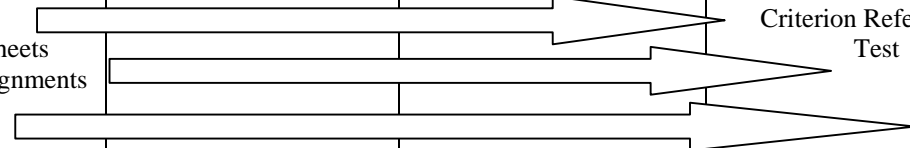
	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*7.A 9.A 13.B *7.B 9.B 18.B *7.C 13.A 13.B 12.C 12.D 13.A				
CONTENT	*Cooperative learning *Small Gas Engines theory *House wiring module. *Construction concepts *Electricity module *CNC router project *Rocket construction				
SKILLS	*Read & follow directions *Manipulate tools and materials *Computer programming and operations *Analyze & predict *Demonstrate physical properties *Circuit Design				
ASSESSMENT	*Student Observations *Individual assignments *Individual projects *Group projects *Quizzes				

NOTES: The majority of the course content is presented in cooperative group instruction using a modular instructional approach.

INDUSTRIAL TECHNOLOGY DEPARTMENT

Network Technician

COURSE 729 -
REV 12.05.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*13A	*6A 6.B *7.A 13A *7.B *7.C	*6A 6.B *7.A 7B 18.B *7.C		
CONTENT	*Class organization *Safety *Following Directions	*DC circuits / Measurements *AC circuits / Measurements	*Series circuits *Parallel circuits	*R, C, L Circuits	*Power supplies *Amplifiers
SKILLS	*Pass safety exams and questions Demonstrate safe working habits	*Measure DC amps *Measure DC volts *Measure Ohms *Measure AC amps *Measure AC volts	*Construct DC series circuits *Construct DC parallel circuits	*Construct R,C,L circuits *Measure impedance	*Construct AC to DC rectifier circuits *Construct an "A" class amplifier
ASSESSMENT	*Teacher Observations *Student worksheets	*Teacher Observations of lab activities *Student worksheets *Individual assignments *Study guides *Quizzes	*Exams	*Exams	 Criterion Reference Test

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Network Technician

COURSE 729 -
REV 12.05.03

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*6.A *13A	*6A 6.B *7.A 7B 18.B *7.C 13A 13B			
CONTENT	*Binary Logic Gates *Registers & Memories *Datacom Fundamentals	*Data Transmissions *Protocols *	*Wide area networks *Network management		*Telephone systems
SKILLS	*Construct logic circuits *Construct CT network circuits using RJ45 & UTP	*Construct and configure local area networks *Use various protocols to set up networks	Use "IP" addresses to build networks that connect to internet		*Set up servers to configure and provide network resources
ASSESSMENT	*Teacher Observations of lab activities *Student worksheets *Individual assignments *Study guides *Quizzes		*Exams	*Net plus practice exams	Criterion Reference Test

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

COURSE 726 -
REV 12.03.03

Production Technology (H)

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A	*6.B 9.A *7.A 9.B *7.B *7.C	*7.A 9.A 13.B *7.B 9.B *7.C 13.A		
CONTENT	Safety Measurement Following directions	*Print reading *Use of layout tools *Use of cutting tools *Precision measurements *Metric measurements *CNC processes *Master Cam design	Machine processes Material removal *Quality control *Cutting & forming metal	*Joining materials	
SKILLS	*Measure to 1/16" *Follow directions *Read & interpret plans	*Measure to .0001" *Use of layout tools *Use drill press *Use power saws *Quality control *Band saw use *Master Cam programming	*Design of jigs and fixtures *Use lathes, mills, surface grinders, *Use breaks & shears	*Welding – MIG – Stick Gas *Gluing & clamping	
ASSESSMENT	Teacher observations Student worksheets Student drawings	Individual projects Group projects Safety quizzes			Criterion reference test

NOTES: The majority of the instructional time of this course is spent developing student skill & knowledge by constructing projects and/or demonstrating processes. Students rotate through activities and therefore not all individuals experience the same instruction simultaneously.

INDUSTRIAL TECHNOLOGY DEPARTMENT

COURSE 726 -
REV 12.03.03

Production Technology (H)

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	
STANDARDS						
CONTENT	Machine processes Material removal *quality control Quality control *Manufacturing processes Cutting & forming metal	*Advanced CNC processes *Joining materials *Casting & forming materials *Molding materials *CAD/CAM file conversions	*Product design *Manufacturing Processes	*Material Handling *Mass Production *Company organization *Product production		
SKILLS	*Design of jigs and fixtures *Use lathes, mills, surface grinders, *Use breaks & shears	*Master Cam operation *Project design		*Mass production *Company organization * Robotics *Product production		
ASSESSMENT	Teacher observations Student worksheets Student drawings	Individual projects Group projects Tests & quizzes Safety quizzes			Criterion reference test	

NOTES: The majority of the instructional time of this course is spent developing student skill & knowledge by constructing projects and/or demonstrating processes. Students rotate through activities and therefore not all individuals experience the same instruction simultaneously.

