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# Program Review Report 3.7 Academic Program Review

A thorough internal or external program review addressing all criteria in policy should be possible within a comprehensive report of ten or fewer pages. This template is provided to assist institutions in compiling the program review information, which is to be presented to the institutional governing board prior to submission to the State Regents. Please provide an executive summary of this review using the Program Review Executive Summary Template.

Institution Name: Oklahoma City Community College

Program Name and State Regents Code: Computer-Aided Technology (011)

List Program Options: Computer-Aided Design Geographic Information System Unmanned Vehicle Systems

# List Embedded Certificates included in this review: Computer-Aided Design (084) Unmanned Aerial System (174)

## **Previous Review**

## Date (Year) of Last Review 2018

1. Summarize key findings from previous internal and/or external reviews of this Program.

The 2018 review included the following recommendations for the department.

The Computer-Aided Technology program at OCCC has provided the state with qualified technicians in CAD and GIS. The employment opportunities for OCCC's graduates continue to grow. Companies are seeking eligible employees with college degrees.

Increasing awareness of the program and career opportunities is essential to meet the needs of businesses and industries.

To increase awareness, there are some recommendations:

• Promote the program on television, radio, and the college's main Facebook page.

- Design new brochures to promote the program at careers fairs.
- Show off the program through public events like an open house and "Lunch/Learn" sessions.
- Set up internships with local companies.
- Pursue 2+2 transfer programs.

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• Work with the STEM coordinator to promote programs in local schools.

• Develop PLAs so individuals taking courses at PDI can also be awarded college credit.

- 2. What developments and actions have taken place since the last review?
  - Develop an articulation agreement in GIS with the University of Oklahoma.
  - Hosted STEM camps for middle and high school students.
  - Hosted Train the Trainer workshop for K-12 STEM Teachers
  - Participated in career fairs on and off campus.
  - Participated in campus tours.
  - Open the Tech-Fab Lab for public usage.
  - Participated in High School Counselor workshops.
  - Created five micro-credentials with digital badges.

We have worked with several companies to employ our students upon graduation. In addition, we have students getting full-time employment before they graduate.

## **Current Review**

**Date (Year) of Current Review 2022** 

Review Criteria (Institutions should address each criterion of OSRHE policy 3.7.5 as directed below).

## A. Centrality of the Program to the Institution's Mission:

The Computer-Aided Technology program at OCCC provides high-quality education to students who wish to join the workforce after completing an AAS degree or certificate of mastery. The Program has produced 29 graduates with Associate in Applied Science degrees and 26 with a Certificate of Mastery over the past five years.

The Computer-Aided Technology program is central to OCCC mission statements.

- Access: Our community has broad and equitable access to highly valued certificate and degree programs and non-credit educational opportunities and events.
  - The Computer-Aided Technology Program offers classes during the day, evenings, and online. Classes are offered in person and online.
- Student Success: Our students complete their academic courses, persist in college, and earn certificates or degrees at OCCC or another institution.

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- Graduate Success: Our graduates earn higher-level degrees or are successful in technical or professional careers.
  - Many of our students will enter the workforce before graduating and complete their degree while working in the industry. Some will transfer to UCO, OU or OSU and work toward a degree in engineering, architecture or design.
- Community Development: Our community's quality of life is enriched through our educational, artistic and recreational programs and events.
  - In conjunction with the Computer Science Department, we host summer STEM camps for students and Train the Teacher workshop.

We have a diverse group of students taking courses in the Computer-Aided Technology program. Our primary students are those working toward an AAS or certificate in Computer-Aided Technology. Secondly, we have students in Engineering Technology taking courses as requirements of their degree plan. Thirdly, students in the pre-engineering program take courses in Computer-Aided Technology as electives in their Program of study. Fourthly, engineering students from the University of Oklahoma take courses as prerequisites or electives in their program of study. Lastly, we have working adults taking courses to enhance their skills

#### Program Objectives:

- Be able to continue to learn and adapt in a world of constantly changing technology.
- 1. Be prepared for an entry-level position in their field of study.
- Use the latest equipment and software used in the industry.

