



IWCC has created a wonderful **win/win opportunity for students and businesses** through the Design Technology program.

John Worth – Vice President of Operations, Owner Revolution

DESIGN TECHNOLOGY

Iowa Western Community College

Overview

The Design Technology program trains students to bridge the gap between engineering and production. Our coursework integrates 21st century skills and tools to communicate ideas, create technical designs, and solve problems. Students of Design Technology learn a broad array of highly demanded technical skills that meet industry needs and provide graduates a variety of career choices in the southwest Iowa region.

Industry Need

Community College Impact:

- ◆ **39% of Iowa jobs will be “middle-skill”** (education and training beyond high school, but below a Bachelor’s degree)
 - ◆ Only 21% of Iowa jobs will require a Bachelor’s degree
- Iowa: Education and Workforce Trends through 2025 by the Center on Education and the Workforce, (Nov. 2015)*

Technical industries have shown increased demand for a “middle-skill” workforce that is able to:

- ◆ Perform many tasks usually assigned to engineers
- ◆ Work with modern engineering technology
- ◆ Understand and manage product lifecycles

Value to Industry:

- ◆ Both hard and soft skills
- ◆ Both knowledge and hands-on experience

Current Employers and/or Internship Locations:

Rockwell Collins – Cedar Rapids
Iowa DOT – Atlantic
Winnebago Ind. – Forest City
Acieta – Council Bluffs
Precision Components – Atlantic

Power Engineers – Des Moines
Lisle Corporation – Clarinda
Schafer Systems – Adair
Snyder & Associates – Ankeny
Plastic Professionals – Atlantic

Rasmussen Mechanical – Council Bluffs
Central Western Fabricators – Atlantic
Tommy Gate – Denison
Atlantic Feedwater Systems – Atlantic

Placement Rate of Design Technology Graduates: **94%**

Industry Advisory Board

Bob Bloomingdale – Winnebago Ind. Tina Waggoner – Rockwell Collins John Worth – Owner Revolution
Scott Hevelone – LBT, Inc Jack Marshall – Kiewit

Program Benefits

Students

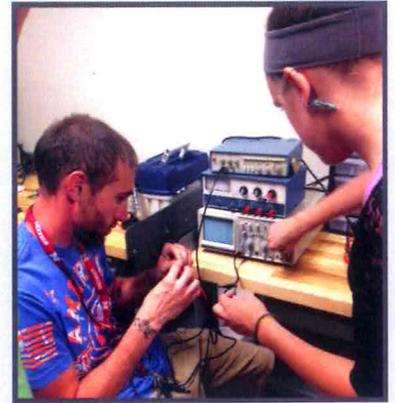
- ◆ Cutting-edge training in a high-demand, well-paying field
- ◆ Graduate with valuable knowledge and skills
- ◆ Average investment with tuition, fees & books is \$13,500

Industries

- ◆ Developed program of study and bi-annual curriculum review by industry
- ◆ Access to highly-skilled graduates
- ◆ Ability to address labor shortage due to new openings and a retiring workforce

Regional

- ◆ Retain local talent
- ◆ Grow community in response to innovation



Program Features

Access to cutting-edge technology

- ◆ \$65.2 million in-kind software grant from Siemens PLM Software
 - 3D CAD modeling experience with Siemens NX and Solid Edge
 - Product Lifecycle Management (PLM) experience with Siemens Teamcenter
- ◆ 3D Printer and 3D Scanner
- ◆ Fabrication and Electrical Labs
- ◆ Gain engineering knowledge with cutting-edge training
- ◆ Gain soft skills by working on group projects and through internships

Careers

Average starting salary for Design Technology graduates: \$35,000—\$45,000*

Product Designer

Technical Designer

Tooling Designer

CAD Software Specialist

Product Line Analyst

Product Specialist

Engineering Technician

* Average reported by Design Technology graduates

Local Investment

Design Technology is an outstanding example of community and regional stakeholders investing a progressive future through a well educated, skilled workforce.

