

# Engineering Design Technology at a Glance



## Program Description

Engineering Design Technology is an interdisciplinary curriculum that prepares graduates for a variety of positions in manufacturing design. All students complete a core set of courses selected to provide a well-rounded understanding of design. Topics include hands-on instruction in current technical competency areas including Computer Aided Drafting (CAD), Machine and Tool Design, 3-D Solid Modeling, CATIA. CATIA are taught in conjunction with the National Institute of Aviation Research (NIAR). O-NET Code:17-3013

## **Visit our Campus!**

We will cover everything you will need to know about:

- Information about the Engineering Design program
- Assist with completing our WATC application
- Give information about enrollment and the FAFSA application
- Tour of campus and programs

**To schedule an appointment, call 316-677-9680**

## Program Start Dates:

Primary start dates are: August (Fall) and January (Spring). General education classes can be taken: March, June, and October.

## Engineering Design Program Contacts:

Admission Counselor:

Marcus Hernandez

[mhernandez12@watc.edu](mailto:mhernandez12@watc.edu)

316-677-1032

Academic Advisor:

Sylvia Smith

[ssmith66@watc.edu](mailto:ssmith66@watc.edu)

316-677-9560

| Type of Degree/Certificate<br>TC – Technical Certificate<br>AAS – Associates Degree<br>COC – Certificate of Completion | Day/<br>Evening | Length<br><i>Based on Average Rate<br/>of Completion</i> | Hours**                      | *Cost<br>Tuition/<br>Fees | Financial<br>Aid<br>Eligible |
|--|-----------------|--|------------------------------|---------------------------|------------------------------|
| AAS - Engineering Design   | Day             | 2 years  | M-F 8am – 11am<br>12pm - 3pm | \$12,869                  | Yes                          |
| AAS - Engineering Design   | Evening         | 3 Years  | M-Thurs<br>5:30-9:30pm       | \$12,869                  | Yes                          |
| TC – Mech. Eng. Design   | Day             | 1 ½ Years  | M-F 8am – 11am<br>12pm - 3pm | \$10,702                  | Yes                          |
| TC – Mech. Eng. Design   | Evening         | 2 Years  | M-Thurs<br>5:30-9:30pm       | \$10,702                  | Yes                          |
| COC - AutoCAD  | Day             | 6 months   | M-F 8am – 11am<br>12pm - 3pm | \$4,374                   | No                           |
| COC – AutoCAD  | Evening         | 10-12 months   | M-Thurs<br>5:30-9:30pm       | \$4,374                   | No                           |

Costs are approximate and subject to change. Costs include Tuition and Student Fees (Books are not included in amount). \*\*Day classes are 8:00am – 11am, 12pm – 3pm, and 5:30pm – 9:30pm for AutoCAD classes.

CATIA classes are 8am – 11am, 1pm – 5pm, and 5pm – 9pm. Class schedules and availability are subject to change. Class schedules and availability are subject to change. For the latest information, please visit:

<http://watc.edu/engineering-design-technology/>



This program is accredited by HLC and Kansas Board of Regents.

More information at: <http://watc.edu/get-started/>

 [KS DegreeStats.org](http://KS DegreeStats.org)



## Frequently Asked Questions

### Q. How do I get started?

A. We would invite you to meet with us to discuss the program at any time Monday through Friday. You can also schedule an appointment via email or phone call. After the admissions requirements are met, you can meet with our academic advisor to enroll in classes and create an educational plan.

### Q. What software will I use in class? What is required for the program?

A. The latest version of AutoCAD and the latest revision of CATIA. Student versions of both programs are available from the software manufacturer. The technical classes will be in a computer lab classroom so you will not need a digital device for those classes. You will need a digital device (tablet or laptop) for the general education classes. The average cost for technical books in this program is \$400. General education textbooks for this program will cost around \$730.