### Program Strengths:

- 1. Faculty and staff have shown dedication to maintaining the excellence of the Program and the success of the students. They stay current in their area of expertise and are willing to learn new material and software for students' success.
- 2. The hardware and software are current and similar to business and industry. This ensures the students will be up to date when they graduate and enter the workforce.
- 3. The Student Computer Center, Tech Lab1 & Tech Lab 2, is conveniently located on the 3rd floor of the library, along with the faculty offices. These resources and the staff allow students to continue learning outside the classroom. We recently purchased a new C02 laser, a fiber laser, and two CNC machines with a Carl Perkins Grant.
- 4. Computer-Aided Technology offers a flexible schedule. Classes are offered in person, via zoom, hybrid, and online during the day and evening.
- 5. The Program is well known for producing high-quality graduates.

#### Area of Improvement:

- 1. With the purchase of new equipment, we need more space.
- 2. Additional faculty and staff.

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### Key findings from the last Program Review:

### **Recommendations:**

- 1. Enclose the space next to the Tech Fab with a wall. This space should have windows, a door, and insulated, soundproof walls.
  - The construction of the wall started on 2/20/23. The space should be ready for occupancy by 3/6/23. This will add 235 sq. ft of lab space.
- 2. Hire more Student Computer Center assistants knowledgeable in CAD and the Tech Fab equipment.
  - There is an ongoing job posting at OCCCJOBS.COM. We interviewed at least five candidates, but none of them were qualified.
- 3. Hire another full-time CAT professor or adjunct available during the day.
  - In the Fall of 2022, we hired a day adjunct that could teach courses in the UAV option.
  - In the Spring of 2023, we hired a day adjunct that could teach Solidworks.
- 4. Develop a comprehensive marketing plan to promote the Program.
  - During the summer of 2022, we received a critical STEM occupation grant from OSRHE. We have set aside 10% of the grant for marketing. We are working with the marketing department for advertising and off-campus marketing materials.

## **B.** Vitality of the Program:

**B.1.** Program Objectives and Goals:

#### CAT Mission Statement:

The Computer-Aided Technology Program will provide the state of Oklahoma with professionals using application software in traditional and non-traditional technologies such as engineering and architectural design, GIS, and UVS. Students graduating from the CAT Department at Oklahoma City Community College will:

- Be able to continue to learn and adapt in a world of constantly changing technology.
- Be prepared for an entry-level position in their field of study.
- Use the latest equipment and software used in the industry.
- **B.2.** Quality Indicators (including Higher Learning Commission criteria and requirements):

Each year the CAT Program uses the outcomes assessment data to improve the quality of the Program. Based on recommendations, listed below are some modifications to specific courses, facilities, or degree options.

 2022

 Outcome:
 Create industry-specific drawings, maps, or models using design software.

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Summary:	After reviewing the final project in CAT-1214, it was determined that 85% of the students were able to complete the project with a grade of 70% or higher.
Recommendation:	Work with students that are behind in the class, especially when it's time to work on the final project.
<u>2021</u>	
Outcome:	Extract and analyze data from drawings, maps, or models.
Summary:	The data extraction portion of Exam 2 in CAT-1214 was reviewed for Forty-Five students. 88% of them scored 70% or better.
Recommendation:	Spend more time going over AutoCAD's data extraction process.
Summary:	Assignment 4-3 in CAT 1043 was reviewed for nine students. 89% of them scored 70% or better. The results showed that some students are struggling with the creation of the 3D model with accuracy.
Recommendation:	Spend more on creating accurate sketches and feature creation.
<u>2019</u> Outcome:	Extract and analyze data from drawings, maps, or models.
	The data extraction portion of Exam 2 in CAT-1214 was reviewed for
Summary:	Forty-Five students. 95% of them scored 70% or better.
Recommendation:	None
Summary:	Assignment 4-3 in CAT 1043 was reviewed for nine students. 69% of them scored 70% or better. The results showed that some students are struggling with the creation of the 3D model with accuracy.
Recommendation:	Spend more on creating accurate sketches and feature creation.
2018	
Outcome:	Ability to use a computer graphic system to create industry-specific 2-D drawings.
Summary:	Students used the skills they learned during the first 16 weeks of the course to complete the final project. 69% of students who successfully completed the final project in CAT 1214 with an 80% or better
Recommendation:	Allow more time in class to work on the final project.

