

Unleashing the Potential of Cobots in Area 31 Programs

Area 31 Career Center was recently the recipient of three integrated cobot (collaborative robot) systems from Vincennes University Center for Applied Robotics and Automation (CARA). Cobot systems are designed for direct human-robot interactions within a shared space.

Industry 4.0, or the fourth industrial revolution, is characterized by automation, advanced data analytics, and smart and autonomous systems. Cobots are fundamental to this transformation because their interoperability and decentralized decision-making contribute to boosting efficiency, quality, and safety in production. Five instructors participated in two days of professional development provided by CARA Technical Advisor, Morgan Chang, learning how to incorporate this new technology into their curriculum. Instructors learned the basics of flow programming, manual positioning, and integration of vision systems for dynamic programming of the end effector, commonly called “the gripper”. This technology will support our programs in preparing students for smart manufacturing and to become productive, efficient technicians in intelligent factories.



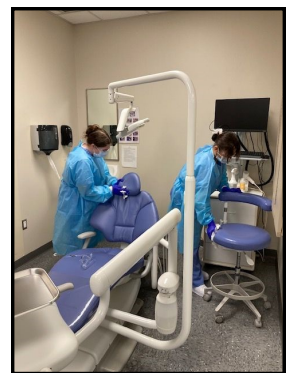
Exciting Spring for Dental Assisting Students

-Jessica Holmes

Area 31 Dental Assisting students are very excited about the content and skill development of the spring semester. As the Dental Assisting seniors progress through the second semester, they are able to narrow down their specific path within the dental industry. Students focus on three main components in the course: infection control procedures, dental radiology, and anatomy morphology/physiology. Many students will take the National Entry Level Dental Assisting (NELDA) certification test, while also receiving licensing through the state of Indiana, qualifying them to work in a dental practice after graduation.



Students have been eager to apply their skills in dental practices throughout the Indianapolis area. After learning and developing many skills through the school year, students will participate in general and specialty dental office observations. This work-based learning opportunity provides first-hand experience in a clinical setting performing technical competencies. Anticipating this authentic learning experience brings about nervousness and excitement for the students, but it will give them opportunities and a competitive advantage in the career field!





Mastering the Fundamentals and Applying Mathematics

Students in the Automotive Service program have the opportunity to earn a technical certificate from Ivy Tech Community College by successfully completing nine dual credit courses throughout the two-year program. Capstone (second-year) students are currently studying the content from the Ivy Tech course: Engine Fundamentals and Repair (AUTI 141). Learning the major engine operating systems and their function, and disassembling and reassembling an engine to industry standards are important learning outcomes for this dual credit course. Recently, teams of students have been provided an engine that they are currently disassembling to gain a practical understanding of how all the components integrate in the power system. This week, students are calculating engine displacement by using an internal micrometer to take precision measurements of the engine bore and piston stroke lengths. Once these two measurements are known, students can calculate the actual engine displacement. Each team is able to assess the accuracy of the calculated displacement by comparing their results with the published specifications of the assigned engine. After students have completely disassembled the engines, they will begin the journey to rebuild and restore the engines to proper working conditions.



Early College Student Spotlight

Erick Dominguez

Ben Davis Class of 2024

Early College Major: Associate Degree in Networking & Cybersecurity

Clubs/Activities:

Self-taught drummer (5 years)

Aspiring musician / Rock star

Church volunteer

I love word searches

Post- Secondary plans: 4-year college majoring in the field of music.



Why did you choose to join the Early College Career Center?:

I chose the Early College Career Center program because I wanted to get a head start in earning an associate degree while high school. Might as well make the most of high school by taking advantage of the opportunities.

How has Early College benefited you over the course of your high school career?

Early College helped me gain college experience credentials while taking my high school classes, make new friends, and decide what I want to pursue in life.



SkillsUSA Competitors Qualify for State Competition

SkillsUSA Region 3 held its first round of competitions on Feb. 2nd and 3rd, at various sites across Indianapolis including: Area 31 Career Center, Ivy Tech Culinary Center, IKORCC, Ed Martin Honda, and Lincoln Tech. Area 31 Career Center had 54 students qualify to compete at the SkillsUSA Indiana State Leadership and Skills Competition to be held at the Indiana State Fairgrounds on April 19th-20th.

Help us congratulate the 2024 SkillsUSA State Qualifiers! The top student in each category at the state competition will advance to the national competition in June. Stay tuned for that announcement.

