

COLLEGE: Indian Hills Community College

CLUSTER: Transportation, Distribution & Logistics

HIGH SCHOOL(S): Albia High School

PATHWAY: Facility and Mobile Equipment Maintenance

PROGRAM: Automotive/Collision Technology A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications				Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History			Small Engines		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Ag Mechanics			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama OR	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats OR		Government					
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I ENG 106 Comp II SPC 112 Public Speaking	MAT 110 Math for Liberal Arts, MAT 156 Stats	PHS 184 Intro to Earth Science and PHS 186 Intro to Earth Science Lab	POL 111 Am Nat'l Govt, HIS 152 US History 1877, HIS 110 or 111 Wes Civ	CRR 321 Sheet Metal Damage	CRR 328 Sheet Metal Fundamentals Theory	CRR 302 Intro to Collision Repair	AUT 140 Welding for Automotive Mechanics	AUT 701&CRR 310 BAutoAC & ATM
	Year 1 2nd Quarter	General Education A & S Elective (3 cr.)				CRR 335 Application of Fillers	CRR 336 Preparation of Fillers	CRR 815 Paint Problems and Final Detail	CRR 672 Electricity	
	Year 1 3rd Quarter	General Education A & S Elective (3 cr.)				CRR 450 Glass Service	CRR 603 Mechanical Repairs	CRR 414 Interior Body Construction	WEL 333 Auto Collision Welding	
	Year 1 4th Quarter	General Education A & S Elective (3 cr.)				AUT 702 Automotive Heating and AC	CRR 503 Frame and Unibody Damage Analysis	CRR 611 Plastic Repair		
	Year 2 1st Quarter	General Education A & S Elective (3 cr.)				CRR 802 Introduction to Refinishing	CRR 848 Computerized Paint Mixing	CRR 843 Color-Matching	CRR 872 Advanced Refinishing	
	Year 2 2nd Quarter	General Education A & S Elective (3 cr.)				CRR 742 Estimating Theory	CRR 361 Collision Lab I	CRR 874 Advanced Refinishing		
	Year 2 3rd Quarter									



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College and Career Transitions Initiative

Funded by the U. S. Department of Education (V051B020001)

Required Courses
Recommended Elective Courses
Other Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Transportation, Distribution & Logistics

HIGH SCHOOL(S): Albia High School

PATHWAY: Facility and Mobile Equipment Maintenance

PROGRAM: Automotive Technology A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications				Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History			Small Engines		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Ag Mechanics			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama OR	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats OR		Government					
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I ENG 106 Comp II SPC 112 Public Speaking	MAT 110 Math for Liberal Arts, MAT 156 Stats	PHS 184 Intro to Earth Science and PHS 186 Intro to Earth Science Lab	POL 111 Am Nat'l Govt, HIS 152 US History 1877, HIS 110 or 111 Wes Civ	AUT 602 Basic Automotive Electricity	AUT 636 Basic Automotive Electronics	AUT 130 Automotive Maintenance and Inspection	AUT 143 Machining for Automotive Mechanics	AUT 701&CRR 310 BAutoAC & ATM
	Year 1 2nd Quarter	General Education A & S Elective (3 cr.)				AUT 155 Automotive Engine Design and Systems	AUT 172 Advanced Automotive Engine Repair	AUT 642 Automotive Charging, Starting and Electrical	Basic Automotive Drive Lines	AUT 140 Welding for Automotive Mechanics
	Year 1 3rd Quarter	General Education A & S Elective (3 cr.)				AUT 833 Automotive Fuel Systems	AUT 654 Automotive Advanced Electricity	AUT 163 Automotive Engine Repair		
	Year 1 4th Quarter	General Education A & S Elective (3 cr.)				AUT 862 Automotive Engine Performance Testing	AUT 851 Automotive Engine Performance Diagnosis	AUT 848 Automotive Engine Drivability Diagnosis		
	Year 2 1st Quarter	General Education A & S Elective (3 cr.)				AUT 402 Automotive Suspension and Steering	AUT 540 Automotive Vehicle Alignment	AUT 702 Automotive Heating and Air Conditioning	AUT 502 Automotive Brake Systems	
	Year 2 2nd Quarter	General Education A & S Elective (3 cr.)				AUT 224 Automotive Drive Lines and Repair Procedures	AUT 204 Automotive Automatic Transmissions/Tran	AUT 303 Automotive Manual Drive Train and Fyles		
	Year 2 3rd Quarter									



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Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Transportation, Distribution & Logistics

