You have big ideas, big goals, big dreams. Start early.

Oakton
Community College

Early College

Oakton offers three ways for academically qualified high school students to earn college credit. You can combine the experiences to fit your goals.

The three opportunities are:

This publication walks you through our Early College program and shows you where advanced placement credit, concurrent enrollment, and dual credit courses fit into our degree and certificate programs.
You can even earn a college certificate that qualifies you for a job while you're still in high school!

Accounting Associate A.A.S.

63 Semester Credit Hours

This is a comprehensive program that encompasses financial accounting, accounting technology, managerial accounting, taxation, and business ethics. Additionally, students will complete 18 credit hours of general education courses. Graduates will be eligible for a variety of accounting jobs, including staff accounting, accounts payable, general ledger, payroll, or income tax preparation.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

FIRST YEAR

Fall Semester   Hours

Automotive Technology A.A.S.

67 Semester Credit Hours

The Automotive Technology program offers an Associate in Applied Science Degree (A.A.S.), as well as the Automotive Technology and Automotive Technology Powertrain certificates. The curriculum is accredited by the Automotive Service Excellence Education Foundation (ASEEF). This program is for students already working in the field or looking to get into the highly skilled trade of automotive.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

FIRST YEAR

Fall Semester		Hours
ATA 102	Introduction to Automotive Technology	4
ATA 111	Automotive Electrical Systems I	4
EGL 101	Composition I *(also available as AP)*	3
Select one from the following:		4
MAT 114	Applied Mathematics I	
MAT 125	General Education Mathematics	
MAT 131	*Elementary Statistics*	
Hours		**15**
Spring Semester		
ATA 110	Engine Performance And Fuel Systems	4
ATA 113	Brake Systems	4
PHY 101	Applied Physics	4
Select one from the following:		3
SOC 101	Introduction to Sociology[1]	
SOC 103	Social Problems[2]	
Hours		**15**
Summer Semester		
ATA 207	Automotive Heating and Air Conditioning	4
Hours		**4**

SECOND YEAR

Fall Semester		
ATA 204	Basic Automotive Engines	4
ATA 206	Clutches, Transmissions, and Differentials	4
ATA 208	Automatic Transmissions	4
Select one Humanities/Fine Arts course that also satisfies Global Studies requirements		3
Hours		**15**
Spring Semester		
ATA 114	Steering, Balancing, and Alignment	4
ATA 205	Advanced Automotive Engines	4
SPE 103	Effective Speech	3
ATA 210	Advanced Engine Performance Analysis	4
		15
Summer Semester		
ATA 211	Automotive Electrical Systems II	4
Hours		**4**
Total Hours		**68**

1 *Course fulfills the U.S. Diversity Studies Requirement. At least one U.S. Diversity Studies course is required for degree completion.*
2 *Course fulfills both, the Global Studies and U.S. Diversity Studies requirements.*

Automotive Technology Certificate

The following pathway is recommended for students pursuing the Automotive Technology Certificate.

FIRST YEAR

Fall Semester		Hours
ATA 102	Introduction to Automotive Technology	4
ATA 111	Automotive Electrical Systems I	4
ATA 206	Clutches, Transmissions, and Differentials	4
Hours		**12**
Spring Semester		
ATA 113	Brake Systems	4
ATA 114	Steering, Balancing, and Alignment	4
Hours		**8**
Summer Semester		
ATA 207	Automotive Heating and Air Conditioning	4
Hours		**4**

SECOND YEAR

Fall Semester		
ATA 211	Automotive Electrical Systems II	4
Hours		**4**
Total Hours		**28**

Automotive Technology Powertrain Certificate

The following pathway is recommended for students pursuing the Automotive Technology Powertrain Certificate.

FIRST YEAR

Fall Semester		Hours
ATA 102	Introduction to Automotive Technology	4
ATA 111	Automotive Electrical Systems I	4
ATA 204	Basic Automotive Engines	4
Hours		**12**
Spring Semester		
ATA 110	Engine Performance and Fuel Systems	4
ATA 205	Advanced Automotive Engines	4
ATA 210	Advanced Engine Performance Analysis	4
Hours		**12**

SECOND YEAR

Fall Semester		
ATA 206	Clutches, Transmissions, and Differentials	4
ATA 208	Automatic Transmissions	4
Hours		**8**
Total Hours		**32**

Computers and Information Systems A.A.S.

62 Semester Credit Hours

This degree prepares the student to support a computer system at an entry-level in the areas of software, hardware, programming, and networks in a business environment or to be a liaison between the IT department and other departments in the organization.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

FIRST YEAR

Semester One		Hours
EGL 101	Composition I *(also available as AP)*	3
MAT 111	Business and Consumer Mathematics	4
CIS 101	*Introduction to Computer Information Systems*	3
CNS 105	Networking Essentials	3
CAB 140	Database Application Using Access	3
Hours		**16**

Semester Two		
CIS 103	Computer Software and Concepts	4
MAT 114	Applied Mathematics I	
or MAT 140	or College Algebra	4
Select one from the following:		3
EGL 102	Composition II	
EGL 111	Introduction to Business and Technical Writing (recommended)	
EGL 211	Writing Digital Content	
EGL 212	Technical Writing Applications (recommended)	
SPE 103	Effective Speech (recommended)	
Select one from the following:		3-4
CIS 131	Web Page Development	
ART 259	Introduction to Web Design	
Select one from the following:		3-4
CSC 155	C++ Computer Science I	
CSC 156	*Java Computer Science I*	
CSC 157	Python Computer Science I	
CIS 180	Introduction to Visual Basic .NET Programming	
Hours		**17-19**

SECOND YEAR

Semester One		
BUS 101	Introduction to Business	3
CAB 135	Electronic Spreadsheeting Using Excel	2
CIS 201	Information Systems for Business	3
CIS 205	Documentation and Technical Writing	3
CIS 116	Introduction to the MS-Windows Operating System	
or CIS 118	or Linux Operating System	2
Select one from the following:		3
SOC 101	Introduction to Sociology[1]	
SOC 103	Social Problems[2]	
SOC 104	Sociology of Marriage and Family[1]	
SOC 230	Sociology of Sex and Gender[1]	
SOC 232	Sociology of Race and Ethnicity[1]	
SSC 105	Introduction to Ethnic Studies[1]	
Hours		**16**