# **B.3.** Minimum Productivity Indicators:

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Enrollment					
Year	Enrollment	Enrollment	Enrollment		
	1000 Level	2000 Level	All Levels		
2018	151	<u>30</u>	181		
2019	152	<u>35</u>	187		
2020	142	<u>51</u>	193		
2021	116	55	171		
2022	<u>91</u>	<u>38</u>	129		

Graduates	
Time Frame (5-year span) FY 2018-2022	Graduates
AAS - CAD	<u>21</u>
COM - CAD	<u>26</u>
AAS-GIS	<u>8</u>
AAS -UAV	<u>0</u>
COM-UAV	<u>0</u>

- **B.4.** Other Quantitative Measures:
  - **b.4.a.** Number and enrollment of courses taught exclusively for the major for each of the last five years: *List or attach list of courses*

	Major Courses				
Prefix &	Course	5-year			
Number	Title	enrollment			
		numbers			
CAT 1003	Special Topics	13			
CAT 1043	Engineering Principles (CAD) 95				
CAT 1053	Manufacturing Materials and Processes (CAD) 17				
CAT 1113	1113   Unmanned Vehicle Systems (UVS)   10				
CAT 1123	UVS Operations (UVS)	0			

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CAT 1133	Airspace and Regulations (UVS)	4
CAT 1214	Computer-Aided Design (CAD)(GIS)(UVS)	249
CAT 1253	CAD 3D Parametric Modeling (CAD)	64
CAT 1313	Introduction to Geographic Information System (GIS) (UVS)	44
CAT 1323	Introduction to Spatial Technology (GIS)(UVS)	19
CAT 2023	Design Mechanics (CAD)(GIS)(UVS)	15
CAT 2123	Digital Fabrication (CAD)(UVS)	39
CAT 2163	CAD Automation (CAD)	24
CAT 2313	Introduction to Spatial Analysis (GIS)	21
CAT 2540	Applications in CAD (CAD)	46
CAT 2703	Practicum (CAD)	9
CAT 2924	Design Project (CAD)	32

**b.4.b.** Student credit hours by course level (i.e. 1000, 2000) generated in all major courses in the degree program for five years:

1000 Level	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Computer-Aided					
Technology	536	535	496	406	326
2000 Level	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Computer-Aided					
Technology	100	107	162	174	119
All Levels	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Computer-Aided					
Technology	636	642	658	580	445

**b.4.c.** Direct instructional costs for the Program during the review period:

In 2021 and 2022, our Information Technology Services department installed Zoom room technology in multiple classrooms across campus with an end goal of 70+ rooms. This hybrid/Hy-Flex technology helps us offer different course modalities and allows us to meet student and employee needs by providing the opportunity for courses and meetings to be held in-person and online simultaneously. This endeavor was achieved at a total cost of \$2,393,437.41. In addition, all teaching station computers, monitors and display adapters were replaced at a total cost of \$107,167.16.

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The Center for Learning and Teaching developed training for this technology that began in Dec. 2021. This training is ongoing and focuses on both how to operate the technology as well as how to engage students with it in the classroom using innovative teaching strategies. We have trained 160+ faculty and staff members to date and anticipate training more in the upcoming fiscal year.