HIGH SCHOOL(S): Albia High School

PATHWAY: Facility and Mobile Equipment Maintenance

PROGRAM: Aviation Maintenance Training A.A.S. degree

ADULT LEARNER ENTRY POINTS	SECONDARY	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES					
							RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES			
	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science			Basic Computer Applications		Exploring Technology I	Exploring Technology II	Corss Roads	
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History			Small Engines	Exploring Technology III	Consumer Ed Course (1 cr)		
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Ag Mechanics	Basic Drafting		Consumer Ed Course (1 cr) if not taken in 10th.		
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama OR ↓	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats OR ↓	Physics ↓	Government ↓			Mechanical Drafting				
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I ENG 106 Comp II SPC 112 Public Speaking	MAT 110 Math for Liberal Arts, MAT 156 Stats	PHS 184 Intro to Earth Science and PHS 186 Intro to Earth Science Lab	POL 111 Am Nat'l Govt, HIS 152 US History 1877, HIS 110 or 111 Wes Civ		AVM 105 Regulations & Publications	AVM 107 Weight and Balance	AVM 109 Basic Electricity	AVM 111 Ground Operations & Servicing		
	Year 1 2nd Quarter	General Education A & S Elective (3 cr.)						AVM 101 Cleaning/Corrosion Control	AVM 103 Aircraft Material & Processes	AVM 113 Airframe Electrical Systems	AVM 119 Fundamentals of Physics	AVM 121 Weather and Warning Systems
	Year 1 3rd Quarter	General Education A & S Elective (3 cr.)						AVM 125 Airframe Structure/Repair	AVM 127 Aircraft Wood/Fabric/Finishes	AVM 141 Control Systems	AVM 145 Aircraft Welding	
	Year 1 4th Quarter	General Education A & S Elective (3 cr.)						AVM 117 Avionics/Fire Protection-AF	AVM 123 Aircraft Assembly and Rigging	AVM 129 Landing Gear and Brake Systems	AVM 131 Airframe Inspections	AVM 134 Aircraft Hydraulics/Pneumatics
	Year 2 1st Quarter	General Education A & S Elective (3 cr.)						AVM 143 Aircraft Gas Turbines	AVM 147 Airframe Fuel Systems	AVM 151 Engine Fuel/Metering		AVM 137 Aircraft Instruments
	Year 2 2nd Quarter	General Education A & S Elective (3 cr.)						AVM 139 Instruments/Fire Protection-PP	AVM 149 Engine Lubrication Systems	AVM 157 Induction/Cooling/Exhaust	AVM 159 Engine Electrical Systems	AVM 161 Aircraft Ignition Systems
	Year 2 3rd Quarter	General Education A & S Elective (3 cr.)						AVM 135 Powerplant Inspection	AVM 153 Powerplant Piston	AVM 155 Aircraft Propeller Systems		



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Other Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Transportation, Distribution & Logistics

HIGH SCHOOL(S): Albia High School

PATHWAY: Transportation Operations

PROGRAM: Aviation Pilot Training A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES					
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES			
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications		Exploring Technology I	Exploring Technology II	Corss Roads	
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History			Small Engines	Exploring Technology III	Consumer Ed Course (1 cr)	
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Ag Mechanics	Basic Drafting		Consumer Ed Course (1 cr) if not taken in 10th.	
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama OR ↓	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats OR ↓	Physics ↓	Government ↓			Mechanical Drafting			
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I ENG 106 Comp II SPC 112 Public Speaking	MAT 110 Math for Liberal Arts, MAT 156 Stats	PHS 184 Intro to Earth Science and PHS 186 Intro to Earth Science Lab	POL 111 Am Nat'l Govt, HIS 152 US History 1877, HIS 110 or 111 Wes Civ	AVI 135 Private Basic Ground	AVI 175 Private Flight I	AVI 190 VFR Communications	AVI 220 Aviation Meteorology		
	Year 1 2nd Quarter	General Education A & S Elective (3 cr.)					AVI 136 Private Basic Ground II	AVI 176 Private Flight II	AVI 110 History of Aviation	AVI 150 Aerodynamics	
	Year 1 3rd Quarter	General Education A & S Elective (3 cr.)					AVI 127 Engine Systems Theory	AVI 187 Private Pilot Certification	AVI 195 IFR Communications	AVI 200 Instrument Pilot Ground I	AVI 230 Instrument Flight Stage 1
	Year 1 4th Quarter	General Education A & S Elective (3 cr.)					AVI 123 Maintenance Responsibilities	AVI 129 Employment Prep for Aviation Careers	AVI 262 Commercial Pilot Ground School I	AVI 201 Instrument Pilot Ground II	AVI 231-2 Instrument Flight Stage 2 & 3
	Year 2 1st Quarter	General Education A & S Elective (3 cr.)					AVI 155 Airframe Systems Theory	AVI 249 General Aviation Operations Management	AVI 263 Commercial Pilot Ground School II	AVI 280 Commercial Night Flight Stage 4A	AVI 281 Commercial X-C Stage 4B
	Year 2 2nd Quarter	General Education A & S Elective (3 cr.)					AVI 282 Commercial Flight Stage 5	AVI 290 Fundamentals of Ground Instruction	AVI 300 Flight Instructor Ground School		
	Year 2 3rd Quarter	General Education A & S Elective (6 cr.)					AVI 283 Commercial Certification	AVI 351 Flight Instructor Basic	AVI 352 Flight Instructor Instrument		



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Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Science, Technology or Agriculture, Food, & Natural Resources

HIGH SCHOOL(S): Albia High School

PATHWAY: Science & Technolgy or Food Products & Processing Systems

PROGRAM: Bioprocess Technology A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDRARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Agriculture I			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Decisions and Dollars		Livestock evaluation		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Ag Marketing	Ag Business Management	Animal Science		Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	Physics, Chemistry, Advanced Bio, Adv Chem	Government					
ADULT LEARNER ENTRY POINTS POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC112 Public Speaking	MAT 120 College Algebra			BPT 104 Introduction to Biotechnology				Fine Arts Elective (3 cr)
	Year 1 2nd Quarter					BPT 109 Lab Instruments	BPT 127 Industrial Chemistry	IND 110 CPR, First Aid and Safety	BIO 120 General Biology 1D	
	Year 1 3rd Quarter					BPT 142 Plant Tissue Culture	BPT 145 Applied Microbiology	CSC 110 Introduction to Computers		Literature Elective (3 cr)
	Year 1 4th Quarter	SPC 112 Public Speaking OR SDV 150 Communications for Careers				BPT 135 Applied Biochemistry	BPT 143 Mammalian Tissue Culture			Humanities Elective (3 cr)
	Year 2 1st Quarter			PHY 705 Introduction to Physics	US History/Western Civ or Social Science Elective (3 cr)	BPT 122 Ethanol Fermentation	BPT 132 Bacterial/Fungal Fermentation			
	Year 2 2nd Quarter			CHM 121 Introduction to General Chemistry	Social Science elective (3 cr)	ELT 736 Instrumentation & Control	MFG 508 Quality Management	ELT 302 Principles of Electricity		
	Year 2 3rd Quarter					BPT 270 Advanced Process Control	BPT 272 Process Control Practicum	BPT 932 Internship	IND 142 Industrial Pumps	IND 140 Industrial Maintenance Drives