Semester Two		
CAB 150	Visio Fundamentals	2
CIS 203	Managing Information Systems	3
CIS 208	Visual Basic for Applications	4
ELT 130	Microcomputer Hardware Systems	3
Select one from the following:		3
ART 114	Art History: Art of the Non-Western World[3]	
EGL 130	Introduction to Global Literature[3]	
HUM 161	Global Cinema[3]	
HUM 165	Introduction to World Music[3]	
HUM 210	World Mythologies[3]	
HUM 220	Asian Humanities[3]	
PHL 205	World Religions[3]	
PHL 215	Asian Philosophy	
Hours		**15**
Total Hours		**64-66**

1 *Course fulfills the U.S. Diversity Requirement. At least one U.S. Diversity course is required for degree completion.*
2 *Course fulfills both the Global Studies and U.S. Diversity Requirement.*
3 *Course fulfills the Global Studies Requirement. At least one Global Studies course is required for degree completion.*

Computer Programmer A.A.S.

63 Semester Credit Hours

This degree prepares the student to become proficient in writing business oriented computer programs and to develop communication skills critical in the workplace.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

FIRST YEAR

Semester One		Hours
EGL 101	Composition I *(also available as AP)*	3
MAT 111	Business and Consumer Mathematics	4
CIS 101	*Introduction to Computer Information Systems*	3
CNS 105	Networking Essentials	3
CAB 140	Database Application Using Access	3
Hours		**16**

Semester Two		
CIS 131	Web Page Development	4
CIS 143	Introduction to SQL	3
MAT 114	Applied Mathematics I	
or MAT 140	or College Algebra	4
Select one from the following:		3
EGL 102	Composition II	
EGL 111	Introduction to Business and Technical Writing (recommended)	
EGL 211	Writing Digital Content	
EGL 212	Technical Writing Applications (recommended)	
SPE 103	Effective Speech (recommended)	
Select one from the following:		3
CSC 155	C++ Computer Science I	
CSC 156	*Java Computer Science I*	
CSC 157	Python Computer Science I	
Hours		**17**

SECOND YEAR

Semester One
CIS 201   Information Systems for278 Tw -33.549 -1.26 Td 9Q BT /T12 h2p1928 -1.

Mobil Programmer Track (11-12 credit hours)
CIS 257   Apps Programming for Apple Mobile Devices
  or CIS 258   or Apps Programming for Android Mobile Devices
Select one from the following:
  CIS 180   Introduction to Visual Basic .NET Programming
  CIS 211   Java Programming
  CIS 227   C# Programming
  or other course approved by the program coordinator
Select one from the following:
  CIS 208   Visual Basic for Applications
  CIS 209   Database Programming for PCs
  CIS 210   Visual Basic .NET Programming for Files and Databases
  CIS 211   Java Programming
  CIS 213   Advanced Topics in Visual Basic .NET Programming
  CIS 222   Java Programming Using Files and Databases
  CIS 227   C# Programming
  CIS 231   Advanced Java Programming
  CSC 240   C++ Data Structures
  CSC 241   Java Data Structures
  CSC 242   Python Data Structures
  CSC 255   Objects and Algorithms
  or other course approved by the program coordinator
Web Developer Track (12 credit hours)
CIS 171   Advanced Web Page Development
CIS 188   Active Server Pages
CIS 248   Web Database Management

Hours	16-18

Semester Two

Mobile Programmer Track (11-12 credit hours)

CIS 267   Advanced Apps Programming Using Apple Mobile Devices
  or CIS 268   or Advanced Apps Programming for Android Mobile Devices

Select one from the following:
CIS 180   Introduction to Visual Basic .NET Programming
CIS 211   Java Programming
CIS 227   C# Programming
  or other course approved by the program coordinator

Select one from the following:
CIS 208   Visual Basic for Applications
CIS 209   Database Programming for PCs
CIS 210   Visual Basic .NET Programming for Files and Databases
CIS 211   Java Programming
CIS 213   Advanced Topics in Visual Basic .NET Programming
CIS 222   Java Programming Using Files and Databases
CIS 227   C# Programming
CIS 231   Advanced Java Programming
CSC 240   C++ Data Structures
CSC 241   Java Data Structures
CSC 255   Objects and Algorithms
  or other course approved by the program coordinator

Web Developer Track (12 credit hours)
CIS 188   Active Server Pages
CIS 248   Web Database Management

Select one from the following:
CIS 214   Web Site Maintenance and Management
CIS 232   Web Scripting
  or other course approved by the program coordinator

Hours	10-12
Total Hours	39-41

Internet and Computer Core (IC3) Certificate

PC Support Specialist Certificate

The following pathway is recommended for students pursuing the PC Support Specialist Certificate.This certificate prepares the student to provide an entry-level support of a computer system software and hardware in a business environment or to be a liaison between the IT department and other departments in the organization.

FIRST YEAR

Semester One		Hours
CIS 101	Introduction to Computer Information Systems	3
CAB 135	Electronic Spreadsheeting Using Excel	2
CAB 140	Database Application Using Access	3
BUS 101	Introduction to Business	3
Hours		11

Semester Two		
CIS 103 Computer Software and Concepts		4
CIS 201 Information Systems for Business		3
ELT 130 Microcomputer Hardware Systems		3
Select one from the following:		2
CAB 125	Word Processing Using Word	
CAB 130	Presentation Software Using PowerPoint	
CAB 235	Advanced Spreadsheeting Using Excel	
or other CAB, CIS or CNS course (except CAB 110)		
Hours		12

SECOND YEAR

Semester One		
CIS 116	Introduction to the MS-Windows Operating System	
or CIS 118	or Linux Operating System	2
or other CAB, CIS or CNS course (except CAB 110)		
CIS 203	Managing Information Systems	3
CIS 205	Documentation and Technical Writing	3
Select one from the following:		3
CAB 104	Skill Building and Formatting	
CAB 184	Communication Strategies	
CNS 105	Networking Essentials	
Hours		11
Total Hours		34

Computer Networking and Systems A.A.S.