Local Fundraising Total: \$918,497

Leading Partners:

Dr. Duane & Shirley Acker
A.M. Cohron & Son, Inc.
Anonymous
Atlantic Coca-Cola Bottling Co.
Atlantic Rotary Club
Baxter Farms LLC
Dolly Bergmann
Brockner, Karns & Karns, Inc.
Brown's Shoe Fit
Brymons Interiors
Cass County Brd. of Supervisors
Cass County Comm. Foundation

David & Barbara Chase
City of Atlantic
Deter Motor Company
LuAnn Acker Deter
First Whitney Bank & Trust
Hal & Allie Gronewold
Gronewold, Bell, Kyhnn & Co.
Rod & Jennifer Hartwig
Hunt Family
Lindeman Tractor, Inc.
Mary Ludeman
Pat McCurdy

Diane Acker Nygaard
Ted & Mary Jo Robinson
Rolling Hills Bank & Trust
Southwest Iowa Foundation
Smith Land Service
Keith & Cindy Steffens
Brooke & Lana Tanner
Todd & Michelle Tanner
Larry & Mary Turner
Wickman Chemical
Greg & Debra Williams

Industry Comments

We see IWCC as a business partner helping us to pave our own path into the future. I appreciate the working relationship we have with the staff at IWCC, who are **willing to listen** to our needs and respond. We've had the opportunity to provide **input on their curriculum** as well as what equipment we'd like to see in their fabrication shop. All of these discussions and ideas go into providing us and other industry partners with very capable and diverse, technical resources. **These resources become the foundation of our organization, the people that meet the challenges of today and tomorrow.**

John Worth – Vice President of Operations, Owner Revolution

Quite honestly for a lot of years I thought the best engineers to hire were ones with a four-year degree.

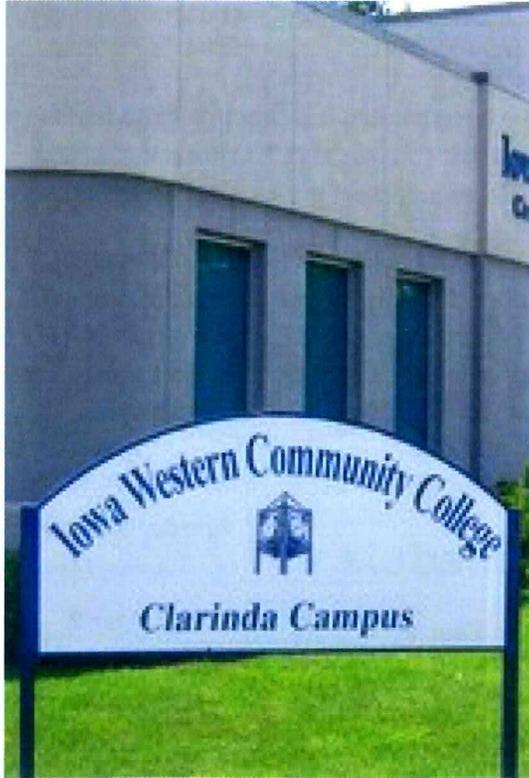
I have a four-year degree and I'll tell you it's valuable in some settings, but **that hands-on component is always missing in a four-year degree.**

Blake Consdorf – Vice President of Sales at Acieta

Completing the Design Technology program, I have been able to help grow Atlantic Feedwater Systems business. We are able to give the customers a better drawing with 3D instead of 2D. We have been able to implement our products more efficacy and with less error. **These skills have allowed us to expand our business significantly.**

Justin Anderson – Atlantic Feedwater Systems
Design Technology Graduate, Class of 2013