First Name	Last Name	Contest	School
Braden	Chaplin	Job Interview	Speedway
Lydia	Beiriger	Job Interview	Brownsburg
Elijah	Patrick	Job Skills Demonstration	Monrovia
Jordan	Watkins	Job Skills Demonstration	Ben Davis
William	Graves	Job Skills Demonstration	Avon
Jon-David	Grissom	Welding Fabrication	Ben Davis
Nick	Frieden	Welding Fabrication	Brownsburg
Josiah	Berkholz	Welding Fabrication	Brownsburg
Mason	Holton	Welding Fabrication	Speedway
Lucas	Mroz	Welding Fabrication	Brownsburg
Michael	Hitching	Welding Fabrication	Brownsburg
Carlee	Carpenter	Cosmetology	Cascade
Delaney	Dunderdale	Cosmetology	Speedway
Forrest	Lee	Carpentry	Cascade
Dean	Leeper	Automotive Service Technology	Avon
Jeren	Gregory	Automotive Service Technology	Mooresville
Brandon	Atherton	Automotive Service Technology	Ben Davis
Carley	Waters	Baking and Pastry	Brownsburg
Connor	Franco	Culinary Arts	Avon
Sadie	Duke	Automotive Refinishing	Monrovia
Grant	Sutherland	Automotive Refinishing	Mooresville
Kevin	Andres	3-Axis Milling Programmer	Ben Davis
George	Fettig	3-Axis Milling Programmer	Brownsburg
Simon	Reese	3-Axis Milling Programmer	Speedway
Alan	Cazarez	Community Service	Ben Davis
Daniel	Clark	Community Service	Ben Davis
Misael	Rodriguez	Community Service	Ben Davis
Bethzy	Carranza-Torres	Community Service	Avon
Peyton	Courtney	Community Service	Monrovia
Brady	Thornburg	Community Service	Cascade
Evan	LaRoche	Community Service	Avon
Dean	Leeper	Community Service	Avon
Temitope	Olaosebikan	Community Service	Ben Davis
Oscar	Dorantes	Community Service	Ben Davis
Aaron	Fields	Community Service	Ben Davis
Ximena	Vargas	Community Service	Ben Davis
Oscar	Dorantes	Cyber Security	Ben Davis



First Name	Last Name	Contest	School
Aaron	Fields	Cyber Security	Ben Davis
Kaytlin	Morton	Early Childhood Education	Cascade
Taylor	Wilson	Early Childhood Education	Avon
Hayden	Newcomer	Electrical Construction Wiring	Cascade
William	Graves	Emergency Medical Technician	Avon
Elijah	Patrick	Emergency Medical Technician	Monrovia
Tyler	Baker	Emergency Medical Technician	Avon
Ximena	Vargas	Internetworking	Ben Davis
Peyton	Hays	Maintenance Light Repair	Tri-West
Misale	Rodriguez	Maintenance Light Repair	Ben Davis
Brady	Thornburg	Maintenance Light Repair	Cascade
Max	Wathen	Maintenance Light Repair	Cascade
Wesley	Tingle	Mechatronics	Avon
Samsum	Zemichael	Mechatronics	Ben Davis
Joshua	East	Mechatronics	Ben Davis
Richard	Parsons	Mechatronics	Cascade
John	Harshbarger	Mechatronics	Cascade
Aiden	Perry	Mechatronics	Brownsburg
George	Fettig	Related Technical Math	Brownsburg
Alicia	Brandon	Restaurant Service	Brownsburg
Mason	Croley	Restaurant Service	Ben Davis
Gabriela	Muhammad	Restaurant Service	Ben Davis
Rylee	Arnold	Welding Sculpture	Avon
Michael	Hitchings	Welding Sculpture	Brownsburg





OUTSTANDING STUDENTS OF THE 2ND 9 WEEKS

Aaron Fields	Ben Davis HS	Cybersecurity
Alexis Edwards	Avon HS	Welding
Allie McFeeley	Cascade HS	Early Childhood Education
Ashlyn VanHart	Home School	Pre-Nursing
Benjamin Greyhat	Monrovia HS	Construction Trades
Blake Delk	Monrovia HS	Digital Integrated Manufacturing
Braden Chaplin	Speedway HS	Work-Based Learning
Charlene Wanjiru	Plainfield HS	Medical Assisting
Dakota Swanson	Cascade HS	Integrated Mechanics
DaLynn Gordy	Ben Davis HS	Cosmetology
Elisabeth Kulkarni	Mooresville HS	Digital Integrated Manufacturing
Garrett Burkle	Brownsburg HS	Radio Broadcasting
Isaiah Pearson	Ben Davis HS	Culinary Arts (Schifano)
Jasmine Taylor	Ben Davis HS	Culinary Arts (Schifano)
Jayanna Strong	Plainfield HS	TV Broadcasting
Lania Tibbs	Avon HS	Culinary Arts (Oechsle)
Maela Spainhower	Ben Davis HS	Criminal Justice
Mark Magers	Plainfield HS	HVAC
Max Berry-Tayman	Home School	Graphic Imaging
Miguel Walker Jr.	Ben Davis HS	Horticulture Science
Mikias Aregay	Ben Davis HS	Precision Machining
Misael Rodriguez	Ben Davis HS	Auto Service
Najoie Hamet-Tidjani	Plainfield HS	Pre-Nursing
Nataly Hernandez	Ben Davis HS	Dental Assisting
Oscar Perez	Ben Davis HS	Collision Repair
Reagan Shaw	Tri-West HS	Emergency Medical Services
Stephanie Franchi Adazme	Ben Davis HS	Pharmacy Tech