60 Semester Credit Hours

The Computer Networking and Systems associate degree program is designed to provide students with the knowledge and skills necessary to obtain a position in Networking.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

General Education Requirements:	Hours
Area A — Communications	
EGL 101 Composition I *(also available as AP)*	3
Select one from the following:	3
EGL 102 Composition II	
EGL 111 Introduction to Business and Technical Writing	
EGL 212 Technical Writing Applications	
SPE 103 Effective Speech	
Area B — Mathematics	3-4
Select course from Area B (Mathematics)	
MAT 114 Applied Mathematics I (or higher)	
Area C — Science	3
Select one course from a science discipline	
PHY 101 Applied Physics (recommended)	
Area D — Social and Behavioral Sciences	3
One course from a social or behavioral science discipline	
Area E — Humanities/Fine Arts	3
One course from a humanities or fine arts discipline	
Area F — Global Studies[1]	0-3
One course that satisfies Global Studies requirement	
GBS 101 Introduction to Global Business (recommended)	
Area G — U.S. Diversity Studies[2]	0-3
One course that satisfies U.S. Diversity Studies requirement	
Total Hours	18

1 *Students may take a Global Studies course that satisfies both Area F and another Area requirement.*
2 *Students may take a U.S. Diversity course that satisfies both Area G and another Area requirement.*

Major Requirements		
CIS 101	*Introduction to Computer Information Systems*	3
CNS 105	Networking Essentials	3
CNS 110	Windows Client Desktop[1]	3
CNS 150	Windows Client Desktop[2]	3
CNS 170	Principles of Information Security	3
or CNS 176	or Network Security	
CNS 172	Network Defense and Countermeasures	3
CNS 174	Introduction to Computer Forensics	3
Select at least twelve credit hours from the following:		12
Nine credit hours from any CNS courses not taken previously		
CIS 118 Linux Operating System (or higher)		
or any CSC or ELT courses		

Cisco Track		
CNS 141	Cisco Introduction to Networks	3
CNS 142	Cisco Switching, Routing, and Wireless Essentials	3
CNS 143	Cisco Enterprise Networking, Security, and Automation	3
Total Hours		9

Microsoft Track		
CNS 111	Windows Server[1]	3
CNS 114	Windows Server[2]	3
CNS 116	Windows Server[3]	3
Total Hours		9

Network Security Administration A.A.S.

60 Semester Credit Hours

The Network Security Administration degree program provides a foundation in network security and provides students with the knowledge and skills necessary to obtain positions as cybersecurity analysts and technical security support personnel.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

General Education Requirements:	Hours
Area A — Communications	
EGL 101 Composition I *(also available as AP)*	3
Select one from the following:	3
EGL 102 Composition II	
EGL 111 Introduction to Business and Technical Writing (recommended)	
EGL 212 Technical Writing Applications	
SPE 103 Effective Speech (recommended)	
Area B — Mathematics	4
One course from Area B	
MAT 114 Applied Mathematics I (or higher)	
Area C — Science	3
One course from a science discipline	
PHY 101 Applied Physics (recommended)	
Area D — Social and Behavioral Sciences	3
One course from a social or behavioral science discipline	
Area E — Humanities/Fine Arts	3
One course from a humanities or fine arts discipline	
Area F — Global Studies[1]	0-3
One course that satisfies Global Studies requirement	
GBS 101 Introduction to Global Business (recommended)	
Area G — U.S. Diversity Studies[2]	0-3
One course that satisfies U.S. Diversity Studies requirement	
Total Hours	**19**

1 *Students may take a Global Studies course that satisfies both Area F and another Area requirement.*
2 *Students may take a U.S. Diversity course that satisfies both Area G and another Area requirement.*

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Early Childhood Education

The Early Childhood Education program is designed to educate professionals in a range of diverse positions to serve infants, toddlers, preschoolers and school-age children in group situations, as well as to serve their families.

Basic Infant Toddler Certificate

The following pathway is recommended for students pursuing the Basic Infant Toddler Certificate.

FIRST YEAR

Fall Semester		Hours
ECE 102	Child Growth and Development	3
ECE 104	Introduction to Early Childhood Education	3
ECE 108	Nutrition, Health and Safety for the Young Child	3
Hours		9

Spring Semester		
ECE 107	Observation and Assessment of the Young Child	3
ECE 180	The Exceptional Child	3

Electronics and Computer Technology A.A.S.

60 Semester Credit Hours

This program provides knowledge of emerging technologies and hands-on skills to analyze, configure, design, test and trouble-shoot analog and digital circuits, install and service electronic equipment and systems, and install, operate and service modern electronic and data communication systems. Curriculum includes an introduction to AC/DC circuits and Ohm's law, digital and semiconductor devices and circuits, microprocessors, CAD, wireless applications, home automation technologies, and fast track A+ certification.