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Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Information Technology

HIGH SCHOOL(S): Albia High School

PATHWAY: Programming and Software Development

PROGRAM: Computer Programmer/Analyst Technology A.A.S. degree

ADULT LEARNER ENTRY POINTS	REQUIRED COURSES									
	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	RECOMMENDED/OTHER ELECTIVES COURSES				
						CAREER AND TECHNICAL EDUCATION COURSES				
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Computer Technology I	Computer Technology II		Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History		Desktop Publishing I			Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Desktop Publishing I I			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	↓	Government		Desktop Publishing III			
POSTSECONDARY	Year 1 1st Quarter			Science Elective (2 cr)		CSC 110 Introduction to Computers	CIS 121 Intro to Programming Logic	CIS 582 Assembler		
	Year 1 2nd Quarter	ENG 101 Elements of Writing				ACC 120 Survey of Accounting	CIS 703 Unix/Linux	CIS 125 Intro to Programming Logic w/language	BCA 186 Fundamentals of Web Programming	
	Year 1 3rd Quarter		MET 105 Elements of Contemporary Math			CIS 603 Visual Basic	CIS 402 COBOL	CIS 345 Data Base Design	CIS 167 C	
	Year 1 4th Quarter					CIS 412 COBOL II	CIS 171 JAVA	CIS 337 SQL/Oracle		PHI 145 Introduction to Ethical Conflicts
	Year 2 1st Quarter					CIS 728 Programmer Communications	CIS 503 Intro to Systems Analysis	CIS 343 Database Programming with DB2	CIS 462 CICS	ART 112 Introduction to Grahic Imagery
	Year 2 2nd Quarter	ADM 221 Career Development Skills				CIS 472 Advanced CICS	CIS 850 Programming Field Project I	CIS 320 Advanced Data Base	CIS175 JAVA II	
	Year 2 3rd Quarter				SOC 147 Foreign and Domestic Terrorism	CIS 596 MVX/JCL Commands	CIS 161 C++	CIS 851 Programming Field Project II	CIS 611 Advanced Visual Basic	



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Career and Technical Education Courses
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Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Business, Management, & Administration

HIGH SCHOOL(S): Albia High School

PATHWAY: Administrative & Information Support

PROGRAM: Computer Accounting Diploma

ADULT LEARNER ENTRY POINTS	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Intro to Business			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History			Business Law		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Accounting I			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats		Government		Accounting II	Personal Finance		
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC 112 Public Speaking, SDV 150	ADM 134 Business Math			ACC 109 Introduction to Accounting	ACC 160 Payroll Accounting	CSC 110 Intro to Computers	ADM 131 Office Calculators	ACC 360 Accounting Spreadsheets
	Year 1 2nd Quarter	Communications for Careers				ACC 110 Introduction to Accounting II	ACC 333 Computer Accounting	ADM 221 Career Development Skills	ACC 150 Financial Reports & Presentations	BCA 134 Word Processing AND
	Year 1 3rd Quarter									BCA 158 Spreadsheet Applications
	Year 1 4th Quarter									
	Year 2 1st Quarter									
	Year 2 2nd Quarter									
	Year 2 3rd Quarter									



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Recommended Elective Courses
Other Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Information Technology

HIGH SCHOOL(S): Albia High School

PATHWAY: Web & Digital Communications

PROGRAM: Computer Forensics Technology A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Computer Technology I	Computer Technology II		Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History		Desktop Publishing I			Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Desktop Publishing II	Business Law		Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama ↓	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	↓	Government		Desktop Publishing III			
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, SPC 112 Public Speaking				CSC 110 Introduction to Computers	CFR 100 Introduction to Computer Forensics	CFR 121 Forensic Problem Solving		
	Year 1 2nd Quarter				SOC 240 Criminology	CFR 120 Forensic Operating Systems	CFR 130 Computer Hardware	CFR 142 Forensic Programming	NET 141 Introduction to Networking	
	Year 1 3rd Quarter	ENG 106 Composition II				CFR 141 Network Forensics	NET 615 Social Engineering			PHI 145 Introduction to Ethical Conflicts
	Year 1 4th Quarter				SOC 147 Foreign and Domestic Terrorism	CFR 140 Data Recovery Methods I	CFR 148 Network Security	CFR 155 Computer Boot Analysis	CFR 160 Digital Search and Seizure	
	Year 2 1st Quarter					CFR 180 Data Recovery Methods II	CFR 190 Ambient Data Sources	NET 635 Ethical Hacking		Fine Arts Elective (3 cr)
	Year 2 2nd Quarter	ADM 221 Career Development Skills				CFR 200 Data Encryption	CFR 210 Computer Evidence/ Preservation	CFR 245 Forensic Evidence Analysis		
	Year 2 3rd Quarter		MAT 105 Elements of Contemporary Math	PHS 185 & 186 Introduction to Earth Science & Earth Science Lab		CFR 230 Evidence and Testimony	CFR 240 Forensics Field Project			



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Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Information Technology