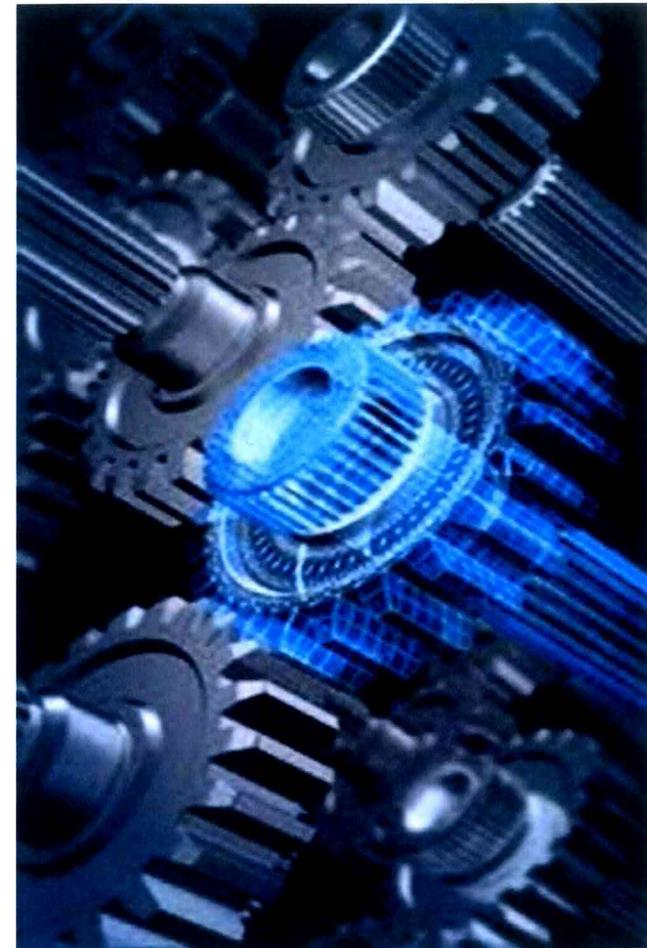


"The function of education is to teach one to think intensively and to think critically. Intelligence plus character—That is the goal of true education

- Martin Luther King, Jr.

PLACE
STAMP
HERE

Iowa Western Community College
Looff Hall DEWD
2700 College Rd.
Council Bluffs, IA 51502



Industrial Trades Center

at Clarinda

Fall 2016

Iowa Western Community College
Clarinda, IA



Program Overview

Industry partners and Iowa Western have established a demand-driven 2 year certificate program designed to meet and sustain the needs of current and emerging industrial trades jobs needed in southwest Iowa companies.

Details

The Industrial Trades Center (ITC) certificate program, will include a core year for students, then will divide into two specialized tracks for either Electro-Mechanical Technician or Tool and Die Technicians. See Schedule (right).

Class instruction will be centered around learning theory then immediately applying said theory to practical application.

Pricing: Due to our ability to use a variety of funds to help offset the cost, please contact



CORE

YEAR 1

- Electricity 1
- Machine Process Theory & Application
- Technical Mathematics
- Welding
- Mechanical Power-Transmissions
- Fluid Power Systems

ELECTRO-MECHANICAL TECH TRACK

— YEAR 2

- Robotics
- Electricity 2
- PLC Basics
- Motor Controls Basic
- PLC Advanced
- Motor Controls Advanced

TOOL & DIE TRACK

— YEAR 2

- Machine Trades & Blueprint Reading
- Workholding Methods
- Machine Tooling & Repair
- CNC Operations
- Advanced Manufacturing
- CNC Programing

Contact Us

Shalimar Mazetis
2700 College Rd.
Council Bluffs, IA 51502

(712) 325-3352
smazetis@iwcc.edu

Interested in an Apprenticeship?

IWCC has not only created a Registered Apprenticeship to utilize ITC but we have also done all the paperwork for our company partners.

We have created this program to go hand in hand with the Related Technical Instruction (RTI) requirement for apprenticeships.

IWCC has worked with the Department of Labor to create registered apprenticeship standards that use ITC as the required RTI hours for the occupations of Electro Mechanical Technician and Tool & Die Technician.

Schedule

Tuesday & Thursday's
4pm—7pm

Year 1

Core Fall 9/6/16-11/17/16
Core Winter 1/3/17-3/16/17
Core Spring 3/28/17-6/8/17

Year 2

Track Fall 9/5/17-11/16/17
Track Winter 1/2/18-3/15/18
Track Spring 3/27/18-6/7/18