Students can receive an A.A.S. degree or can focus on technical courses in the following certificate programs: electronics technology; electronics computer technician; A+ computer diagnostic specialist; and home/office technology integrator.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

FIRST YEAR

Semester One		Hours
ELT 101	Introduction to Electronics	5
ELT 130	Microcomputer Hardware Systems	3
CNS 105	Networking Essentials	3
MAT 114	Applied Mathematics I	4
Hours		15
Semester Two		
EGL 101	Composition I *(also available as AP)*	3
ELT 106	Semiconductor Theory	3
ELT 110	Electronic Drafting Using CAD	4
ELT 140	Computer Peripherals	3
MAT 116	Applied Mathematics II	3
Hours		16

SECOND YEAR

Semester One		
ELT 221	Digital Circuit Fundamentals	3
ELT 223	Integrated Circuits	3
PHY 101	Applied Physics	4
Select one from the following:		3
EGL 102	Composition II	
EGL 111	Introduction to Business and Technical Writing	
EGL 212	Technical Writing Applications	
SPE 103	Effective Speech	
Select one from the following:		3
HUM 165	Introduction to World Music[1]	
HUM 210	World Mythologies[1]	
PHL 205	World Religions[1]	
Hours		16
Semester Two		
ELT 225	Digital Integrated Circuits	3
ELT 231	Fundamentals of Microprocessors	3
MFG 240	Programmable Logic Controllers (PLC)	4
Select one from the following:		3
SOC 101	Introduction to Sociology[2]	
SOC 103	Social Problems[3]	
SSC 105	Introduction to Ethnic Studies[2]	
Select one from the following:		2-3
ELT 150	A+ Certification Preparation	
ELT 154	Fundamentals of Solar Energy Systems	
Hours		15-16
Total Hours		62-63

[1] *Course fulfills the Global Studies Requirement. At least one Global Studies course is required for degree completion.*
[2] *Course fulfills the U.S. Diversity Requirement. At least one Global Studies course is required for degree completion.*
[3] *Course fulfills both, the Global Studies and U.S. Diversity Requirements.*

Electronics Technology Certificate

The following pathway is recommended for students pursuing the Electronics Technology Certificate.

FIRST YEAR

Semester One		Hours
ELT 101	Introduction to Electronics	5
ELT 130	Microcomputer Hardware Systems	3
CNS 105	Networking Essentials	3
MAT 114	Applied Mathematics I	4
Hours		15
Semester Two		
ELT 106	Semiconductor Theory	3
ELT 110	Electronic Drafting Using CAD	4
PHY 101	Applied Physics	4
MAT 116	Applied Mathematics II	3-4
or MAT 140	or College Algebra	
Hours		14-15

SECOND YEAR

Semester One		
ELT 221	Digital Circuit Fundamentals	3
ELT 231	Fundamentals of Microprocessors	3
MFG 240	Programmable Logic Controllers (PLC)	4
ELT 225	Digital Integrated Circuits	3
or ELT 224	or Industrial Circuit Applications	
Hours		13
Total Hours		42-43

Electronics Computer Technician Certificate

The following pathway is recommended for students pursuing the Electronics Computer Technician Certificate.

FIRST YEAR

Semester One		Hours
ELT 101	Introduction to Electronics	5
ELT 130	Microcomputer Hardware Systems	3
ELT 140	Computer Peripherals	3
MAT 114	Applied Mathematics I	4
Hours		15
Semester Two		
ELT 106	Semiconductor Theory	3
ELT 110	Electronic Drafting Using CAD	4
CIS 103	Computer Software and Concepts	4
CNS 105	Networking Essentials	3
Hours		14

SECOND YEAR

Semester One		
ELT 221	Digital Circuit Fundamentals	3
ELT 231	Fundamentals of Microprocessors	3
ELT 150	A+ Certification Preparation	2-3
or ELT 154	or Fundamentals of Solar Energy Systems	
Hours		8-9
Total Hours		37-38

Home/Office Technology Integrator Certificate

This certificate can be completed in one semester.

Courses for a Certificate		Hours
ELT 105	Network Infrastructure Essentials	3
or CNS 140	or Network Infrastructure Essentials	
ELT 108	Home Technology Integration	3
ELT 114	Residential Wiring	3
or ELT 204	or Wireless Technology Integration (WTI)	
Total Hours		9

Health Information Technology A.A.S.

Associate in Applied Science in Health Information Technology prepares graduates for positions in health information management, clinical data specialist, medical coding, record processing, quality improvement, utilization management and reimbursement in the prospective payment system.

This program combines academic and technical studies as well as a professional practice experience in medical facilities and related settings.

Graduates of the Associate Degree program qualify to take the national certification examination, the RHIT (Registered Health Information Technician), given by the American Health Information Management Association (AHIMA). The Health Information Technology program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), in cooperation with AHIMA's Council on Accreditation.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

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Medical Assistant Certificate

The Medical Assistant Certificate prepares students for careers in a medical office or ambulatory care setting. The medical assistant performs a variety of administrative and clinical skills to assist physicians or other health professionals. Students will learn skills in accordance with the standards and guidelines recommended by the Medical Assistant Education Review Board.

Upon successful completion of the program, the graduate is eligible to take a national certification exam.

FIRST YEAR

Semester One		Hours
MAP 120	Basic Healthcare Skills For The Medical Assistant	2
MAP 180	Healthcare Office Procedures for the Medical Assistant	3
HIT 104	Medical Terminology	3
MLT 105	Introduction to Health Care Issues	1
MLT		

Law Enforcement and Criminal Justice A.A.S.

60 Semester Credit Hours

The goal of the Law Enforcement and Criminal Justice curriculum is preparation for careers in the field of law enforcement: police and sheriffs' departments, federal and state agencies, retail/hospital/industrial security, and private investigative agencies.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

FIRST YEAR

Semester One		Hours
EGL 101	Composition I *(also available as AP)*	3
LAE 101	Introduction to Criminal Justice	3
LAE 270	Law of Evidence	3
Select one from the following:		3
SOC 101	Introduction to Sociology[1]	
SOC 103	Social Problems[2]	
SSC 105	Introduction to Ethnic Studies[1]	
Select one from the following:		3
PHL 105	Logic	
PHL 106	Ethics	
PHL 205	World Religions[3]	
Hours		15

Semester Two		
LAE 221	Criminal Law	3
LAE 245	Juvenile Delinquency	3
SPE 103	Effective Speech	3
Select one from the following:		3
BIO 109	Plants and Society	
EAS 105	Introduction to Weather and Climate	
EAS 121	Physical Geography	
EAS 205	Environmental Geology	
Select one from the following:		3
PHL 205	World Religions[3]	
PSC 202	International Relations[3]	
Hours		15

SECOND YEAR

Semester One		
LAE 121	Police Organization and Administration	3
LAE 122	Police Operations	3
LAE 201	Criminology	3
LAE 223	Criminal Procedures	3
LAE 234	Ethics and Leadership in Policing	3
Hours		15