HIGH SCHOOL(S): Albia High School

PATHWAY: Network Systems

PROGRAM: Computer Networks/Security Technology A.A.S. degree

ADULT LEARNER ENTRY POINTS	REQUIRED COURSES									
	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	RECOMMENDED/OTHER ELECTIVES COURSES				
						CAREER AND TECHNICAL EDUCATION COURSES				
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Computer Technology I	Computer Technology II		Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History		Desktop Publishing I			Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Desktop Publishing II	Business Law		Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama ↓	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	↓	Government		Desktop Publishing III			
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC112 Public Speaking OR	MAT 105 Elements of Contemporary Math			CSC 110 Introduction to Computers	NET 615 Social Engineering	ATR 266 Automation Programming		
	Year 1 2nd Quarter					NET 610 Security Fundamentals	NET 111 Microcompu-ter Lab Fundamentals	NET 122 Computer Hardware Basics	ELT 424 Digital Telecommuni-cations	
	Year 1 3rd Quarter	ENG 101 Elements of Writing		ENV 105 Introductory Environmental Science		NET 780 Microcompu-ter Utilities	NET 451 Unix/Linux	NET 141 Introduction to Networking		PHI 145 Introduction to Ethical Conflicts
	Year 1 4th Quarter				SOC 147 Foreign and Domestic Terrorism	NET 319 Microsoft Server	NET 151 Intermediate Networking			Fine Arts Elective (2 cr)
	Year 2 1st Quarter					NET 343 Windows Directory Services	NET 611 Network Security	NET 153 Advanced Networking	NET 684 TCP/IP for Networking	
	Year 2 2nd Quarter	ADM 221 Career Development Skills				NET 347 Windows Directory Scripting	NET 685 Advanced TCP/IP for Networking	NET 622 Network Security Applications		
	Year 2 3rd Quarter					NET 513 Novell Network Administration	NET 454 Advanced Unix/Linx	NET 635 Ethical Hacking	NET 845 Security Field Projects	



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Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Architecture and Construction

HIGH SCHOOL(S): Albia High School

PATHWAY: Design/Pre-construction or Construction or Maintenance/Operations

PROGRAM: Construction Technology Diploma/A.A.S.

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Basic Drafting	Industrial Technology I	Intro to Engineering Design (grade 9-12)	Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Mechanical Drafting		Industrial Technology II	Principals of Engineering (grades 10-12)	Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Architctural Drafting	Ag Mechanics			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama		Physics	Government					
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC 112 Public Speaking	ADM 134 Business Math		POL 111 Am Nat'l Gov, HIS 110/111 Western Civ, HIS 151 US History	CON 276 Construction Technology I	CON 197 Construction Lab 1	CSC 105 Computer Essentials		
	Year 1 2nd Quarter	SDV 150 Communications for Careers	MAT 110 Math for Lib Arts, MAT 120 College Algebra, MAT 156 Stats			CON 277 Construction Technology II	CON 198 Construction Lab II			
	Year 1 3rd Quarter					CON 278 Construction Technology III	CON 200 Construction Lab III			
	Year 1 4th Quarter					CON 279 Construction Technology IV	CON 199 Construction Lab IV			
	Year 2 1st Quarter	General Education A & S Elective (3 cr.)					CON 295 Construction Lab V	CON 245 Residential Wiring	CON 124 Construction Estimating I	
	Year 2 2nd Quarter	General Education A & S Elective (3 cr.)				CON 304 Introduction to Building Science	CON 296 Construction Lab VI	CON 248 Heating, Plumbing and Air Conditioning	CON 125 Construction Estimating II	
	Year 2 3rd Quarter	General Education A & S Elective (3 cr.)					CON 297 Construction Lab VII	CON 271 Concrete and Masonry Technology	CON 299 Advanced Technology	4th Quarter Plan CON310 CON298



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Recommended Elective Courses

Other Elective Courses

Career and Technical Education Courses

Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)

Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Hospitality & Tourism

HIGH SCHOOL(S): Albia High School

PATHWAY: Restaurants and Food/Beverage Services

PROGRAM: Culinary Arts A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications				Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Focus on Foods		Modern Meals		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II					Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama			Government					
POSTSECONDARY	Year 1 1st Quarter		HCM 261 Math Principles		Social Science Elective (3 cr)	CSC 105 Computer Essentials	HCM 101 Safety/Sanitation	HCM 202 Foodservice Lab	HCM 102 Food Service Technology	HCM 163 Culinary Skills (lab)
	Year 1 2nd Quarter					HCM 203 Food Service Lab 2	HCM 146 Cold Food Principles (lec)	HCM 145 Garde Manger (lab)	HCM 232 Culinary Nutrition (lec/lab)	Humanities Elective (2 cr)
	Year 1 3rd Quarter	English/ Speech Elective (3 cr)				BUS 102 Introduction to Business	HCM 200 Dining Service	HCM 150 Shellfish, Poultry, Meats (lec)	HCM 149 Principles of Cooking (lab)	HCM 151 Stocks, Soups, Sauces
	Year 1 4th Quarter			Science Elective (3 cr)		HCM 264 Culinary Computer Apps	HCM 114 Basic Baking (lec)	HCM 115 Basic Baking (lab)	HCM 201 Fine Dining Experience (lab)	
	Year 2 1st Quarter		Math Elective (2 cr)			MGT 101 Principles of Management	HCM 118 Advanced Baking (lec)	HCM 119 Advanced Baking (lab)		Fine Arts Elective (3 cr)
	Year 2 2nd Quarter					MKT 110 Principles of Marketing	HCM 174 International Cuisine (lab)	HCM 211 Culinary Management	HCM 341 Catering and Banqueting (lec/lab)	
	Year 2 3rd Quarter					HCM 512 Culinary Internship	HCM 400 Food Service Entrep. (lec)	HCM 401 Culinary Industry		