### Q. Why should I take this program at WATC? What makes this program different from other design programs?

A. You will learn the latest techniques of the design process here at WATC. Our National Center of Aviation Training is one of the nation's top learning facilities. We have an articulation agreement with Wichita State University where our students can go directly from our program to WSU's Engineering bachelor's degree programs. We also have an articulation agreement with Pittsburg State University. Our students have won awards from SkillsUSA and many scholarships from industry leaders like Airbus and the Wichita Manufacturing Association.

### Q. What wage can an Engineering Drafting Technician expect?

A. \*According to the Bureau of Labor Statistics (May 2016); mean wages for individuals in this field in Wichita are approximately \$54,480 annually. The typical entry level education for this field is associate's degree.

### Q. Can I take the CATIA classes before the AutoCAD classes? How do the CATIA lab and lecture work?

A. We prefer students take the AutoCAD classes first, because the AutoCAD classes provide a foundation for CATIA classes. However, there are times when we can make an exception and place students in the CATIA portion of the program first. It will lengthen the overall time to complete the program. Twice a week, the CATIA lecture instructor will teach the class for 2 hours. On the opposite days of the week, students will attend a classwork/homework lab for the class.

\*Source: Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Employment Statistics*, June 26<sup>th</sup> 2017 [www.bls.gov/oes/](http://www.bls.gov/oes/).

### Questions for our Instructors?

#### AutoCAD Instructors

Jeremy King: [jking@wadc.edu](mailto:jking@wadc.edu)

Kevin West: [kwest@wadc.edu](mailto:kwest@wadc.edu)

Jesse Ross: [jross8@wadc.edu](mailto:jross8@wadc.edu)

#### CATIA Instructors

Paul Von Itter: [pvonitter@wadc.edu](mailto:pvonitter@wadc.edu)

Kurt Foley: [kfoley@wadc.edu](mailto:kfoley@wadc.edu)

Michael Milhon: [mmilhon@wadc.edu](mailto:mmilhon@wadc.edu)

# AutoCAD Certificate at a Glance

## Program Description

AutoCAD (*Computer Aided Design*) is one of the leading drafting programs in the world. It is used in several industries including: Architecture, Engineering (Civil, Manufacturing, Mechanical, Process, and Structural), Interior Design, Mapping, and Transportation. All students complete a core set of courses selected to provide a well-rounded understanding of design. Topics include: Computer Aided Drafting (CAD), Machine and Tool Design, and 2D/3D Solid Modeling. O-NET Code:17-3013.00



## Visit our Campus!

We will cover everything you will need to know about:

- Information about the AutoCAD Design program
- Assist with completing our WATC application
- Give information about enrollment and the FAFSA application
- Tour of campus and programs

To schedule an appointment, call 316-677-9680

## AutoCAD Design Program Contacts:

Admission Counselor:  
Marcus Hernandez  
[mhernandez12@watc.edu](mailto:mhernandez12@watc.edu)  
316-677-1032

Academic Advisor:  
Sylvia Smith  
[ssmith66@watc.edu](mailto:ssmith66@watc.edu)  
316-677-9560

## Program Start Dates:

Primary start dates are: August (Fall) and January (Spring). General education classes can be taken: March, June, and October.

| Type of Degree/Certificate<br>COC – Certificate of Completion | Day/<br>Evening | Length<br><i>Based on Average<br/>Rate of Completion</i> | Hours                        | *Cost<br><i>Tuition/Fees</i> | Financial<br>Aid<br>Eligible |
|---|-----------------|--|------------------------------|------------------------------|------------------------------|
| COC - AutoCAD   | Day             | 6 months   | M-F 8am – 11am<br>12pm - 3pm | \$4,374                      | No                           |
| COC – AutoCAD   | Evening         | 10-12 months   | M-Thurs<br>5:30-9:30pm       | \$4,374                      | No                           |

\*Costs are approximate and subject to change. Costs include tuition and fees for all classes including prerequisites (Books are not included in amount). Class schedules and availability are subject to change. For current info, please visit: <http://watc.edu/autocad-coc/>



This program is accredited by HLC and Kansas Board of Regents.  
More information at: <http://watc.edu/get-started/>

 [KS DegreeStats.org](http://KS DegreeStats.org)



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## Frequently Asked Questions

### Q. How do I get started?

A. We would invite you to meet with us to discuss the program at any time Monday through Friday. You can also schedule an appointment via email or phone call. After the admissions requirements are met, you can meet with our academic advisor to enroll in classes and create an educational plan.