Semester Two		
LAE 235	Criminal Investigations	3
LAE 260	Community Relations and Procedural Justice	3
Select three from the following:		9
LAE 130	Vice And Drug Control	
LAE 135	Forensics I	
LAE 140	Introduction to Corrections	
LAE 239	Forensics II	
LAE 240	Police Strategies and Tactics	
LAE 276	Traffic Investigation	
Hours		15
Total Hours		60

1 *Course fulfills the U.S. Diversity Requirement. At least one U.S. Diversity course is required for degree completion.*
2 *Course fulfills both, the Global Studies and U.S. Diversity Requirements.*
3 *Course fulfills the Global Studies Requirement. At least one Global Studies course is required for degree completion.*

Forensics Certificate

The following pathway is recommended for students pursuing the Forensics Certificate. This certificate provides students with practical hands on experience in the proper techniques of identifying, processing, collecting, and preserving physical evidence associated with crime scenes. The instruction focuses on the understanding of the criminal justice field, the investigative process, criminal law, and the legal aspects of handling evidence and recovered property. The forensic science/evidence technician supports criminal justice professionals in the investigation and prosecution of criminal activity. Graduates and certificate holders may be employed as forensic evidence technicians, property custodians, arson investigators and investigators for local law enforcement and fire services, federal agencies, local, regional and national crime labs, as well as private industry that includes insurance agencies.

FIRST YEAR

Semester One		Hours
LAE 101	Introduction to Criminal Justice	3
LAE 135	Forensics I	3
LAE 239	Forensics II	3
Hours		9

Semester Two		
LAE 221	Criminal Law	3
LAE 235	Criminal Investigations	3
LAE 270	Law of Evidence	3
Hours		9
Total Hours		18

Private Security Certificate

This 18 credit-hour certificate program is designed to serve the needs of individuals who want the core education the Law Enforcement and Criminal Justice program offers. Upon completion, students will be prepared and certified to seek entry level employment positions in the private security field, which include but are not limited to: security officers, loss prevention officers, private inspectors, and private detectives. Completion of the Private Security Certificate also allows students to obtain certification through the state of Illinois as a security officer or private investigator (PERC Certification).

Courses for a Certificate		
LAE 101	Introduction to Criminal Justice	3
LAE 122	Police Operations	3
LAE 135	Forensics I	3
LAE 221	Criminal Law	3
LAE 235	Criminal Investigations	3
LAE 275	Security Guard Training	3
Total Hours		18

Supply Chain Automation A.A.S.

60 Semester Credit Hours

The Supply Chain and Automation Program prepares students for an industrial certification designed to develop the skills and knowledge necessary to enter into the growing field of supply chain logistics, advanced manufacturing, transportation and warehousing. Students will demonstrate skills in overall automated processes and procedures used in warehousing, productions, inventory control, and distribution.

Note: Refer to page 25 for guidelines on IAI General Education course selection.

FIRST YEAR

Fall Semester		Hours
EGL 101	Composition I *(also available as AP)*	3
MAT 114	Applied Mathematics I	4
MFG 102	Industrial Drafting and Design	3
MFG 112	Automated Storage and Distribution	3
Select one Social and Behavioral Sciences course that also satisfies Global Studies[1] or U.S. Diversity Studies[2] requirement		3
Hours		**16**

Spring Semester		
ELT 101	Introduction to Electronics	5
MFG 135	Hydraulics, Pneumatics and Controls	3
Select one from the following:		3
EGL 102	Composition II	
EGL 111	Introduction to Business and Technical Writing	
EGL 212	Technical Writing Applications	
SPE 103	Effective Speech	
Select one from the following:		3
CNS 105	Networking Essentials	
ELT 120	Introduction to Radio Frequency Identification	
MFG 110	Introduction to Machining	
MFG 220	Automation Vision Systems	
MGT 155	Operations and Supply Chain Management	
MGT 156	Introduction to Transportation, Warehousing and Logistics	
Hours		**14**

SECOND YEAR

Fall Semester		
ELT 107	Survey of Electronics	3
MFG 120	Introduction to Welding	4
MFG 240	Programmable Logic Controllers (PLC)	4
Select one from the following:		4
GIS/EAS 190	Geographic Information Systems I	
MFG 140	Introduction to Robotics and Vision Systems	
MFG 250	Advanced Automation Applications (PLC/PAC/HMI)	
Hours		**15**

Spring Semester		
ELT 231	Fundamentals of Microprocessors	3
MEC 220	Elements of Machine Design	3
MFG 245	Programmable Automation Controllers (PAC)	4
Select one elective course not taken previously:		3-4
CNS 105	Networking Essentials	
ELT 120	Introduction to Radio Frequency Identification	
GIS/EAS 190	Geographic Information Systems I	
MFG 110	Introduction to Machining	
MFG 140	Introduction to Robotics and Vision Systems	
MFG 220	Automation Vision Systems	
MFG 250	Advanced Automation Applications (PLC/PAC/HMI)	
MGT 155	Operations and Supply Chain Management	
MGT 156	Introduction to Transportation, Warehousing and Logistics	

Select one Humanities/Fine Arts course that also satisfies Global Studies[1] or U.S. D

Mechatronics Technology Certificate

The following pathway is recommended for students pursuing the Mechatronics Technology Certificate. This certificate offers a general multi-purpose curriculum which covers a broad area of mechatronics technology.