INDUSTRIAL TECHNOLOGY DEPARTMENT

COURSE 725 -
REV 12.03.03

Production Technology (R)

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A	*6.B 9.A *7.A 9.B *7.B *7.C	*7.A 9.A 13.B *7.B 9.B *7.C 13.A		
CONTENT	Safety Measurement Following directions	*Print reading *Use of layout tools *Use of cutting tools *Precision measurements *Metric measurements	Machine processes Material removal *Quality control *Cutting & forming metal	*CNC processes *Joining materials *Molding materials	
SKILLS	*Measure to 1/16" *Follow directions *Read & interpret plans	*Measure to .0001" *Use of layout tools *Use drill press *Use power saws *Quality control *Band saw use	*Design of jigs and fixtures *Use lathes, mills, surface grinders, *Use breaks & shears	*Welding – MIG – Stick Gas *Gluing & clamping	
ASSESSMENT	Teacher observations Student worksheets Student drawings	Individual projects Group projects Safety quizzes			Criterion reference test

NOTES: The majority of the instructional time of this course is spent developing student skill & knowledge by constructing projects and/or demonstrating processes. Students rotate through activities and therefore not all individuals experience the same instruction simultaneously.

INDUSTRIAL TECHNOLOGY DEPARTMENT

COURSE 725 -
REV 12.03.03

Production Technology (R)

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS					
CONTENT	Machine processes Material removal *quality control Quality control *Manufacturing processes Cutting & forming metal	*CNC processes *Joining materials *Casting & forming materials *Molding materials	*Product design *Manufacturing Processes	*Material Handling *Company organization *Product production	
SKILLS	*Design of jigs and fixtures *Use lathes, mills, surface grinders, *Use breaks & shears	*Master Cam operation *Project design		*Mass production *Company organization *Robotics	*Product production
ASSESSMENT	Teacher observations Student worksheets Student drawings	Individual projects Group projects Tests & quizzes Safety quizzes			Criterion reference test

NOTES: The majority of the instructional time of this course is spent developing student skill & knowledge by constructing projects and/or demonstrating processes. Students rotate through activities and therefore not all individuals experience the same instruction simultaneously.

INDUSTRIAL TECHNOLOGY DEPARTMENT

Technical Design

COURSE 713 -
REV 10.15.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A	*6.B 9.A *7.A 9.B *7.B *7.C	*7.A 9.A *7.B 9.B *7.C	*18.B	
CONTENT	*Safety *Following directions *Measuring to 1/8" *Basic drafting tool use	*Use of basic drafting tool use *Measuring to 1/16" *Basic drafting skills and concepts *2 dimensional single view drawings Simple multi-view drawings	*Orthographic projection techniques *Complex multi view drawings	* *Introduction to CAD concepts *DC electricity principles	*
SKILLS	*Follow directions *Measure to 1/8" *Board drafting skills	*Read technical materials *Follow directions *Measure to 1/16" *Accurately draw horizontal, vertical, angular and circular lines with drafting instruments. *Construct three view drawings	*Development of complex three view drawings including straight, angular and rounded surfaces. (No auxiliary views) *Linetypes *Centering drawings	*Automotive Circuit design and switching *Cooperative problem solving *Use of Multi-meters *Use of Electronic workbench Basic CAD operations / draw and modify 2-d objects	
ASSESSMENT	*Teacher Observations *Student worksheets *Student drawings	*Teacher Observations *Individual assignments *Individual projects *Performance quizzes and tests			Criterion Reference Test

INDUSTRIAL TECHNOLOGY DEPARTMENT

Technical Design

COURSE 713 -
REV 10.15.03

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*6.B 9.A *7.A 9.B *7.B *7.C	*6.B 9.A *7.A 9.B *7.B 8D *7.C			
CONTENT	*Use of precision conventional drafting tools *Scaling *Metric measurements *Pictorial drawings *Basic electronic concepts *Electricity trainer	*Complex pictorial drawings Introduction to architecture A-C circuit design	*Advanced Orthographic projection concepts *Residential design *Intermediate CAD concepts Electronic application		
SKILLS	*Centering pictorial drawings * Oblique drawings *D-C circuit design *Electronic components and D-C circuit theory *Read & follow directions *Plotting of drawings to scale	*Oblique & Isometric drawings including angles including holes including curves *House wiring Basic architectural drafting	*Auxiliary views *Sectional views * *Use of Electronic workbench *House plans	Electronic kit construction	
ASSESSMENT	*Teacher Observations *Individual assignments *Individual projects *Performance quizzes and tests				Criterion Reference Test