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Required Courses
Recommended Elective Courses
Other Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Transportation, Distribution & Logistics

HIGH SCHOOL(S): Albia High School

PATHWAY: Facility and Mobile Equipment Maintenance

PROGRAM: Diesel Power Systems Technology A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES			CAREER AND TECHNICAL EDUCATION COURSES	
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications				Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History			Small Engines		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II			Ag Mechanics		Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats		Government					
ADULT LEARNER ENTRY POINTS POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC 112 Public Speaking, LIT 101 Intro to Lit				AUT 602 Basic Automotive Electricity	AUT 636 Basic Automotive Electronics	DSL 602 Principles of Hydraulics	AUT 140 Welding for Automotive Mechanics	AUT701 & CRR310 BAutoAC & ATM
	Year 1 2nd Quarter	MAT 110 Math for Lib Arts, MAT 156 Stats, MAT 120 College Algebra				DSL 325 Diesel Engine Fundamentals	AUT 172 Advanced Automotive Engine Repair	AUT 642 Automotive Charging, Starting and Electrical	Basic Automotive Drive Lines	AUT 143 Machining for Automotive Mechanics
	Year 1 3rd Quarter	PHS 184 and 186 Earth Science and lab				DSL 344 Diesel Engine Overhaul	DSL 375 Assembly of Diesel Engines			
	Year 1 4th Quarter	POL 111 Am National Gov, HIS 111 Wes Civ, HIS 151 US History				DSL 384 Engine Application and Tune-ups	DSL 423 Electronic Engine Control	DSL 742 Air Conditioning/ Refrigeration		
	Year 2 1st Quarter	General Education A & S Elective (3 cr.)				DSL 442 Fuel Systems	DSL 153 Vehicle Engine Diagnosis	DSL 654 Technical Power Hydraulics		
	Year 2 2nd Quarter	General Education A & S Elective (3 cr.)				DSL 534 Drive Trains	DSL 600 Brakes, Tires & Alignment	DSL 834 Repair and Maintenance		
	Year 2 3rd Quarter									



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Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Architecture or Science, Technology, Engineering or Manufacturing

HIGH SCHOOL(S): Albia High School

PATHWAY: Design/Pre-construction or Engineering or CAD operators

PROGRAM: Drafting/Virtual Reality A.A.S. degree

ADULT LEARNER ENTRY POINTS	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES			CAREER AND TECHNICAL EDUCATION COURSES	
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Basic Drafting			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Mechanical Drafting				Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Architectural Drafting				Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	Physics	Government					
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC 112 Public Speaking	VRT 110 Fundamentals of Algebra			CAD 105 CAD I	VRT 150 Virtual Reality I	VRT 135 Blueprint Reading	CSC 110 Introduction to Computers	
	Year 1 2nd Quarter		MAT 101 Intermediate Algebra			CAD 106 CAD II	CAD 210 Pipe Drafting	MFG 203 Manufacturing Processes	EGT 170 Physical Metallurgy	
	Year 1 3rd Quarter			EGT 103 Technical Science I		EGT 130 Kinematics	CAD 140 Parametric Solid Modeling I	MFG 508 Quality Management	EGT 140 Fluid Power	ART 137 Freehand Drawing
	Year 1 4th Quarter			Science Elective (2 cr.) Technical Science II	EGT 104	CAD 165 Rendering and Animation	CAD 141 Parametric Solid Modeling II			
	Year 2 1st Quarter			EGT 105 Technical Science III		VRT 169 Virtual Environments	CAD 142 Parametric Solid Modeling II	VRT 111 Engineering Design I		
	Year 2 2nd Quarter	SDV 150 Communication for Careers				VRT 156 Virtual Reality II	EGT 120 Strengths of Materials	VRT 112 Engineering Design II		
	Year 2 3rd Quarter				Social Science Elective (3 cr.)	VRT 157 Virtual Reality III	VRT 158 Mechanical Design Sim.	VRT 159 Industrial Prototyping		Humanities Elective (3 cr.)



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Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Science, Technology, Engineering & Mathematics or Manufacturing

HIGH SCHOOL(S): Albia High School

PATHWAY: Engineering and Technology or Maintenance, Installation, & Repair

PROGRAM: Electronics/Computer Occupations Diploma

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES			
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES	
SECONDRARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Computer Technology I	Computer Technology II	Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History		Desktop Publishing I		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II		Desktop Publishing I I		Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats ↓		Government ↓		Desktop Publishing III		
ADULT LEARNER ENTRY POINTS POSTSECONDARY	Year 1 1st Quarter	COM 725 Workplace Communications	MAT 742 Technical Math			ELT 373 DC Circuit Analysis	CSC 110 Introduction to Computers		BUS 104 Business Essentials
	Year 1 2nd Quarter		MAT 761 Technical Math for Electronics		Social Science Elective (3 cr.)	ELT 378 AC Circuit Analysis	ELT 310 Digital Circuits		
	Year 1 3rd Quarter		MAT 120 College Algebra			ELT 550 Analog Devices	LEO 101 Photonics Concepts	ELT 505 Power Transfer Technology	
	Year 1 4th Quarter								
	Year 2 1st Quarter								
	Year 2 2nd Quarter								
	Year 2 3rd Quarter								



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Required Courses
Recommended Elective Courses
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Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Science & Technology or Ag. Food & Nat. Resources or Mfg.