FIRST YEAR

Fall Semester		Hours
CAD 116	Basic AutoCAD	3
ELT 101	Introduction to Electronics	5
MFG 240	Programmable Logic Controllers (PLC)	4
Hours		12
Spring Semester		
ELT 106	Semiconductor Theory	3
MFG 135	Hydraulics, Pneumatics and Controls	3
MFG 250	Advanced Automation Applications (PLC/PAC/HMI)	4
Select one from the following:		3
ELT 110	Electronic Drafting Using CAD	
ELT 231	Fundamentals of Microprocessors	
MFG 102	Industrial Drafting and Design	
Hours		13

SECOND YEAR

Fall Semester		
ELT 221	Digital Circuit Fundamentals	3
ELT 223	Integrated Circuits	3
ENG 120	Engineering Graphics	3
MFG 140	Introduction to Robotics and Vision Systems	4
Hours		13
Total Hours		38

Automation and Controls Certificate

This certificate prepares students for technical job positions in industrial maintenance and automation. Possible job positions would be in automated production line maintenance, robotic cell safeguarding, and industrial machine up keeping. This certificate can be completed in one semester.

Courses for a Certificate		Hours
MFG 111	Introduction to Computer Integrated Manufacturing (CIM)	3
MFG 135	Hydraulics, Pneumatics and Controls	3
MFG 140	Introduction to Robotics and Vision Systems	4
MFG 240 or MFG 245	Programmable Logic Controllers (PLC) Programmable or Automation Controllers (PAC)	4
Total Hours		14

Welding Certificate

Welding is a skill used by various trades and welding applications that range from sculptures by home hobbyist to heavy metal fabrication of bridges, ships, and many other projects. The Welding Certificate follows the standards of American Welding Society (AWS) and covers training of the four welding systems including electric arc, oxy-fuel, gas metal arc, and gas tungsten arc welding processes with emphasis on OSHA operational safety requirements. Welders are employed in shipyards, manufacturing, building and construction, industrial maintenance, repair shops and more. This certificate can be completed in one semester.

Courses for a Certificate		Hours
MFG 102	Industrial Drafting and Design	3
MFG 110	Introduction to Machining	3
MFG 120	Introduction to Welding	4
Total Hours		10

Advanced CNC Machinist Certificate

This certificate is intended for students who are interested in expanding their knowledge and skills beyond CNC machine operation, setup, and programming. Students will acquire essential skills for a professional CNC programmer, such as industrial design and CAD. Additionally, students will learn about industrial robotics and Programmable Logic Controllers (PLC), which are integral parts of modern CNC operations.

Courses for a Certificate		Hours
CAD 116 or MFG 110	Basic AutoCAD or Introduction to Machining	3
MFG 102	Industrial Drafting and Design	3
MFG 140 or MFG 165	Introduction to Robotics and Vision Systems or Mastercam Computer Aided Manufacturing	4
MFG 141	CNC Machine Operation - NIMS Test Preparation	4
MFG 144	Introduction to CNC Programming	4
MFG 240 or MFG 245	Programmable Logic Controllers (PLC) Programmable or Automation Controllers (PAC)	4
Select one from the following:		4
MFG 145	Advanced CNC Programming	
MFG 166	Mastercam Computer Aided Manufacturing II	
MFG 250	Advanced Automation Applications (PLC/PAC/HMI)	
Total Hours		26

Production Technician Certificate

The Production Technician Certificate offers credentials for entry-level manufacturing production workers. The material taught in the program provides the fundamental knowledge and skill sets for anyone seeking a job in the manufacturing industry. Prospective students who earn the certification will enter production market with an understanding of manufacturing technology processes and technical skills required for the position.

Courses for a Certificate		Hours
MFG 102	Industrial Drafting and Design	3
MFG 110	Introduction to Machining	3
MFG 111	Introduction to Computer Integrated Manufacturing (CIM)	3
Total Hours		9

Programmable Controllers (PLC/PAC)
MFG 110

CAD Interior Design Certificate

The CAD Interior Design Certificate prepares students for CAD drafting positions tailored towards Interior Design using AutoCAD for 2D and 3D design and drafting. Students will be proficient in creating floor plans and elevation drawings using AutoCAD and creating 3D computer models of interior floor plans. Possible job positions include CAD draftsperson and interior detail draftsperson. This certificate can be completed in one semester.

Courses for a Certificate		Hours
CAD 134	Basic AutoCAD for Interior Design	4
CAD 136	Advanced AutoCAD for Interior Design	4
Total Hours		8

General Design Certificate

The General Design Certificate prepares students for general drafting positions using a variety of CAD software like AutoCAD, Inventor, Revit, and SolidWorks to design 2D and 3D CAD models and detail drawings. Possible job positions include CAD draftsperson and general CAD designer.

Courses for a Certificate	Hours

Advanced Placement (AP) Credit

AP courses are offered at your high school and are taught by high school faculty. The courses are developed by a national organization called the College Board, ensuring that they meet strict standards for college rigor. This means that you'll be taking a course at your high school that's more difficult than the average high school course. In most cases, you'll take an AP exam to show that you've mastered the material at the college level. Upon successful completion of the exam with a score of 3 or higher, you can apply AP credit toward your degree or certificate at Oakton or any other school to which you apply.

Advanced Placement (AP) Equivalencies are identified in green italics throughout this publication.

Advanced Placement (AP) Equivalencies

Examination	Minimum Score for Awarding Credit	Semester Credit Hours	Oakton Course Equivalent
AP Capstone			
Research		3	Social Science Elective
Seminar		3	Social Science Elective
Arts			
Art History	3	6	ART 111, 112
Studio Art: 2D Design	3	3	ART 105
Studio Art: 3D Design	3	3	ART 107
Studio Art: Drawing	3	3	ART 131
Music Theory	3	6	MUS 121, 122
English			
English Language and Composition	3	3	EGL 101
English Literature and Composition	3	3	EGL 129
History and Social Science			
Government and Politics Comparative	3	3	PSC 201
European History	3	6	HIS 131, 132
Human Geography	3	3	GEG 122
Macroeconomics	3	3	ECO 201
Microeconomics	3	3	ECO 202
Psychology	3	3	PSY 101
U.S. Government and Politics	3	3	PSC 101
U.S. History	3	6	HIS 111, 112
World History	3	3	Social Science Elective
Math and Computer Science			
Calculus AB	3	5	MAT 250
Calculus BC	3	9	MAT 250, 251
Computer Science A	3	3	CSC 156
Computer Science Principles	3	3	CIS 101
Statistics	3	3	MAT 131
Sciences			
Biology	3	4	BIO 121
	4	4	BIO 121
	5	8	BIO 121, 122
Chemistry	3	4	CHM 121
	4-5	8	CHM 121,122
Environmental Science	3	4	BIO 106
Physics C: Electricity and Magnetism	3	4	Science Elective
Physics C: Mechanics	3	4	Science Elective
Physics 1: Algebra-Based	3	4	Science Elective
Physics 2: Algebra-Based	3	8	PHY 131, 132 *(Must get 3 or higher on both Physics 1 and 2)*
World Languages and Culture			
Chinese Language and Culture	3	8	CHI 101, 102
French Language and Culture	3	8	FRE 101, 102
German Language and Culture	3	8	GER 101, 102
Italian Language and Culture	3	8	ITL 101, 102
Japanese Language and Culture	3	8	JPN 101, 102
Latin	3	8	Language Elective
Spanish Language and Culture	3	8	SPN 101, 102
Spanish Literature and Culture	3	3	SPN 210

