

East Central College

ARTICULATED THROUGH SOUTHEAST MISSOURI STATE UNIVERSITY

Industrial Technology

Associate of Arts Degree

Catalog Year Fall 2015

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East Central College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools 30 N. LaSalle St., Suite 2400 Chicago, Illinois 60602-2504 800-621-7440

THE CAREER

Industrial technology emphasizes the use of engineering and manufacturing technology to make production faster, simpler and more efficient. The industrial technology field employs creative and technically proficient individuals who can help a company achieve efficient and profitable productivity. Industrial technologists work in a job spectrum between the skilled technician and upper management.

Industrial technology graduates have several career paths available to them. Many graduates work in planning and designing manufacturing processes and equipment, management of the operation and maintenance of complex operating systems or implementing designs and processes. These technologists are employed in a large and wide array of industries including manufacturing, facilities management, construction, industrial, maintenance, telecommunications and sustainable energy.

EMPLOYMENT AND SALARY INFORMATION

Examples of possible career paths and their annual median salaries* include:

Safety Specialist	\$66,790
Construction and Building Inspector	\$53,450
Industrial Production Manager	\$89,190
Industrial Engineering Technologist	\$58,670
Production Specialist	\$50,980
Quality Control Inspector	\$43,120

PROFESSIONAL TRAITS

Those pursuing a career in this field should:

- Be at ease working with technology
- Possess good communication and organizational skills
- Work well independently and as part of a team
- Be able to analyze, compare and interpret detailed information
- Anticipate and prevent problems

* Data provided by the U.S. Bureau of Labor Statistics

THE PROGRAM

East Central College offers its industrial technology students a complete two-year program. It consists of basic calculus, science classes and hands-on mechanical and electrical classes in state-of-the art facilities. ECC students benefit from instruction in optimization theory, industrial processes, industrial planning procedures, computer applications and report and presentation preparation.

ADMISSIONS REQUIREMENTS

To enter the program, students must have completed:

- ✓ High school diploma or the equivalent (documentation must be sent to the registration office)
- ✓ Application for admission
- ✓ A placement test as specified by the college (please note: some coursework requires minimum placement results)

Transfer Options

Industrial technology students benefit from an articulation agreement between East Central and Southeast Missouri State University. They transfer to four-year, bachelor of science programs with a very high completion rate.

Please note that transferring credit is decided solely by the bachelor degree-granting institution, not ECC. Students are advised to make early contact with the four-year college or university of their choice so that they can take the appropriate coursework at East Central.

Special Funding Available

Scholarships and grants are available for those who qualify through the Missouri Manufacturing WINs grant. Please contact Financial Aid for more details.













INDUSTRIAL TECHNOLOGY

Associate of Arts Degree

PROGRAM OF STUDY

This program of study is for a full-time student; part-time study is also available. Please contact an academic advisor for full course options. For the most current academic schedule (which is subject to change), visit the college website at www.eastcentral.edu.

AA Program (66 credit hours)

YEAR 1

FALL SEMESTER

Course		Hours
FS 1000 FS 1001	Campus Orientation/ Foundation Seminar	1
EN 1223 EN 1233	English Comp I or Honors English Comp I	3
MT 1505	Pre-Calculus Math	5
PE 1081	Introduction to Fitness & Wellness	1
	Technical Elective**	3
	Art/Music/Theater Appreciation Elective	3
	Total Hours	16

Spring Semester

Course		Hour
CS 1093	C# Programming	3
IE 1123	Industrial Computer Applications	3
MT 2013	Survey of Calculus	3
EN 1333 EN 1343	English Comp II or Honors English Comp II	3
PS 1000	Constitutions Study Module	0
PS 1203 PS 1303	U.S. Government I: Nation & State or State & Local Government	3
	Total Hours	15

YFAR 2

FALL SEMESTER

Course		Hours
CT 1003 CT 1103	Oral Communications or Public Speaking	3
SC 1000	Laboratory Safety for Students	0
	Physical Science Elective with Lab*	5
	Technical Elective**	3
	Psychology/Ethics Elective***	3
	Literature Elective	3
	Total Hours	17

Spring Semester

Course		Hours
	Technical Elective**	3
	Technical Elective**	3
	Technical Elective**	3
	Life or Environmental Science	3
	Civilization/History Elective***	3
	Geography/Sociology/Anthropology	
	Elective (GLB)	3
	Total Hours	18

^{*} Telecommunications students take PH 1703/1712 College Physics I Lecture/Lab; Industrial students take CH 1105 Introduction to Chemistry Lecture/Lab

**ADDITIONAL TECHNICAL ELECTIVES

	Industrial			Telecommunications	
IE 2123	Materials and Metallurgy F	3	CS 1063	Microcomputer Operations	3
IE 2213	PLC: Programmable Logic Controlle	ers ^F 3	CS 1153	Network 1 (Cisco)	3
MA 1013	Print Reading and Design	3	CS 1163	Network 2 (Cisco)	3
MA 2163	Solidworks ^F	3	IE 1172	Process & Controls Systems Lecture	2
BOTH INDUSTRIAL AND TELECOMMUNICATIONS			IE 1171	Process & Controls Systems Lab	1
IE 1152	Industrial Electricity Lecture F	2			
IE 1151	Industrial Electricity Lab ^F	1	F - Courses that	are only offered in the fall semester.	



^{***} Students taking the Psychology elective (Year 2 Fall) must enroll in the Civilization elective (Year 2 Spring). Students choosing the Ethics elective (Year 2 Fall), must take the History elective (Year 2 Spring).