HIGH SCHOOL(S): Albia High School

PATHWAY: Engineering & Technology or Technical Systems or Maint. & Repair

PROGRAM: Ethanol Plant Technician A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Agriculture I	Small Engines		Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Decisions and Dollars				Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Ag Marketing	Leadership Development			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	Physics, Chemistry, Adv Chemistry, Adv Biology	Government		Ag Mechanics			
ADULT LEARNER ENTRY POINTS POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC112 Public Speaking	MAT 742 Technical Math			BPT 104 Introduction to Biotechnology	ELT 373 DC Circuit Analysis			
	Year 1 2nd Quarter		MAT 761 Technical Math for Electronics			BPT 127 Industrial Chemistry	ELT 378 AC Circuit Analysis			
	Year 1 3rd Quarter		MAT 120 College Algebra			BPT 145 Applied Microbiology	CSC 110 Introduction to Computers			
	Year 1 4th Quarter	SDV 150 Communication for Careers				BPT 135 Applied Biochemistry	ELT 310 Digital Circuits		Humanities Elective (3 cr) Fine Arts Elective (1 cr)	
	Year 2 1st Quarter			PHY 705 Introduction to Physics	Social Science Elective (3)	BPT 122 Ethanol Fermentation	BPT 132 Bacterial/Fungal Fermentation	IND 142 Industrial Maintenance Pumps	IND 140 Industrial Maintenance Drives	
	Year 2 2nd Quarter			CHM 121 Introduction to General Chemistry		ELT 736 Instrumentation & Control	IND 162 Equipment Maintenance	MFG 508 Quality Management	IND 110 CPR, First Aid and Safety	
	Year 2 3rd Quarter					BPT 270 Advanced Process Control	BPT 272 Process Control Practicum	BPT 932 Internship		



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Required Courses
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Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Health Science

HIGH SCHOOL(S): Albia High School

PATHWAY: Therapeutic Services

PROGRAM: Health Occupations (Nursing, EMT, Pharm. Tech, Rad. Tech, Surg. Tech, PTA)

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDRARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	9th Family & Consumer Science			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Focus on Foods		Parenting		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Child Development	Medical Term., Nursing Essentials I, Health Career Certifications & Health Care BLS			
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats		Government		Nutrition, Nursing Essentials II, Pharmacy Calculations, Intro to Prehospital Medicine			
POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC 112 Public Speaking					Specific coursework- see IHCC catalog			
	Year 1 2nd Quarter	MAT 110 Math for Lib Arts, MAT 120 College Algebra, MAT 156 Stats					Specific coursework- see IHCC catalog			
	Year 1 3rd Quarter	General Education A & S Elective (3 cr.)- Social Sciences					Specific coursework- see IHCC catalog			
	Year 1 4th Quarter	General Education A & S Elective (3 cr.)- Humanities					Specific coursework- see IHCC catalog			
	Year 2 1st Quarter	General Education A & S Elective (3 cr.)					Specific coursework- see IHCC catalog			
	Year 2 2nd Quarter	General Education A & S Elective (3 cr.)					Specific coursework- see IHCC catalog			
	Year 2 3rd Quarter						Specific coursework- see IHCC catalog			



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Recommended Elective Courses
Other Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Science, Technology, Engineering & Mathematics or Manufacturing

HIGH SCHOOL(S): Albia High School

PATHWAY: Engineering and Technology or Maintenance, Installation, & Repair

PROGRAM: Laser/Electro-optics Technology (A.A.S. degree)

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Basic Drafting			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Mechanical Drafting				Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Architectural Drafting				Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats		Government		3D Drafting - Animations			
ADULT LEARNER ENTRY POINTS POSTSECONDARY	Year 1 1st Quarter	COM 725 Workplace Communications	MAT 742 Technical Math			ELT 373 DC Circuit Analysis	CSC 110 Introduction to Computers			BUS 104 Business Essentials
	Year 1 2nd Quarter		MAT 761 Technical Math for Electronics		Social Science Elective (3 cr.)	ELT 378 AC Circuit Analysis	ELT 310 Digital Circuits			
	Year 1 3rd Quarter		MAT 120 College Algebra			ELT 550 Analog Devices	LEO 101 Photonics Concepts	ELT 505 Power Transfer Technology		
	Year 1 4th Quarter			Lab Science Elective (3 cr.)		LEO 242 Introduction to Photonics	LEO 257 Laser Components	CAD 114 AutoCAD I		Humanities Elective (3 cr.)
	Year 2 1st Quarter					LEO 259 Optical Devices	LEO 254 Geometric and Wave Optics	LEO 262 Laser System Fundamentals		Fine Arts Elective (1 cr.)
	Year 2 2nd Quarter	SDV 150 Communication for Careers				LEO 250 Automated Laser Processing	LEO 267 Semiconductor Fabrication	LEO 268 Photonics Troubleshooting		
	Year 2 3rd Quarter					LEO 266 Photonic Applications	LEO 275 Optical Systems Analysis	LEO 277 Photonic Systems Lab		



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Required Courses
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Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Manufacturing

HIGH SCHOOL(S): Albia High School

PATHWAY: Production or Production Process Development or Quality Assurance

PROGRAM: Machine Technology A.A.S. degree

ADULT LEARNER ENTRY POINTS	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Basic Drafting			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Mechanical Drafting				Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Ag Mechanics	Small Engines			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats		Government					
POSTSECONDARY	Year 1 1st Quarter		Math Elective (2 cr)			AUT 140 Welding for Automotive Mechanics	MFG 209 Machine Shop Practices	MFG 222 Machine Operations I	CSC 105 Computer Essentials	
	Year 1 2nd Quarter				Social Science Elective (3 cr)	MFG 228 Machine Operations II	MFG 254 Engine Lathe Theory	MFG 121 Machine Trade Printreading I		
	Year 1 3rd Quarter			Science Elective (2 cr)		MFG 131 Machine Trade Printreading II	MFG 272 Grinders Theory	MFG 233 Machine Operations III		
	Year 1 4th Quarter					MFG 421 Jig and Fixtures	MFG 234 Machine Opearsion IV			Fine Arts Elective (1 cr)
	Year 2 1st Quarter	SDV 150 Communications for Careers				CAD 114 Auto CAD I	MFG 235 Machine Operations V	MFG 352 CNC Lathe Fundamentals		
	Year 2 2nd Quarter					COM 725 Workplace Communications	MFG 333 CNC Mill Fundamentals	MFG 236 Machine Operations VI		Humanities Elective (3)
	Year 2 3rd Quarter									