Illinois Articulation Initiative (IAI) General Education Courses

Students pursuing an associate degree leading to transfer (A.A., A.S., A.S.E., or A.F.A.) must select their general education courses from those listed below with IAI codes. These courses are part of the Illinois Articulation Initiative general education core and will be accepted by all Illinois public and private colleges and universities subscribing to the Initiative. This includes all public two-year, four-year, and many independent colleges and universities. Transfer students may select other courses in these general education disciplines as electives. More information about the Illinois Articulation Initiative, including courses that are part of the IAI general education core is available at *iTransfer.org.*

Students pursuing an associate degree in a career program (A.A.S.) or in General Studies (A.G.S.) may select their general education courses from the lists below,   including those   without IAI codes. These courses may also transfer as electives. Consult the Office of Advising, Transitions, and Student Success for more information.

Students may use two or more IAI general education courses with the same IAI code to fulfill general education requirements unless otherwise indicated in the Academic Catalog course descriptions.

Consult the Baccalaureate Transfer Programs and Career Programs sections of the Academic Catalog for specific requirements for associate degrees.

Communications (Area A)

Course		Hours
EGL 101	Composition I (C1 900) *(also available as AP)* [1]	3
EGL 102	Composition II (C1 901R) [1]	3
SPE 103	Effective Speech (C2 900)	3

1 *IAI requires a grade of C or better in EGL 101 Composition I and EGL 102 Composition II.*

Note: Students pursuing an associate degree in a career program (A.A.S.), may take EGL 111 and/or EGL 212 to satisfy general education requirements. These courses may also transfer as electives.

Mathematics (Area B)

Course		Hours
MAT 125	General Education Mathematics (M1 904)	4
MAT 129	Foundations of Mathematics for Elementary Teachers II (M1 903)	3

History

HIS 111	*United States History to 1877 (S2 900)*	3
HIS 112	*United States History from 1877 (S2 901)*	3
HIS 113	History of Native Americans (S2 923D)[3]	3
HIS 131	*Western Civilization to 1650 (S2 902)*	3
HIS 132	*Western Civilization since 1650 (S2 903)*	3
HIS 139	History of the Non-Western World to 1900 (S2904N)[1]	3
HIS 140	History of Contemporary Non-Western Civilizations (S2 905N)[1]	3
HIS 203	History of South Asia I (S2 920N)[1]	3
HIS 204	History of South Asia II (S2 920N)[1]	3
HIS 208	History Of Ancient Africa (S2 920N)[1]	3
HIS 211	History of Modern Africa (S2 920N)[1]	3
HIS 216	History of Modern China (S2 920N)[1]	3
HIS 225	History of the Islamic Middle East from the 7th Century to 1918 (S2 920N)[1]	3
HIS 226	History of the Islamic Middle East in Modern Times (S2 920N)[1]	3
HIS 233	History of Latin America to Independence (S2920N)[1]	3
HIS 234	History of Modern Latin America (S2 920N)[1]	3

Geography

GEG 120	World Regional Geography (S4 900N)[1]	3
GEG 122	*Cultural Geography (S4 900N)* [1]	3
GEG 130	Introduction to Economic Geography (S4 903N)[1]	3

Political Science

PSC 101	*American Government (S5 900)*	3
PSC 103	Introduction to Political Science (S5 903)	3
PSC 201	Comparative Government (S5 905)[1]	3
PSC 202	International Relations (S5 904)[1]	3

Psychology

PSY 101	*Introduction to Psychology (S6 900)*	3
PSY 120	Human Development (S6 902)	3
PSY 202	Social Psychology (S8 900)[2]	3
PSY 205	Adult Psychology (S6 905)	3
PSY 211	Child Psychology (S6 903)	3

Sociology

SOC 101	Introduction to Sociology (S7 900)[2]	3
SOC 103	Social Problems (S7 901)[3]	3
SOC 104	Sociology of Marriage and Family (S7 902)[2]	3
SOC 230	Sociology of Sex and Gender (S7 904D)[2]	3
SOC 232	Sociology of Race and Ethnicity (S7 903D)[2]	3

Social Science

SSC 101	The Individual in Modern Society (S9 900)	3
SSC 105	Introduction to Ethnic Studies (S7 903D)[2]	3
SSC 201	Introduction to Global Studies (S9 900)[1]	3

Note: Students pursuing an associate degree in a career program (A.A.S.), may take other general education courses in Anthropology (ANT); Economics (ECO); Geography (GEG); History (HIS); Political Science (PSC); Psychology (PSY) (except PSY 230 and PSY 231); Social Science (SSC); Sociology (SOC). These courses may also transfer as electives.

Humanities/Fine Arts (Area E)

Associate degrees leading to transfer, must include courses in at least two different disciplines.