At this point, all course sections now use our Learning Management System (LMS), Moodle, and we have several third-party tools available to faculty and students that foster online engagement, including Turnitin, Ally, Poll Everywhere, and VoiceThread. These recurring costs add up to approximately \$338,000 per fiscal year. Faculty are trained in these resources, and the CLT continues to work with faculty to make sure they understand best practices for how to use and implement these resources. Turnitin aids with grading and academic integrity, Ally with ensuring faculty have the tools to make their course materials Section 508 complaint, Poll Everywhere with student engagement, and VoiceThread with creating quality audio presentations and feedback for our students. Additionally, the Center for Learning and Teaching is working toward developing augmented and virtual reality resources for OCCC faculty to potentially integrate into their courses to better engage students through real-world experiences offered in a virtual environment.

**b.4.d.** The number of credits and credit hours generated in the Program that support the general education component and other degree programs including certificates:

0 (Zero)

**b.4.e.** A roster of faculty members, faculty credentials and faculty credential institution(s). Also include the number of full-time equivalent faculty in the specialized courses within the curriculum:

Faculty	Credential (i.e. MFA, PhD)	Institution that granted degree
John F. Helton	M. Ed.	University of Center Oklahoma

**b.4.f.** If available, information about employment or advanced studies of graduates of the Program over the past five years:

List below are companies that have hire our students.			
Job Title	Company		
Project Manager	Poe & Associates		
Estimator	Star Buildings		
CAD Technician / Drafter VMI INSPECTIONS			

	Engery Meter System	
	Trinity Group Architects Hobby Lobby	
	Wallace Engineering	
Associate Drafter	RBA Architects	
CADD Specialist II	ODOT	

**b.4.g.** If available, information about the success of students from this Program who transferred to other institutions:

These programs are not designed for transfer, but some students pursue a degree in engineering, architecture or GIS at four-year institutions

We have worked and developed an articulation agreement between our GIS Program and the University of Oklahoma.

# **B.5.** Duplication and Demand:

In cases where program titles imply duplication, programs should be carefully compared to determine the extent of the duplication and the extent to which that duplication is unnecessary. An assessment of the demand for a program takes into account the aspirations and expectations of students, faculty, administration, and the various constituents served by the Program. Demand reflects the desire of people for what the Program has to offer and the needs of individuals and society to be served by the Program.

Address Duplication:

Oklahoma Regents of Higher Education has a process for new program approval. This includes a review process by other colleges.

The Computer-Aided Technology program options allows OCCC to offer cost effective options for students who wish to pursue a College degree that offers critical indemand professional development and training. Statewide and federal demands are carefully looked at when courses in the programs are updated. This is where duplication ceases even when there may be slight duplication in degrees.

# Address Demand:

Since the last program review, faculty have been contacted 45 times by employers looking to hire students. These job opportunities are mentioned to students in class, posted on the bulletin board in the student computer center, and emailed to current

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and former students using the CAT listserv. Currently, 400 current/former students subscribe to the listserv.

Many students are hired before they completed the program. We are currently offering students scholarships to come back and finish their degree. We emphisas the importance of a college degree. Their current employer may not require the degree, but future employers may require it.

**b.5.a.** Describe demand from students, taking into account the profiles of applicants, enrollment, completion data, and occupational data:

The program serves a number of traditional students, co-enrolled students at OU, OSU-OKC and other higher educational institutions, concurrent high school students, industry employees, and students who are seeking a career transition. The department has also created five micro-credentials to encourage students to gain "small victories" and retain them on their path to degree or certificate completion.

**b.5.b.** Describe demand for students produced by the Program, taking into account employer demands, demands for skills of graduates, and job placement data:

The U.S bureau of Labor Statistics project a three percent decline in drafters over the next 10 years. In the Oklahoma City market, there is a high demand for Civil Drafters and BIM Technicians.