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Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Science, Technology, Engineering & Mathematics or Manufacturing

HIGH SCHOOL(S): Albia High School

PATHWAY: Engineering and Technology or Maintenance, Installation, & Repair

PROGRAM: Robotics/Automation Technology (A.A.S. degree)

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Basic Drafting			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Mechanical Drafting				Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Exploring Technology I	Exploring Technology II			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats		Government					
POSTSECONDARY	Year 1 1st Quarter	COM 725 Workplace Communications	MAT 742 Technical Math			ELT 373 DC Circuit Analysis	CSC 110 Introduction to Computers			BUS 104 Business Essentials
	Year 1 2nd Quarter		MAT 761 Technical Math for Electronics		Social Science Elective (3 cr.)	ELT 378 AC Circuit Analysis	ELT 310 Digital Circuits			
	Year 1 3rd Quarter		MAT 120 College Algebra			ELT 550 Analog Devices	LEO 101 Photonics Concepts	ELT 505 Power Transfer Technology		
	Year 1 4th Quarter			Lab Science Elective (3 cr.)		ELT 580 Microelectronic Circuits	ATR 251 Robot Programming I	CAD 114 AutoCAD I		Humanities Elective (3 cr.)
	Year 2 1st Quarter					ATR 132 Computer Aided Manufacturing	ELT 130 Control Systems	ATR 273 Object Recognition	ATR 110 Manufacturing Fundamentals	Fine Arts Elective (1 cr.)
	Year 2 2nd Quarter	SDV 150 Communication for Careers				ATR 261 Robot Controllers I	ATR 252 Robot Programming II	ATR 266 Automation Programming	ATR 267 Industrial Systems	
	Year 2 3rd Quarter					ATR 262 Robot Controllers II	ATR 274 Automated Systems Apps.	ATR 275 Industrial Networks	ELT 124 Advanced PLCs and Systems Int.	



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Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Agriculture, Food & Natural Resources

HIGH SCHOOL(S): Albia High School

PATHWAY: Agribusiness or Natural Resource or Plant Systems

PROGRAM: Sustainable Agriculture/Entrepreneurship A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Agriculture I			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Decisions and Dollars		Livestock Evaluation		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Ag Occupations	Ag Marketing	Animal Science		Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	Chemistry, Adv Chemistry	Government		Ag Business Management	Ag Mechanics	Small Engines	
ADULT LEARNER ENTRY POINTS POSTSECONDARY	Year 1 1st Quarter	ENG 105 Comp I, ENG 106 Comp II, SPC 112 Public Speaking	MAT 156 Statistics	ENV 142 Natural Resources & BIO 101 Introductory Biology & BIO 103 CHM 157 Principles of Chemistry & AGA 154 Fundamentals		AGP 450 Fundamentals of GIS			CSC 110 Introduction to Computers	
	Year 1 2nd Quarter					AGA 114 Principles of Agronomy	AGN 127 Agrarian Systems and Ecology			
	Year 1 3rd Quarter					AGH 233 Plant Propagation I	AGH 264 Organic Crop Production	AGA 450 Sustainable Agriculture	AGN 130 Soil and Water Conservation	Fine Arts Elective (1 cr)
	Year 1 4th Quarter				Elective (3 cr)	AGB 230 Land Management Experiences				
	Year 2 1st Quarter					AGN 115 Integrated Agroforestry	AGN 120 Wildlife and Agriculture	AGN 125 Woodland Management	AGA 379 Biological Pest Management	
	Year 2 2nd Quarter					AGB 212 Agriculture Law and Taxation	BUS 130 Introduction to Entrepreneurship	MKT 140 Principles of Selling		Humanities Elective (1 cr)
	Year 2 3rd Quarter					AGS 113 Survey of the Animal Industry	AGB 235 Introduction to Agriculture Markets	ACC 118 Introduction to Accounting Systems	AGB 949 Special Topics	



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Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Science, Technology, Engineering & Mathematics or Manufacturing

HIGH SCHOOL(S): Albia High School

PATHWAY: Engineering and Technology or Maintenance, Installation, & Repair

PROGRAM: Electronics/Telecommunications Technology (A.A.S. degree)

ADULT LEARNER ENTRY POINTS	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Computer Technology I			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Computer Technology II		Basic Drafting		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Mechanical Drafting				Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats		Government					
POSTSECONDARY	Year 1 1st Quarter	COM 725 Workplace Communications	MAT 742 Technical Math				ELT 373 DC Circuit Analysis	BUS 104 Business Essentials	CSC 110 Introduction to Computers	
	Year 1 2nd Quarter		MAT 761 Technical Math for Electronics		Social Science Elective (3 cr.)	ELT 378 AC Circuit Analysis	ELT 310 Digital Circuits			
	Year 1 3rd Quarter		MAT 120 College Algebra			ELT 550 Analog Devices	LEO 101 Photonics Concepts	ELT 505 Power Transfer Technology		
	Year 1 4th Quarter			Lab Science Elective (3 cr.)		ELT 402 Introduction to Communication	ELT 540 Linear Components			Humanities Elective (3 cr.)
	Year 2 1st Quarter					ELT 858 Circuit Design and Test	ELT 570 Integrated Linear Circuits	ELT 418 Communication Systems I		Fine Arts Elective (1 cr.)
	Year 2 2nd Quarter	SDV 150 Communication for Careers				ELT 419 Communication Systems II	ELT 515 Wireless Networks	ATR 266 Automation Programming		
	Year 2 3rd Quarter					ELT 460 Fiber Optics	ELT 437 Communication Networks	ELT 760 Computer Assisted Systems		