Course		Hours
Humanities		
EGL 113	Introduction to Drama (H3 902)	3
EGL 115	Introduction to Fiction (H3 901)	3
EGL 117	Introduction to Poetry (H3 903)	3
EGL 129	*Introduction to Literature (H3 900)*	3
EGL 130	Introduction to Literature (H3 900N)	

Global Studies (Area F)

Oakton requires that all students earning an associate degree successfully complete a course that provides a distinct global context for examining debates surrounding the complex interrelationships among peoples, nations and the environment, and the phenomenon of globalization. Courses that provide this context and fulfill this requirement are marked with the footnote reference "1" and listed below. Some of these courses may also fulfill general education requirements for Humanities,

Concurrent Enrollment

Baccalaureate Transfer Programs and Pre-Majors

Do you have a vision for your college education and love a good plan? One benefit of starting at Oakton if you plan to earn a four-year degree is the opportunity to pursue our specially designed transfer programs and pre-majors. Students pursuing coursework through Early College may also apply their credit to these transfer-ready programs. And here's more good news: All of the courses on the IAI list count toward these transfer programs. Our goal is to make sure your transfer experience is as seamless as possible.
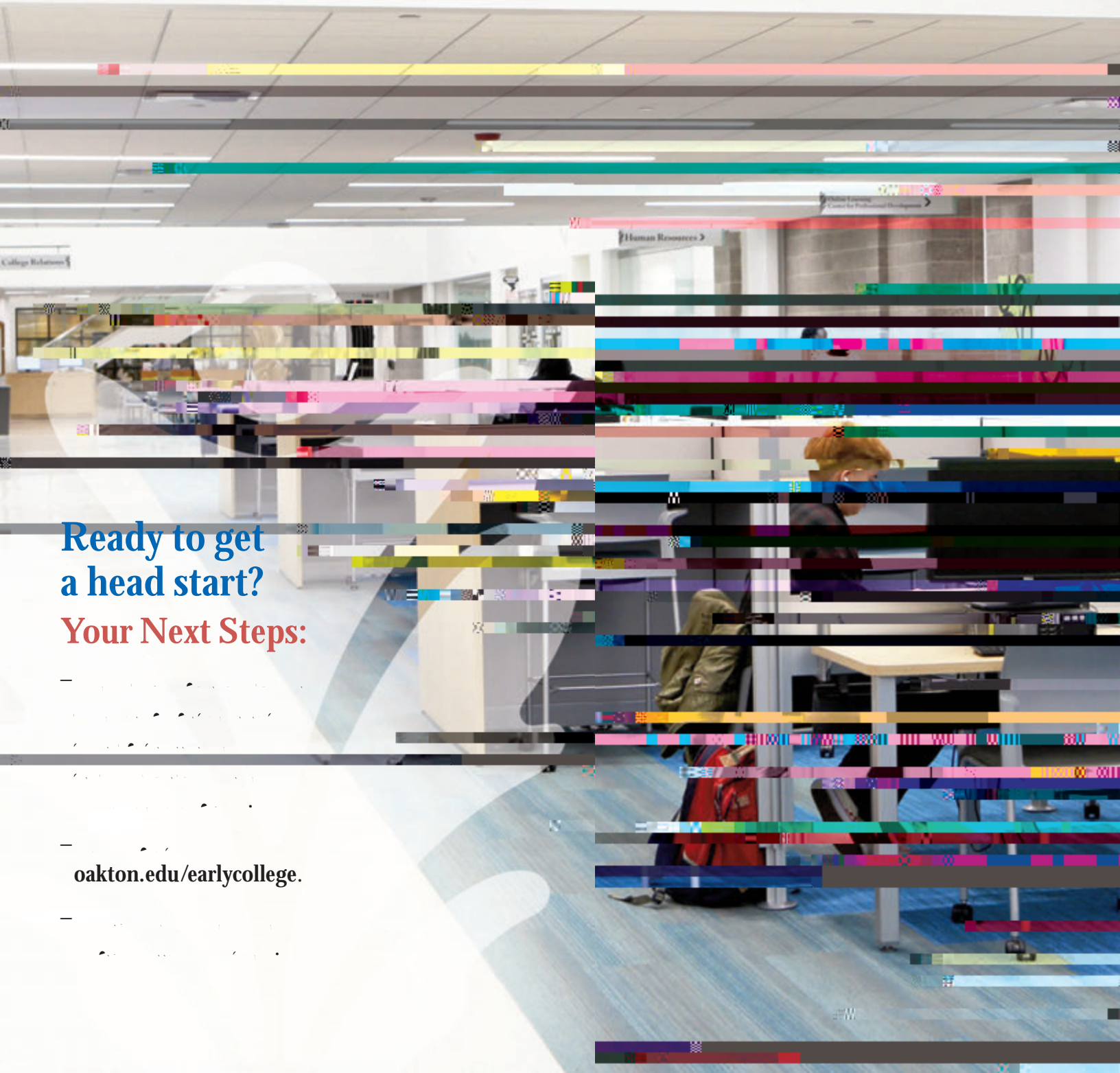
Here's our full list of bachelor degree transfer programs and pre-majors. Learn more at www.oakton.edu/transfer

Associate in Arts (A.A.)

Anthropology Pre-major

Biology Pre-major for Associate in Arts

Computer Science Pre-major for Associate in Arts

Economics Pre-major

Elementary Education Pre-major

English Pre-major

Environmental Studies Pre-major

Exploring Humanities Pre-major

Geography Pre-major

Global Studies Pre-major

History Pre-major

Jewish Studies Pre-major

Law Enforcement and Criminal Justice Pre-major

Modern Languages Pre-major

Peace and Social Justice Studies Pre-major

Philosophy Pre-major

Political Science Pre-major

Psychology Pre-major

Religious Studies Pre-major

Secondary Education – Humanities, Behavioral/Social Sciences or Arts Pre-major

Secondary Education – Science or Math Pre-major

Sociology Pre-major

Special Education Pre-major

Speech Pre-major

Theater Pre-major

Women, Gender, and Sexuality Studies Pre-major

Did you know? Concurrent enrollment allows you to take any course in Oakton's catalog, as long as you meet the prerequisites.

Ready to get a head start?

Your Next Steps:

oakton.edu/earlycollege.