Employment projections data for drafters, 2021-31						
Occupational	SOC	Employment,	Projected	Change, 2021-31		
Title	Code	2021	Employment, 2031	Percent	Numeric	
Drafters	17-3010	192,200	185,400	-3	-6,700	
Architectural and civil drafters	17-3011	105,400	104,100	-1	-1,300	
Electrical and electronics drafters	17-3012	21,500	21,500	0	0	
Mechanical drafters	17-3013	49,400	45,200	-9	-4,200	
Drafters, all other	17-3019	15,900	14,700	-8	-1,200	
SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program						

There are many fields of study such as engineering, architecture, interior design, and manufacturing that requires knowledge of CAD software. Some of our students don't major in

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Computer-Aided Technology, but take classes as electives in their major. The chart below list many of those professionals that require CAD skills.

SOC	Description	2019 Jobs	2025 Jobs	Change (2019 - 2025)	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On- The-Job Training
17-2141	Mechanical Engineers	2,978	3,288	309	\$ 40.47	Bachelor's degree	None	None
17-2051	Civil Engineers	2,649	2,813	163	\$ 40.47	Bachelor's degree	None	None
13-1051	Cost Estimators	2,083	2,263	180	\$ 28.97	Bachelor's degree	None	Moderate- term on-the- job training
11-9041	Architectural and Engineering Managers	2,044	2,223	179	\$ 60.08	Bachelor's degree	5 years or more	None
17-2112	Industrial Engineers	1,792	2,178	386	\$ 39.56	Bachelor's degree	None	None
17-2171	Petroleum Engineers	1,946	2,062	117	\$ 62.05	Bachelor's degree	None	None
11-3051	Industrial Production Managers	1,916	2,053	137	\$ 45.93	Bachelor's degree	5 years or more	None
17-2071	Electrical Engineers	1,474	1,638	164	\$ 46.03	Bachelor's degree	None	None

**b.5.c.** Describe demand for services or intellectual property of the Program, including demands in the form of grants, contracts, or consulting:

The faculty and staff have been asked to teach professional training courses to industry partners. We also volunteer and teach summer camps for students and K-12 teachers. The Tech Fab lab is open to the community and the staff will help individuals in the design phase and final production of their product.

**b.5.d.** Describe indirect demands in the form of faculty and student contributions to the cultural life and well-being of the community:

The faculty, staff, students and alums have contributed to the cultural life and wellbeing of the community in several different ways.

- Volunteered at the Oklahoma Regional Food Bank, Feed the Children, Food and Shelter for Friends,
- Faculty and staff have given presentations at various schools on career days.
- The faculty have donated time and services to non-profit organizations.
- The faculty is currently working with the J.D. McCarty Center in Norman, to develop an "Active Shooter/Shelter in Place" plan. Our part of the plan is to design and draw the necessary maps and drawings.
- **b.5.e.** The process of program review should address meeting demands for the Program through alternative forms of delivery. Describe how the Program has met these demands:

With the recent update of the classroom to a zoom room, we offered an in person and zoom class simultaneously. It had a few technical clitches, but overall it worked great.

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CAT 1214 - Computer-Aided Design is offered in person, online and as a Zoom class. CAT-1043 Engineering Principles is offered as a zoom class and in person. The GIS courses, CAT 1313, CAT 1323 & CAT 2313, are provided as a hybrid class.

**B.6.** Effective Use of Resources:

(Resources include financial support (state funds, grants and contracts, private funds, student financial aid); library collections; facilities including laboratory and computer equipment; support services, appropriate use of technology in the instructional design and delivery processes, and the human resources of faculty and staff).

# **Library Resources**

# **Instruction and Reference**

Librarians provide instruction and reference assistance to OCCC students. Librarian staffing is at 4.5 FTE. Many students receive hands on instruction for using library resources and selecting and evaluating sources as part of the required *Success in College and Life* course. Additional instruction is also provided to a variety of other classes, with a focus on the appropriate resources for that discipline or a specified assignment.