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Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Agriculture, Food & Natural Resources

HIGH SCHOOL(S): Albia High School

PATHWAY: Plant systems

PROGRAM: Turf and Greenhouse Management A.A.S. degree

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Basic Drafting	Agriculture I		Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Decisions and Dollars		Horticulture		Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Ag Occupations	Ag Marketing			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	Chemistry, Adv Chemistry	Government		Ag Business Management			
POSTSECONDARY	Year 1 1st Quarter	LIT 802 Readings in Literature I	MAT 105 or Mat 120 Elements of Contemporary Math			AGH 124 Woody Plants/Trees	AGH 221 Principles of Horticulture	AGH 112 Introduction to Turfgrass Management		
	Year 1 2nd Quarter	SDV 150 or ENG 105 Comm for Careers or Composition I				CSC 105 Computer Essentials	AGH 125 Woody Plants/Shrubs	AGH 151 Landscape Design Techniques	AGH 283 Pesticide Application Certification	ART 137 Freehand Drawing
	Year 1 3rd Quarter					AGH 120 Herbaceous Plant Materials	AGH 154 Residential Landscape Design	AGH 131 Greenhouse Management	AGH 941 Horticulture Practicum	
	Year 1 4th Quarter					AGH 800 Turf & Greenhouse Internship				
	Year 2 1st Quarter			CHM 166 General Chemistry I CHM 176 General Chemistry II		AGH 802 Self Directed Internship				
	Year 2 2nd Quarter									
	Year 2 3rd Quarter									



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College and Career Transitions Initiative

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Required Courses
Recommended Elective Courses
Other Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Agriculture, Food & Natural Resources

HIGH SCHOOL(S): Albia High School

PATHWAY: Agribusiness Systems or Plant Systems

PROGRAM: Viticulture Technician Diploma

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications	Agriculture I			Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History	Decisions and Dollars				Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II	Ag Occupations	Horticulture			Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats	Physics	Government		Ag Marketing			
POSTSECONDARY	Year 1 1st Quarter			PHY 101 Physics & PHY 102 Physics Lab		BUS 130 Introduction to Entrepreneurship				
	Year 1 2nd Quarter		MAT 156 Statistics			AGA 154 Fundamentals of Soil Science				
	Year 1 3rd Quarter					VIN 111 Vineyard Establishment and Maintenance	VIN 113 Spring Viticulture Technology			
	Year 1 4th Quarter					VIN 115 Summer Viticulture Technology	VIN 213 Midwest Vineyard Management			
	Year 2 1st Quarter									
	Year 2 2nd Quarter									
	Year 2 3rd Quarter									



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Required Courses
Recommended Elective Courses
Other Elective Courses
Career and Technical Education Courses
Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)
Mandatory Assessments, Advising, and Additional Preparation

COLLEGE: Indian Hills Community College

CLUSTER: Manufacturing

HIGH SCHOOL(S): Albia High School

PATHWAY: Production

PROGRAM: Welding Technology Diploma

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES				
						RECOMMENDED/OTHER ELECTIVES COURSES		CAREER AND TECHNICAL EDUCATION COURSES		
SECONDRARY	9	English 9	Algebraic Concepts I, Pre-Algebra, Algebra I, Geometry	Physical Science		Basic Computer Applications				Corss Roads
	10	English 10	Algebraic Concepts II, Algebra I, Geometry, Algebra II	Biology	World History					Consumer Ed Course (1 cr)
	11	English 11	Algebra I, Geometry, Algebra II	Environmental Science or Chemistry	American History AND Psychology, Sociology, Intro to Econ, or Cont Issues II					Consumer Ed Course (1 cr) if not taken in 10th.
	12	Sr Communications, Sr Lit, Sr Speech & Contemporary Drama	Algebra II, Trig, Pre-Calc I & II, Calculus I, Prob and Stats		Government		Ag Mechanics			
POSTSECONDARY	Year 1 1st Quarter		MAT 762 Technical Math for Industry			WEL 120 Oxy Fuel Welding and Cutting	WEL 150 Arc Welding I (SMAW)	WEL 151 Common Arc Welding Processes		
	Year 1 2nd Quarter					WEL 181 Gas Metal Arc Welding	WEL 190 Gas Tungsten Arc Welding	WEL 201 Procedures and Qualifications	WEL 202 Discontinuities and Defects	WEL 110 Welding Blueprint Reading
	Year 1 3rd Quarter					WEL 173 Advanced Welding Procedures I	WEL 174 Advanced Welding Procedures II	WEL 182 FCAW		
	Year 1 4th Quarter	ADM 221 Career Development Skills				WEL 211 Production Welding Procedures	WEL 200 Metallurgy Fundamentals			ADM 221 Career Development Skills
	Year 2 1st Quarter					WEL 308 optional Pipe Welding Uphill SMAW	WEL 309 optional Pipe Welding Downhill SMAW			
	Year 2 2nd Quarter									
	Year 2 3rd Quarter									



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Mandatory Assessments, Advising, and Additional Preparation