### Q. What's required for the program?

A. There are no tools or special software required for the program. There are student versions of the software that are available from the software manufacturer. Please consult your instructor for more information. We would advise all students to have a flash drive to save their work. Book cost for this program are approximately \$510.

### Questions for our Instructors?

#### AutoCAD Instructors

Jeremy King: [jking@watc.edu](mailto:jking@watc.edu)

Jessie Ross: [jross8@watc.edu](mailto:jross8@watc.edu)

Kevin West: [kwest@watc.edu](mailto:kwest@watc.edu)

### Q. What wage can an AutoCAD drafter expect?

A. \*According to the Bureau of Labor Statistics (May 2016), mean wages for individuals in this field in Wichita are approximately \$54,480 annually. The typical entry level education for this field is associate's degree.

### Q. What classes (prerequisites) do I take as part of this COC? Can I take AutoCAD without taking the prerequisites?

A. This chart can help explain the order of the classes for the certificate. The classes are designed to cover all of the different aspects of AutoCAD. The last class, Advanced AutoCAD, assumes that a student has all the basic knowledge of the five previous classes taught in the program. If a student feels that they have that knowledge, they can consult with the instructor about an opportunity to advance straight to the advanced class. All of the classes are required for the certificate of completion.

| 1 <sup>st</sup> set of Technical Classes | 2 <sup>nd</sup> set of Technical Classes | General Education Classes      |
|--|--|--------------------------------|
| Introduction to CAD I and II             | Machine Drafting and Design*             | Blueprint for Personal Success |
| Blueprint Reading*                       | Advanced AutoCAD                         | Intermediate Algebra           |
| Precision Measuring*                     |  |                                |
| Descriptive Geometry*                    |  |                                |

\*Classes are prerequisite classes for the AutoCAD certificate.



# CATIA Design/Machining Certificates at a Glance



## Program Description

CATIA (*Computer Aided Three-Dimensional Interactive Application*) is one of the leading 3D modeling and drafting programs in the world. It is used in several industries including: Aerospace, Automotive, Shipbuilding, Industrial, High Tech, Energy/Public Works, Retail, Architecture, and Petroleum. WATC offers two different certificates in CATIA: CATIA Engineering Design and CATIA Machining. Our CATIA classes are taught in conjunction with the National Institute of Aviation Research (NIAR). O-NET Code:17-3013.00

## **Visit our Campus!**

We will cover everything you will need to know about:

- Information about the CATIA Design program
- Assist with completing our WATC application
- Give information about enrollment and the FAFSA application
- Tour of campus and programs

**To schedule an appointment, call 316-677-9680**

## Program Start Dates:

Primary start dates are: August (Fall) and January (Spring). General education classes can be taken: March, June, and October.

## CATIA Design Program Contacts:

Admission Counselor:  
Marcus Hernandez  
[mhernandez12@watc.edu](mailto:mhernandez12@watc.edu)  
316-677-1032

Academic Advisor:  
Brian Lee  
[blee3@watc.edu](mailto:blee3@watc.edu)  
316-677-1810

| Type of Degree/Certificate<br>COC – Certificate of Completion | Day/<br>Evening | Length<br><i>Based on Average<br/>Rate of Completion</i> | Hours**           | *Cost<br><i>Tuition/<br/>Fees</i> | Financial<br>Aid<br>Eligible |
|---|-----------------|--|-------------------|-----------------------------------|------------------------------|
| COC - CATIA Machining   | Day             | 6 – 8 months   | M-F 8am-5pm       | \$3,824                           | No                           |
| COC – CATIA Machining   | Eve             | 6 – 8 months   | M-Th. 5:00-9:00pm | \$3,824                           | No                           |
| COC – CATIA Mech. Design                                      | Day             | 6 months   | M-F 8am-5pm       | \$3,451                           | No                           |
| COC - CATIA Mech. Design                                      | Evening         | 10 months  | M-Th. 5:00-9:00pm | \$3,451                           | No                           |