Librarians are available to assist students in person 8 AM to 9 PM Monday through Thursday, and 8 AM to 5 PM on Fridays. In Fall 2019 the library implemented an online chat service that is available approximately 56 hours per week. Students may also request additional research help outside those hours. Video tutorials and LibGuides on the Library's website supplement instruction by providing guidance for students who are off campus.

# Online and Print Resources

Librarians select and purchase materials specific to Computer Aided Technology, as well as maintain a broad collection of resources to support the overall OCCC curriculum. Areas of the collection that are in direct support of Computer Aided Technology are:

Q	Science
Q 350	Information Theory
QA 71-90	Instruments and Machines
QA 75-76.95	Calculating Machines/Cybersecurity
QA 75.5-76.95	Electronic Computers/Computer Science
QA 76.75-76.765	Computer Software
Т	Technology
T58.5-58.64	Information Technology
Т 385	Computer Drawing/AutoCAD

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Librarians use professional resources such as *Choice* to select materials based on dependable reviews. The library's main collection includes over 80,000 circulating items to support the academic course offerings at OCCC as well as general interest materials. This includes access to over 11,000 eBooks, and over 4,000 audio-visual materials. The collection is weeded periodically to maintain currency and relevance.

Course textbooks are available at the Library Circulation Desk for in-library use. Textbooks are available for all General Education courses, as well as most other courses taught at OCCC.

Some print periodicals have been retained, though electronic periodicals make up the bulk of the periodical collection. Students can utilize *EBSCOhost* to find credible, peer-reviewed articles. The multidisciplinary databases *MasterFILE Premier* and *Academic Search Complete* are generalized databases that contain relevant article collections for this program. *Computer Source* is also available through *EBSCOhost* and provides access to the latest research in Computer Science and related fields. In addition, the Library maintains a subscription to the *US Dailies* database that provides access to current and historical newspapers from *Chicago Tribune, Los Angeles Times, New York Times, The Wall Street Journal*, and *The Washington Post*.

Streaming academic and scholarly videos, as well as documentary and feature films are available through *Films on Demand*, *AVON*, *PBS Video*, and *Swank Digital Campus*. All of these resources are utilized on and off campus by both faculty and students. Another tool is *ImageQuest*, a database of millions of copyright-cleared images for student and faculty projects and presentations.

The Library also strives to support the professional development of faculty. The book collection is updated with materials on teaching, learning, classroom technology, and curriculum development. Additionally, the *Education Source, ERIC,* and *Professional Development Collection* databases, available via *EBSCOhost,* provide faculty access to periodical literature on teaching.

During the pandemic closure and subsequent reduction in hours, Library staff worked to ensure access to resources and services by mailing books to students, extending due dates, providing curbside book pickup, increasing online chat coverage, creating additional instructional videos, providing online access to course reserves and additional electronic databases, offering Zoom reference meetings with students, and laptop and webcam checkout. A wireless hotspot checkout service was added in Fall 2021.

# **Facility**

The library offers public computers, group study rooms, digital scanners, free printing (100 pages per semester, per student), huddle stations, mobile white boards, laptop and hotspot checkout, and a designated/monitored quiet study area.

Available Fall 2022, the library has installed individual use cubicles (Study Cubbies) in the designated quiet study area. Study Cubbies are reservable by all OCCC students, faculty, and staff.

# In summary, the Library supports this program comprehensively and appropriately.

In addition to classroom learning, the CAT program has tutors available to students. The students also have access to the student computer center and lab assistants. The CAT program has over 5,000 square feet of learning space that includes the following:

**The Student Computer Center** (4,000 sq. ft.) is located on the 3rd floor of the library. The Student Computer Center is open to all students during the fall, spring, and summer Semesters from 7:30 a.m. to 9:00 p.m. Monday through Thursday, 7:30 a.m. to 5:00 p.m. On Friday and Saturday, 8:00 a.m. to 4:45 p.m. The Student Computer Center is open in the weeks between the semesters but on a reduced schedule.