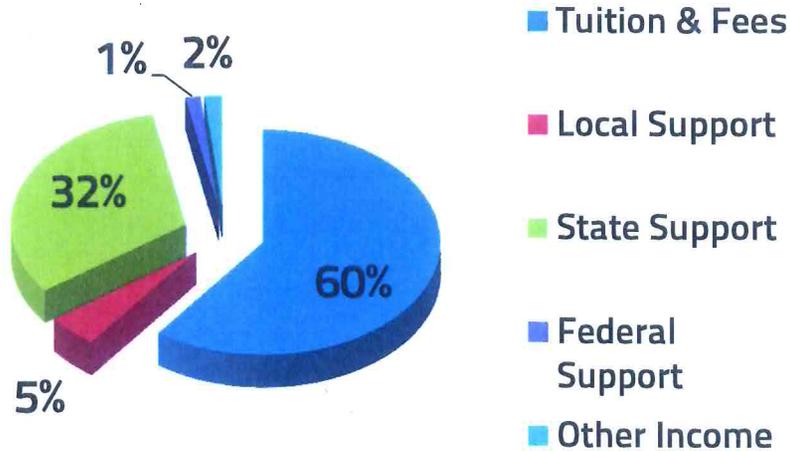


Electro-Mechanical and Tool & Die Technician



Revenues by Source IWCC and Iowa Community Colleges

Iowa Western Community College



Iowa Community Colleges

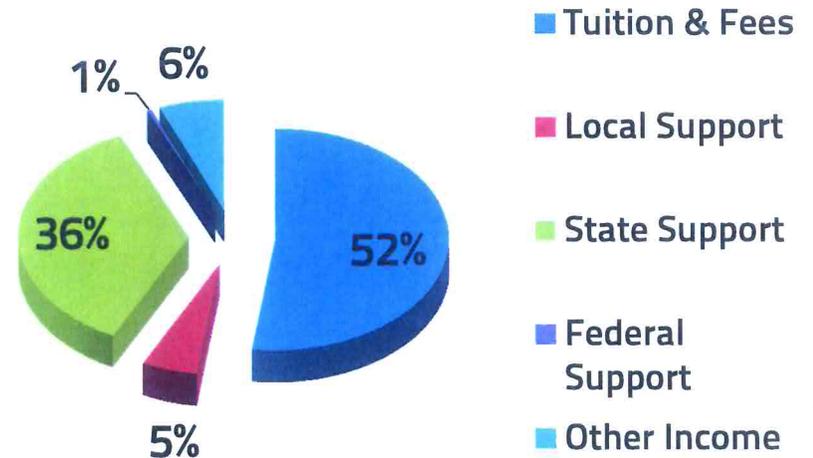


Table 15-1: 2015 Nominal Revenue by Source and College.

College	Tuition & Fees, \$	Local, \$	State Support, \$	Federal, \$	Other Income, \$	Total Revenue, \$
Northeast	15,251,109	2,020,034	9,930,203	8,825	3,008,664	30,218,835
North Iowa	10,837,543	1,301,993	10,075,468	5,884	1,295,362	23,516,250
Iowa Lakes	8,435,523	1,138,186	9,325,475	210	2,014,399	20,913,793
Northwest	5,502,534	746,732	4,587,266	43,760	802,706	11,682,998
Iowa Central	22,913,177	1,465,087	11,389,365	33,110	953,486	36,754,225
Iowa Valley	11,685,182	854,276	8,937,758	209,836	1,508,400	23,195,452
Hawkeye	17,732,024	1,742,218	13,575,322	212,940	2,112,447	35,374,951
Eastern Iowa	20,955,038	2,629,600	17,191,538	280,205	892,301	41,948,682
Kirkwood	48,590,955	4,331,778	31,470,426	76,283	3,199,417	87,668,859
Des Moines Area	54,629,627	7,256,630	33,680,001	415,391	10,571,410	106,553,059
Western Iowa Tech	16,045,309	1,524,063	11,164,102	274,381	2,820,442	31,828,297
Iowa Western	22,678,431	1,829,780	12,118,736	528,088	607,751	37,762,786
Southwestern	5,713,799	575,228	4,676,007	31,569	826,982	11,823,585
Indian Hills	19,395,524	1,057,623	14,673,081	0	2,114,295	37,240,523
Southeastern	10,196,136	731,103	8,482,483	68,842	1,271,023	20,749,587
Total	290,561,911	29,204,331	201,277,231	2,189,324	33,999,085	557,231,882

Table 15-2: Nominal revenue totals by source 2011-2015.

Year	Tuition & Fees, \$	Local, \$	State Support, \$	Federal, \$	Other Income, \$	Total Revenue, \$
2011	308,633,060	25,406,419	158,754,232	14,478,452	31,507,835	538,779,998
2012	314,657,804	26,471,137	163,774,647	10,142,936	29,392,828	544,439,352
2013	307,054,107	27,428,532	177,274,655	9,710,256	31,529,441	552,996,991
2014	295,035,559	28,505,519	193,274,647	6,421,205	34,226,499	557,463,429
2015	290,561,911	29,204,331	201,277,231	2,189,324	33,999,085	557,231,882