Costs are approximate and subject to change. Costs include Tuition and Student Fees (Books and Digital Device not included in amount). \*\*CATIA classes have morning (8am – 12), afternoon (1pm – 5pm), and evening options (5:30pm – 9:30pm). Friday classes are typically open lab days. Class schedules and availability are subject to change. For the latest information, please visit:

<http://watc.edu/catia-mechanical-engineering-design-coc/> and <http://watc.edu/catia-machining-coc/>



This program is accredited by HLC and Kansas Board of Regents.  
More information at: <http://watc.edu/get-started/>

 [KS DegreeStats.org](http://KS DegreeStats.org)

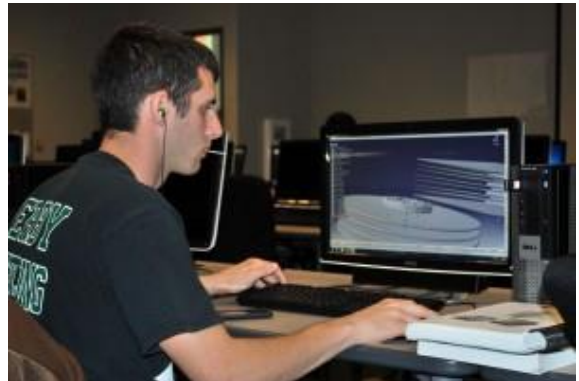


Rev. 06/27/2017

## Frequently Asked Questions

### Q. How do I get started?

A. We would invite you to meet with us to discuss the program at any time Monday through Friday. You can also schedule an appointment via email or phone call. After the admissions requirements are met, you can meet with our academic advisor to enroll in classes and create an educational plan.



### Q. What are the different certificates in CATIA?

A. CATIA Design COC covers three of our CATIA classes: CATIA Parts & Sketcher, Assembly Design, and Drafting. CATIA Machining COC incorporates OSHA training along with three CATIA classes: CATIA Parts and Sketcher, Assembly Design, and Prismatic Machining. Please see the grid below.

| CATIA Classes - COC        |  |  |                             |
|----------------------------|--|--|-----------------------------|
| 1st Semester               |  | 2nd Semester                               |                             |
| 1 <sup>st</sup> 8 Weeks    | 2 <sup>nd</sup> 8 Weeks                              | 1st 8 Weeks                                | 2nd 8 weeks                 |
| CATIA - Parts and Sketcher | CATIA - Assembly Design                              | CATIA - Prismatic Machining                | CATIA - Drafting            |
|                            | CATIA - Drafting                                     | CATIA - Functional/Tolerancing             | CATIA - Wireframe/Surfacing |
|                            | *Day students can take both classes at the same time | CATIA - Wireframe/Surfacing (Morning only) |                             |

### Q. What software will I use in class? What is required for the program?

A. WATC uses the latest revision of CATIA. Student versions of the programs are available from the software manufacturer. <http://academy.3ds.com/software/catia/catia-v5-student-edition/>. The books are included as part of the program's costs and supplies.

### Q. What wage can a CATIA drafter expect?

A. \*According to the Bureau of Labor Statistics (May 2016), mean wages for individuals in this field in Wichita are approximately \$54,480 annually. The typical entry level education for this field is associate's degree.

### Q. How do the CATIA lab and lecture work?

A. Twice a week, the CATIA lecture instructor will teach the class for 2 hours. On the opposite days of the week, students will attend a computer lab version of the class. Each scheduled lab time is schedule specifically for students in that class. If a student wants to work outside of lab hours, there are open labs that they can use. The open labs will not have any instructor led support.

#### Questions for our Instructors?

##### CATIA Instructors

Paul Von Itter: pvonitter@watc.edu

Kurt Foley: kfoley@watc.edu

Michael Milhon: mmillhon@watc.edu

\*Source: Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Employment Statistics*, June 26<sup>th</sup> 2017 [www.bls.gov/oes/](http://www.bls.gov/oes/).