The SCC has 90 computers for general use and 23 high-end workstations for CAD with 32 GB of RAM and a 24" Monitor, and all software necessary to support the courses are installed on these computers.

Students have access to several printers and plotters. These include:

- HP Designjet T1120 44" wide plotter with 44" wide scanner
- HP Designjet 75000 44" wide plotter
- Two HP LaserJet (B&W) for plotting up to 11x17 sheets.

**TechLab2** is located on the 3rd floor of the library. The 190-square-foot room is equipped with six 3D Printers, a Roland desktop CNC machine, and a vacuum form machine.

**TechLab1** room is located on the 3rd floor of the library. The 150-square-foot room is equipped with two laser cutters, a fiber laser and a CNC machine

We are currently using the hallway as an overflow area. In that area, there is the metrology workbench and some of the metrology equipment. The rest of the metrology equipment has been moved to room 201.

<u>Unmanned Vehicle System Equipment</u> is stored in room 201 and 301. The following equipment has been purchased with Carl Perkins Funds. The equipment includes several DJI and Parrot drones; an Aquabotix HydroView Sport Remote-Controlled Underwater Vehicle, Telepresence office robot Robot Create® 2 Robot, Parrot Jumping Sumo, Genibo Robot Dog.

All CAT courses are taught in Library classroom 201 or 206. The room is approximately 1,300 sq. It has recently been updated to a Zoom Room. The classroom has 21 high-end workstations with 32 GB of RAM and two 24" Monitors.

The CAT program has access to industry-standard software, which includes:

- Site licenses for all Autodesk software, including AutoCAD, 3D Studio Max, Revit, Inventor Professional, Fusion 360, and many more.
- Site License for ArcGIS.
- Solidworks (60 seats).
- Site License for Adobe Creative Suite.
- · Vcarve Professional (21 seats)
- · Zbrush (21 seats)
- · Lightburn (27 seats)
- · Vcarve Pro (40 seats)

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The CAT program uses grants and student technology fees to purchase equipment and software for the department. The computers and classrooms are shared with computer science. The software is installed in the classrooms, student computer center and the engineering lab.

## **Recommendation(s)**

## A. Recommendation for the Program (3.7.7.A.4):

- $\boxtimes$  Maintain the Program at the current level.
- □ Continue the Program with modifications as noted below and detailed in the comment section below.
  - $\Box$  Expand the Program
  - $\Box$  Reduce Program in size or scope
  - □ Merge or consolidate Program
  - □ Reorganize program/curricular modifications\*
- □ Suspend Program to allow an opportunity to consider recommendations detailed in the section below\*
- □ Delete Program\*

\*Requires a Request for Degree Program Modification and governing board approval.

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### B. Specific comments regarding recommendations:

(Provide detailed recommendations for the Program as a result of this thorough review and how these recommendations will be implemented, as well as the timeline for key elements. Recommendations to suspend or modify the Program should include measurable goals aIncnd a timeline for monitoring the Program in one-, two-, three-, or four-year increments)

Recommendations	Implementation Plan	Target Date
Grow the Program. Build better relations with community partners	<ul> <li>Increase advertising and contacts with local high schools.</li> <li>Use stem grant to offer scholarship to exising and prospective students.</li> <li>Offer workshop/seminars to makers and levereage the resoruces in the Tech Fab Lab.</li> <li>Offer classes in Catia, Civil 3D, or Micostation.</li> <li>Offer more online classes.</li> <li>Host an open house for community to view our facitily.</li> </ul>	By next program review. Fall 2024
Click here to enter text.	Click here to enter text.	Click to enter a date.

Add additional rows as necessary

Department/		
Program Hea	.d	Date: <u>Click here to enter a date.</u>
	(Signature)	
Dean		Date: <u>Click here to enter a date.</u>
	(Signature)	
Chief		
Academic		
Officer		Date: <u>Click here to enter a date.</u>
	(Signature)	
President		Date: Click here to enter a date.
	(Signature)	