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Technical Drafting (H)

COURSE 734 -
REV 12.2.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A 13A	*6A 6.B *7.A 13A *7.B *7.C	*6A 6.B *7.A 7B 18.B *7.C 9A 9B 12C 12D 13A 13B		
CONTENT	*Drafting Concepts *Computer introduction File management Operating systems *Drafting careers *AutoCad basics	AutoCad operation *Draw functions *Modify Functions *Dimension Functions *Multi-view drawings *3-D Wireframes	*Orthographic Projection *Detail Views *Sectional Views *Surface modeling	*Auxiliary Views *Patterns & Developments *Assembly drawings Solid Modeling	*Architectural Framing & sections *Architectural modeling
SKILLS	*Drawing purpose & method selection *Basic computer skills *Single view AutoCad drawings	*2-D single view drawings *Multi-view drawings *3-D Visualization *User Coordinate Systems	*layers *Projection methods *Use a variety of surfacing techniques & practices *Drawing organization by : color layer linetype	*3-D solids *User Coordinate systems *3-D visualization *Use of Mechanical Desktop	*Architectural standards *Construct an architectural model (small & simple)
ASSESSMENT	*Teacher Observations *Student drawings	*Teacher Observations *Individual drawing assignments			

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Technical Drafting (H)

COURSE 734 -
REV 12.2.03

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*6A 6.B *7.A 7B 18.B *7.C 9A 9B 12C 12D 13A 13B				
CONTENT	*Threads & Fasteners *Floor plans *Elevations *Architectural Desktop	*Cams & Gears *Architectural details *Perspectives *Design & Planning	*Independent project Architectural or Mechanical theme	*Solid Modeling *Demonstration models	*Software Exploration
SKILLS	*National Thread standards *Draw Floor plans *Draw Elevations *3-D Architectural developments	*Cam motion developments *Architectural presentation drawings *Problem solving	*Architectural or mechanical design problem *Graphic communication *Drawing selections	*Structural analysis & design *Mechanical desktop software	
ASSESSMENT	*Teacher Observations *Student drawings				
		*Individual projects & designs *Group projects			Criterion Reference Test

INDUSTRIAL TECHNOLOGY DEPARTMENT

Technical Drafting (R)

COURSE 733 -
REV 12.2.03

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STANDARDS	*6.A 13A	*6A 6.B *7.A 13A *7.B *7.C	*6A 6.B *7.A 7B 18.B *7.C 9A 9B 12C 12D 13A 13B		
CONTENT	*Drafting Concepts *Computer introduction File management Operating systems *Drafting careers *AutoCad basics	AutoCad operation *Draw functions *Modify Functions *Dimension Functions *Multi-view drawings	*Orthographic Projection *Detail Views *Sectional Views	*Auxiliary Views *Patterns & Developments *Assembly drawings *3-D Wireframes	*Architectural Framing & sections *Surface modeling *Architectural modeling
SKILLS	*Drawing purpose & method selection *Basic computer skills *Single view AutoCad drawings	*2-D single view drawings *Multi-view drawings	*layers *Projection methods *Drawing organization by : color layer linetype	*3-D wireframing *User Coordinate systems *3-D visualization	*Architectural standards *Use a variety of surfacing techniques & practices *Construct an architectural model (small & simple)
ASSESSMENT	*Teacher Observations *Student drawings	*Teacher Observations *Individual drawing assignments			

NOTES:

INDUSTRIAL TECHNOLOGY DEPARTMENT

Technical Drafting (R)

COURSE 733 -
REV 12.2.03

	JANUARY	FEBRUARY	MARCH	APRIL	MAY
STANDARDS	*6A 6.B *7.A 7B 18.B *7.C 9A 9B 12C 12D 13A 13B				
CONTENT	*Threads & Fasteners *Floor plans *Elevations *Architectural Desktop	*Cams & Gears *Architectural details *Perspectives	*Independent project Architectural or Mechanical theme	*Solid Modeling *Demonstration models	*Software Exploration
SKILLS	*National Thread standards *Draw Floor plans *Draw Elevations *3-D Architectural developments	*Cam motion developments *Architectural presentation drawings	*Architectural or mechanical design problem *Graphic communication *Drawing selections	*Structural analysis & design *Mechanical desktop software	
ASSESSMENT	*Teacher Observations *Student drawings				
		*Individual projects & designs *Group projects			Criterion Reference Test

NOTES: