Skilled Trades
Electricity at Central Campus

Teacher - Trevor Stevens (trevor.stevens@dmschools.org)

Key Points for Counselors, Students and Families: If you are interested in the installation and maintenance of residential and commercial electrical systems, then the electrical program at Central Campus is for you. The program provides students with the hands-on skills, knowledge, and attitude needed to begin their career in the commercial or residential electrical industry. Focus will be placed upon performing and completing tasks in a precise, craftsman like manner. Throughout the program, students will be given the opportunity to tour, work with, and apply for local electrical apprenticeships and local industry leaders, providing a pathway toward a successful career in the electrical industry.

What is it like to be a student in this program? Students will learn about electricity and how to safely work around electricity, spend time building and understanding electrical circuits, practice with and learn the safe and proper use of working with common electrical tools and electrical materials, practice bending; cutting; and threading electrical conduit, use full scale construction drawings to become proficient in reading blueprints, install a residential electrical service, electrical panel, and common residential electrical devices.

What does success look like for a student in this program or class? Success will be students discovering a talent for and passion for installing wiring and conduit systems. Success will be students understanding why and how electricity travels from where it is generated to where it is needed. Success will be students applying for, interviewing at, and being accepted into an electrical apprenticeship.

Are their certifications students can earn being in this program or class? NCCER Electrical Level 1

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Previous construction experience, industrial technology or shop classes, use of common hand tools, and basic math skills are helpful, but not a necessity to achieve success in the electrical program at Central Campus.
Survey of Skilled Trades at Central Campus

Teacher – Chris Meis (christopher.meis@dmschools.org)

Key Points for Counselors, Students and Families – Students will get a basic introduction to different opportunities available in the skilled trades related to construction. Basic hand and power tool usage is covered as well as introductory use of building materials and fasteners.

What is it like to be a student in this program or class? This is a hands on class so students can expect to be on their feet during class and working on projects related to construction. Cell phones and ear buds are prohibited in the lab space.

What does success look like for a student in this program or class? Successful students have good attendance, have a willingness to learn and participate in class activities.

Are there certifications students can earn being in this program or class? Students can earn a OSHA 10hr Safety Awareness Certification.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Since this is an introductory class, there are no pre-requisites.
Carpentry at Central Campus

Teacher – Barry “Ben” Molloy  (barry.molloy@dmschools.org)

Key Points for Counselors, Students and Families - We build stuff in class. We work in the shop and outdoors. You will work alone and in groups/teams. You will learn how to use tools safely. After you graduate you will have an opportunity to get a job in construction. Students interested in careers like residential or commercial carpentry, construction or structural; engineering, architecture, or design may find this course interesting.

What is it like to be a student in this program or class?
1. Carpentry has the highest job satisfaction of all careers.
2. Students will be on their feet and working with their brains and hands.
3. Build things like sheds, a garage and/or a house that are sold to the public.
4. The skill you learn in class can lead to a career earning $65,000 a year.

What does success look like for a student in this program or class? Mastery of many tools and construction skills. Pride and joy of completion of group projects. Vision of how skills can open doors to well paid careers.

Are there certifications students can earn being in this program or class?
OSHA 10 hour construction safety certificate.
Powder Actuated Fastener certificate
DMACC credit
Scissor Lift Training
Aerial Lift Training

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Students should take any shop or CTE class offered at their home high school. Math is helpful.
Advanced Paint Applications at Central Campus

Teacher:

Students will learn about real-world (industry) standards for painting and drywall

- Students will be given “on-the-job” training to help support their learning
- Students will work with: brush and roll, spray, powder-coating, and detail work

Student Experience:

- Students work collaboratively on projects
- Students work with students from other programs to support each other
- The classroom environment is safe, fun, and there is room for independent thinking and action
- Students get to complete interest projects (personal items, etc.)

Student Success:

- There are many types of success in this program. Successful students participate in projects, practice their painting skills, learn to be independent workers and work collaboratively, and grow in their abilities.

Course Completion:

- Students who successfully complete this coursework will receive DMACC credit and have the skills to pursue a painting apprenticeship at a later time.

Prior Skills:

- The only thing required is for students to be open to new experiences and be willing to put in the work!
Plumbing & Mechanical Systems at Central Campus

Teacher- Michael Murphy (Michael.Murphy@dmschools.org)

Key Points for Counselors, Students and Families – We are in the construction business, so you will learn how to install water supply and wastewater collection systems using a variety of materials and connection methods. You will also learn how to properly use and maintain tools safely along with Personal Protective Equipment. After you graduate, you will have an opportunity to get a job in the plumbing career field.

What is it like to be a student in this program of class? Students will learn about the various materials and installation methods in the classroom before getting hands on experience in the shop. Students keep safety on the forefront of their mind and use personal protective equipment. Students are expected to come to class ready to work.

What does success look like for a student in this program or class? – Mastery of many hand tools, battery operated tools, and corded tools and their own construction skills. Students take pride in completion of group and individual projects and get a vision of how these skills can open the doors to well-paid careers.

Are their certifications students can earn being in this program or class? DMACC credit

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Any shop classes taken at their home high schools, Algebra and Geometry are highly recommended, because they are both used frequently in Plumbing and Mechanical Systems.

College Credit – DMACC – Year 1 (2 Credits)
**Welding at Central Campus**

**Teacher** - Ralph Young ([ralph.young@dmschools.org](mailto:ralph.young@dmschools.org))

**Key Points for Counselors, Students and Families** - The Central Campus Welding program is a career education program with a proud tradition and a strong reputation of placing students in jobs, apprentice programs, and advanced welding schools. Right now skilled welders are in high demand, so if you dedicate yourself to learning the trade, this is a great opportunity.

**What does success look like?**

You will need to come everyday, work hard, and stay drug free.

We are in direct contact with professionals from the local building trades which creates opportunities for paid internships and employment.

**Certifications** –

- American Welding Society (AWS) membership,
- 10 hour OSHA safety program,
- Study from the industry-approved Hobart curriculum which is 80% hands-on.

**Exploratory classes or foundational knowledge** – There are no required perquisites but a beginning Industrial Technology class would be helpful. A strong interest in the manufacturing and construction fields is beneficial.

**College Credit** – DMACC – 15 hours (2 years)
Transportation
**Intro to Automotive, Auto I, Auto II at Central Campus**

**Teachers** – James Boyd, Christopher Goodwin, and James Nelson II (james.boyd@dmschools.org, christopher.goodwin@dmschools.org, james.nelson@dmschools.org)

**Key Points for Counselors, Students and Families** - Students gain knowledge in the automotive field and apply that knowledge in a hands-on environment. Class time is split between a traditional classroom and the automotive shop. Acquire college credits all while in high school.

**What is it like to be a student in this program or class?**
- Instruction in fundamental mechanical knowledge
- Written study/research of knowledge
- Demonstration of processes and procedures
- Hands on practice of learned knowledge i.e. rebuild an engine, repair brakes, rewire electrical components

**What does success look like for a student in this program or class?**
Successful students pose the desire to listen and participate in class discussions. They will then be able to apply classroom knowledge in lab areas to reinforce learned skills. Students must be punctual and have required materials at the beginning of class.

**Are there certifications students can earn being in this program or class?**
Auto I - 18 DMACC credits includes integrated math

Auto II - 8 DMACC credits

DMACC credits go toward the general automotive program. Students will also qualify to take engine repair, brakes, and electrical ASE tests.

**Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?**
Our Intro to Automotive class would help students identify interest in automotive and any hands on industrial arts type classes would help prepare students for our classes.
Auto Collision at Central Campus

Teacher - Joel Samuelson  (joel.samuelson@dmschools.org)

Key Points for Counselors, Students and Families - You will learn panel repair, refinishing with the latest waterborne refinish materials. Hands on experiences with individual and small group projects. We are the outside people, we make vehicles look great! We offer DMACC and high school credits. We can start you off no matter if you have any background or not!

What is it like to be a student in this program or class? 1. Actively repairing vehicles 2. Small group and individual projects 3. The same students who repair the car, refinishes it as well. 4. We use the same professional materials as the major collision shops in the area 5. We spend the majority of our time in our newly remodeled lab.

What does success look like for a student in this program or class? We have program graduates in many shops in the area. One has currently 9 employed. We strive for entry level skill building. A accomplished technician can earn a very good living.

Are there certifications students can earn being in this program or class? We offer I-Car points and certifications. They will obtain SP/2 certifications for safety and pollution prevention.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Any tech ed. class. Metals or automotive classes where available

College Credit – Year 1 - DMACC – up to 8 credits; Year 2 – Up to 7 credits
Introduction to Aviation at Central Campus

Teacher - Keith Boot (keith.boot@dmschools.org)

Key Points for Counselors, Students and Families
• Exploratory
• Entry-level
• Prerequisite for Aviation Maintenance
• Prerequisite for Private Pilot Ground School
• Instructor dual certified in maintenance and flight

What is it like to be a student in this program or class?
A student in this class will utilize classroom activities, hands-on projects, field trips, and guest speakers to learn about various aviation careers (including maintenance and pilot), aviation history, and basic aircraft design. In addition, Mathematics for Aviation will be provided via another instructor.

What does success look like for a student in this program or class?
Success in this class will be a clear understanding of possible choices to proceed with a career in aviation. Success will be achieved through proper attendance, attentive and respectful behavior, and enthusiasm about aviation.

Are there certifications students can earn being in this program or class?
College credit for mathematics is available. There is no certification available directly through this course, however, this course serves as a prerequisite for either the Aviation Maintenance Program or Private Pilot Ground School. Both of which may lead to a Federal Aviation Administration (FAA) certificate. However, Mathematics for Aviation shall be applied to the Aviation Maintenance Program for FAA credit if the student wishes to continue with the Aviation Maintenance Program.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?
This is an exploratory course and the main foundation for success is an enthusiasm regarding anything aviation.

College Credit - DMACC (Math Only)
Aviation Maintenance at Central Campus

Teacher – Keith Boot (keith.boot@dmschools.org)

Key Points for Counselors, Students and Families
- Advanced-level course
- Very rare opportunity for high school students
- Certified FAA Part 147 (D52T096K)
- Instructor dual certified in maintenance and flight

What is it like to be a student in this program or class?
A student in this class will utilize classroom instruction and hands-on practical projects. The modern facility houses several operational airplanes and helicopters. In addition, lab areas contain various tools and equipment necessary to maintain aircraft.

What does success look like for a student in this program or class?
Success in this class will be successful completion to the Federal Aviation Administration (FAA) requirements. Requirements includes hours of instruction and minimum test and project scores of 70% each. These requirements take three years to complete, starting at grade 10. Please note, all students start at the same point, but may start at any age or grade level.

Are there certifications students can earn being in this program or class?
Students can earn an FAA Airframe Maintenance Certificate. The program offers the necessary training needed to take the required FAA knowledge, oral, and practical tests. Successful completion of all the tests earns an FA Airframe Maintenance Certificate. The Airframe is one half of the FAA A&P Mechanic Certificate. Powerplant is the other portion, which is not currently offered at Des Moines Public Schools but may be taken at another FAA Part 147 school.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?
Introduction to Aviation is a perquisite course. A strong commitment to the program is also necessary.

College Credit – None currently.
Private Pilot Ground School at Central Campus

Teacher – Keith Boot (keith.boot@dmschools.org)

Key Points for Counselors, Students and Families

- Advanced-level course
- Rare opportunity for high school students
- Conducted under FAA Part 61
- Instructor dual certified in maintenance and flight

What is it like to be a student in this program or class?

A student in this class will utilize an online Private Pilot Ground School video series with associated daily discussion. Additional training will include classroom assignments and a Federal Aviation Administration (FAA) approved flight simulator.

What does success look like for a student in this program or class?

Success in this class will be an endorsement to take the Federal Aviation Administration (FAA) Private Pilot Knowledge Exam. An endorsement will be given provided a score of 80% or better on the final exam, twice. Success shall be attainable with proper attendance, attentiveness, and additional studying.

Are there certifications students can earn being in this program or class?

With proper achievement levels, students may earn an endorsement to take the Federal Aviation Administration (FAA) Private Pilot Knowledge Exam. Successful completion of this exam completes the non-flight portion of the Private Pilot Certificate. If desired, students will have to attain private flight training outside of school to complete the Private Pilot Certificate.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?

Introduction to Aviation

College Credit – None currently.
Environmental and Agricultural Sciences
Animal Science at Central Campus

Teacher - Kevin Anderson  (kevin.anderson@dmschools.org)

Key Points for Counselors, Students and Families

Animal Science Class – Up to 4 DMACC credits

Students will get the opportunity to work with various types of animals in this class. Animals included sheep, goats, pigs, chickens, rabbits, fish and bees. Students will get to learn about animal health care, feeding, management, and behavior/handling. This is an exciting class with many hands on activities, students will get dirty in some activities. There is college credit awarded in this class, an opportunity to raise an animal at the school farm, and be involved in a leadership organization called FFA.

Veterinary Careers Class – Up to 9 DMACC credits

Those enrolled in the Vet Careers class will get hands on experience learning about advanced animal health management challenges. Students will utilize skills in biology and algebra to help solve animal health. Students will get an opportunity to raise a group of pigs and present research data. This is a great class for anyone interested in pursuing a career with animals (even others than being a vet). There is college credit awarded in this class, an opportunity to raise an animal at the school farm, and be involved in a leadership organization called FFA.

Global Animal Science Class – 9 DMACC credits

Students will get to do hands on labs in this class relating to the animal industry. Students will also get to pick their own research project to present at the DMPS Science Fair. Those in the class will also get to work on solving global issues such as hunger and malnutrition. On top of that students will get real world experience in business management in this class. There is college credit awarded in this class, an opportunity to raise an animal at the school farm, and be involved in a leadership organization called FFA.

What is it like to be a student in this program or class?

Hands-on learning, problem solving, work with animals, gain leadership experience.

What does success look like for a student in this program or class? Success appears in many forms. Students will have the knowledge to care and manage animals. They will also have a basic understanding of proper terminology and tools. They will be able to perform animal care activities such as giving shots and basic animal behavior. They will also be able to perform the scientific method when doing and experiment. The biggest indicator is that students improve their leadership skills and problem solving skills.

Are there certifications students can earn being in this program or class? 20+ college credits through DMACC (Des Moines Area Community College).

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Biology and Algebra
Aquarium Science at Central Campus

Teacher - Kirk Embree (kirk.embree@dmschools.org)

Key Points for Counselors, Students and Families - Aquarium Science is a course designed to introduce students to the aquaculture and ornamental marine fish industries. This course prepares students for advanced degrees in fields such as working at large public aquariums, fish hatcheries, or doing conservation work. The focus of the course will center around professional presentation skills, reproducing corals for conservation work, breeding clownfish, water quality, aquatic animal husbandry, and professionalism that will lead to careers working with aquatic animals. Successful students will be enthusiastic about working with and learning about marine fish and coral reefs.

What is it like to be a student in this program or class?  Students will feed the fish. Students will clean all parts of the aquariums and maintain the lab in a pristine condition. Students should expect to get wet and possibly dirty while working in the lab on a daily basis. Optional weekend work by students will ensure the health of the animals in their care.

What does success look like for a student in this program or class?  Successful students will put in significant study time outside of class for exams. They will possess a willingness to work hard and learn new skills as well as continuously repeat learned skills to maintain the health of the animals and presentation of the lab. This is a student run lab where the students do 100% of the work and the successful students will actively participate and take pride in the work they perform. The students will have opportunities to succeed with visible results from their hard work.

Are there certifications students can earn being in this program or class?  No

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?  Students should have a strong interest in the biological sciences and conservation fields. Both Biology and Chemistry would help a student do well in this course but are not required prerequisites

College Credit – DMACC – Up to 6 credits
Horticulture/Environmental Science at Central Campus

Teacher - Craig Nelson  (craig.nelson@dmschools.org)

Key Points for Counselors, Students and Families - Student centered with a lot of teacher support for the students to have success in high school and throughout life and college.

What is it like to be a student in this program or class?  Students are up and moving during class time engaged in learning activities. High expectations for students to succeed in class. Class is structured so that students can be independent thinkers and problem solvers.

What does success look like for a student in this program or class?  Success comes in a number of ways. Students have the opportunity to apply their knowledge in a variety of real life contests. In the past couple of years my students have won state contest with horses, soils, forestry and wildlife. Students have traveled around the United States competing in various contests and also the world through the Horticulture class.

Are there certifications students can earn being in this program or class?  I offer several free college credit classes though both DMACC and Indian Hills Community Colleges

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?  Any science class which could include Earth Science, Plant Sciences, or Sciences dealing with animals

College Credit – DMACC – All classes – up to 22 credits
IESA - Iowa Energy and Sustainability Academy at Central Campus

Teacher - Larry Beall (larry.beall@dmschools.org)

Key Points for Counselors, Students and Families - 2 year - in depth study of environmental issues which include many biological and earth science topics such as energy systems, recycling, ecosystems, endangered species, and Earth history. Students will not only earn 20+ hours of college credits but they will be exposed to many activities, labs, and experiences that will enhance their portfolios to give them an advantage over their peers.

What is it like to be a student in this program or class? 1. Short discussion of an important environmental topic with follow up research. 2. Student choice on demonstrating knowledge of the topics. 3. Hands on labs and field experiences to reinforce the researched topics.

What does success look like for a student in this program or class? The experiences and projects give IESA students an advantage in many future opportunities such as scholarships, internships, and various college programs. Completing projects, labs, and participation in field experiences when possible.

Are there certifications students can earn being in this program or class? Master Conservationists Certification

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? None required although General Biology, Environmental Science, and/or Earth Science would help in their success.

College Credit – DMACC – Year 1, 8 credits; Year 2 - Up to 15 credits.
Marine Biology at Central Campus

Teacher - Gregory Barord, PhD (gregory.barord@dmschools.org)

Key Points for Counselors, Students and Families – It is difficult to learn about the ocean, only from books. So, in Marine Biology, in addition to building foundational knowledge about the ocean, you'll care for hundreds of different marine organisms from sea dragons, cuttlefish, and corals, to octopus, sting rays, and puffer fish. You'll have the opportunity to conduct your own research projects, perform dissections, design aquariums, participate in (and win) science fairs, compete in the annual Ocean Bowl, publish and present your work to professionals, and share all of this in our end of year Central Campus Oceans Week. By the end of the year, ALL students will leave a legacy for other students to follow.

What is it like to be a student in this program or class? Interact with marine fish and invertebrates each day; conduct your own research projects; develop an understanding of how the ocean works; bring your own ideas to the program and improve it; be part of the solution and discuss real-world ocean conservation issues AND make an impact on those issues.

“In this class, you are challenged and expected to problem solve. Students are held to stringent industry standards because we work with living animals and mistakes would possibly cost them their lives” - Student

What does success look like for a student in this program or class? Student success in marine biology is when that student begins thinking more about their day-to-day lives. Sure, there are different assessments throughout the year and activities, but all of them have the overarching goal of asking students to authentically think about different subjects, whether it be the how the ocean works, why biodiversity is important, and even the use of single use plastics.

“Adapting to new circumstances and being able to follow, as well as give, directions. Smooth communication and cooperation skills are keys to success as well as college level listening and note taking skills that will help you along the way” - Student

Are there certifications students can earn being in this program or class? There is an external certificate that may be obtained related to maintaining our online database of the marine organisms in the lab. Internally, students may leave the course as either a Marine Biologist I, II, or III based upon completing different levels of competencies.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Biology (must have or currently taking plus any other science course).

College Credit – DMACC – 8 credits
Engineering & Computer Technology
Cybersecurity at Central Campus

Teacher - Sam Oppel  (samuel.oppel@dmschools.org)

Key Points for Counselors, Students and Families - Are you curious how the Internet works and what cybersecurity means? Do you like puzzles & challenges? Come join us in the Cybersecurity program at Central Campus! In Cybersecurity we learn all about ethical hacking and protecting systems from the bad guys. We also have a ton of fun doing hands-on work, going on field trips, and especially participating in cybersecurity competitions. You can earn over 30 DMACC credits and lots of IT certifications in the two year of the program and even earn a paid registered apprenticeship! No previous knowledge required.

What is it like to be a student in this program or class? Hands-on labs, fun competitions, problem solving, paid registered apprenticeships, teamwork

What does success look like for a student in this program or class? Students who come to class everyday willing to work hard will be successful in this program. Grit and liking puzzles and challenges is a plus.

Are there certifications students can earn being in this program or class? PC Pro Certification, Security Pro Certification, Network Pro Certification, Routing & Switching Pro Certification, Windows Server Pro Certification, Linux Pro Certification, CCENT Certification, CCNA Certification, Employability Essentials Certificate of Completion

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? No

College Credit – DMACC - Year 1 - 17 credits; Year 2 – up to 18 credits;
Intro to Robotics at Central Campus

Teacher - Richard Homard (richard.homard@dmschools.org)

Key Points for Counselors, Students and Families - In the beginning of the course, students learn the fundamentals of programming and basic electronics. As they show success with the initial projects, students step up their programming skills and use more advanced sensors.

What is it like to be a student in this program or class? * Friendly, fun environment, * Great feeling seeing your robot come to life. * Peer collaboration

What does success look like for a student in this program or class? * Excitement from students watching their robot move around the floor

* Students showing leadership by helping other students.

* Students extending their learning by exploring beyond the objectives.

Are there certifications students can earn being in this program or class? There are no certifications at this time.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? PLTW - Principles of Engineering (POE) and PLTW - Introduction of Engineering Design (IED). A programming class is helpful but not necessary.
**Computer Aided Design (CAD)** at Central Campus

**Teacher** - Clinton Gadbury  ([clinton.gadbury@dmschools.org](mailto:clinton.gadbury@dmschools.org))

**Key Points for Counselors, Students and Families** - In CAD, students will learn to use Autodesk programs AutoCAD, Inventor, and Revit to create 2D/3D models and technical blueprints of machine parts, products, and buildings. Electronic designs may be used for 3D printing, lasers, or computer numerical controlled machines. Being able to develop a design in a CAD system is an important skill for architects, construction companies, engineers, or manufacturers.

**What is it like to be a student in this program or class?**
- Use professional software on a computer to create 2D or 3D drawings and models of parts, products, and buildings.
- Learn how to read and interpret technical drawings.
- Redesign and detail drawings in Autodesk AutoCAD.
- Reverse engineer and model a Vex robot in Autodesk Inventor.
- Enter an affordable home designed in Autodesk Revit in a contest.

**What does success look like for a student in this program or class?** Success in CAD is being in class every time, learning to overcome challenges, and paying attention to detail. Learning new software and content is challenging. Missing classes makes it even more challenging. Being persistent and curious is essential in becoming a problem solver. You have to learn the basics before you can be creative. Paying attention to the details separates you from the pack, so being particular about your work creates great work habits. Learning how to work with others in a team is essential as well.

**Are there certifications students can earn being in this program or class?**
Certifications: Students can become an Autodesk Certified User in AutoCAD, Inventor, or Revit by taking the certified user exam provided in class.

**Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?**
3D Mechanical Drawing or 3D Architectural Drawing is offered at the home high school. The class is a semester each, and has some elements of CAD in them. CAD at CC will go more in depth, and offers college credit.

**College Credit** – DMACC – 12 credits
Civil Engineering & Architecture (CEA) at Central Campus

Teacher - Clinton Gadbury (clinton.gadbury@dmschools.org)

Key Points for Counselors, Students and Families - In CEA, students learn the basics of civil, construction, environmental, and mechanical engineering and architecture while developing a residential home and commercial building design. Autodesk Revit is used to create a 3D model and 2D blueprints for their designs. Students will also learn how to survey a property.

What is it like to be a student in this program or class? • Use Autodesk Revit on a computer to create 2D or 3D drawings and models of buildings. • Work independently and in groups often. • Learn and apply engineering concepts and perform engineering calculations. • Research building codes and apply them to design projects. • Understand architectural concepts and apply them to building design.

What does success look like for a student in this program or class? Success in CEA is being in class every time, learning to overcome challenges, and paying attention to detail. Learning new software and content is challenging. Missing classes makes it even more challenging. Being persistent and curious is essential in becoming a problem solver. You have to learn the basics before you can be creative. Paying attention to the details separates you from the pack, so being particular about your work creates great work habits. Learning how to work with others in a team is essential as well.

Are there certifications students can earn being in this program or class? Certifications: Students can become an Autodesk Certified User in Revit by taking the certified user exam provided in class.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Not really exploratory, but students should take Intro to Engineering Design (IED) or Principles of Engineering (POE) at their home high school, or CAD 1 at Central Campus prior to taking Civil Engineering & Architecture.

College Credit – DMACC – 4 credits
Computer Integrated Manufacturing (CIM)  
***NEW Course!*** at Central Campus

Teacher - Clinton Gadbury  (clinton.gadbury@dmschools.org)

Key Points for Counselors, Students and Families - In CIM, students learn about manufacturing process, product design, robotics, and automation. Students use computer aided design (CAD) and manufacturing to produce products using a computer numerical controlled (CNC) machine. Students will design, build, and program a manufacturing cell.

What is it like to be a student in this program or class? • Use a computer to create 2D or 3D drawings and models. • Work independently and in groups often. • Learn and apply engineering concepts and perform engineering calculations. • Learn G & M code to efficiently run a CNC machine. • Learn to program robots and implement automation control systems.

What does success look like for a student in this program or class? Success in CIM is being in class every time, learning to overcome challenges, and paying attention to detail. Learning new software and content is challenging. Missing classes makes it even more challenging. Being persistent and curious is essential in becoming a problem solver. You have to learn the basics before you can be creative. Paying attention to the details separates you from the pack, so being particular about your work creates great work habits. Learning how to work with others in a team is essential as well.

Are there certifications students can earn being in this program or class?  
Certifications: Students can become an Autodesk Certified User in AutoCAD, Inventor, or HSM by taking the certified user exam provided in class.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Not really exploratory, but students should take Intro to Engineering Design (IED) or Principles of Engineering (POE) at their home high school, or CAD 1 at Central Campus prior to taking Computer Integrated Manufacturing.
Digital Electronics and Robotic Engineering at Central Campus

Teacher - Richard Homard (richard.homard@dmschools.org)

Key Points for Counselors, Students and Families - This is a hands on class where students design digital circuitry, simulate it on a computer, and build the circuits they design.

Students learn about the sub-assemblies of a robot, learn how to design and simulate a robot on a computer and use that design to build a robot to compete in a classroom competition.

8 DMACC credits are earned.

Skills learned in this class will greatly prepare students desiring to learn any engineering field.

What is it like to be a student in this program or class? * Project based learning, * Hands-on learning, * Manageable and challenging at the same time, * Real world applications

What does success look like for a student in this program or class?
Designing and building a working circuit.

Designing a robot with properly operating sub-assemblies (drive train, arm, chassis, etc.)

Are there certifications students can earn being in this program or class? No certifications but students do earn 3 DMACC credits for Digital Electronics, 3 DMACC credits for Digital Electronics Lab, 2 DMACC credits for Digital Portfolio

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Although not necessary, PLTW - Principles of Engineering and PLTW - Introduction to Engineering Design

College Credit – DMACC – 8 credits
Engineering Design & Development (EDD) (Senior Capstone) at Central Campus

Teacher - Clinton Gadbury  (clinton.gadbury@dmschools.org)

Key Points for Counselors, Students and Families – EDD is a course for high school seniors. In EDD, students work in teams to identify a real problem that exists in the world, justify and validate that it is a problem to be solved, and design a solution to solve the problem. The solution involves creating and testing a prototype, and presenting that solution to professionals or stakeholders. This course is the closest a student can get to duplicating how a professional engineer works.

What is it like to be a student in this program or class? Students conduct market and patent research. Work independently and in groups often. Apply engineering concepts and perform engineering calculations. Use the engineering design process to solve problems. Apply skills learned in other courses (engineering, industrial technology: woods/metals manufacturing, electrical/electronics, robotics, science, math, business, language arts, public speaking). Use software to design a prototype or organize and track project progress.

What does success look like for a student in this program or class? Success in EDD is being in class every time, learning to overcome challenges, and paying attention to detail. Being persistent and curious is essential in becoming a problem solver. You have to learn the basics before you can be creative. Paying attention to the details separates you from the pack, so being particular about your work creates great work habits. Learning how to work with others in a team is essential as well.

Are there certifications students can earn being in this program or class? Certifications: Students can become an Autodesk Certified User by taking the certified user exam provided in class.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Yes. Students should take a variety of courses prior to taking EDD, including successfully completing at minimum one of the Project Lead the Way (PLTW) courses Intro to Engineering Design (IED), Principles of Engineering (POE), Civil Engineering & Architecture (CEA), Computer Integrated Manufacturing (CIM), or Digital Electronic & Robotics (DE). Other courses that are helpful are Computer Aided Design (CAD), Metalworking, Woodworking, Construction, Robotics, or Manufacturing.
Game Design and Programming at Central Campus

Teacher - Richard Homard  (richard.homard@dmschools.org)

Key Points for Counselors, Students and Families - Students develop a story line and sketch out your game environment. They learn to use pre-made assets and create their own assets. Students can use/modify existing scripts. Peers routinely test games for bugs. At the end of the year, students create a stand-alone game and present it to the rest of the school.

What is it like to be a student in this program or class?  * Creative freedom with your game, * Great feeling when a solution comes along, * Friendly, fun environment, * Having fun playing peer’s games

What does success look like for a student in this program or class?  * Great feeling when a solution comes along

*Watching your peers enjoy the game you created.

Are there certifications students can earn being in this program or class? At this time, no certifications are available.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? There are no exploratory courses available. Computer programming would be helpful but not necessary.
Education & Leadership
Criminal Justice at Central Campus

Teacher – LaWanda Sanders (LaWanda.Sanders@dmschools.org)

Key Points for Counselors, Students and Families – Please note: Course Program specifics are subject to change for 2019-2020 depending on the instructor. Currently DMACC Credit is offered in Intro to Criminal Justice, and Survey of Criminal Justice Agencies. Students may be exposed to material which may contain profanity, blood and bodily fluids, and violence.

What is it like to be a student in this program or class? Students in this class will gain knowledge and experience of the Criminal Justice System. Students will learn about the sources of laws in the State of Iowa as well as the roles of Law Enforcement at the local, state, and Federal levels. Students will prepare and perform individual and group presentations surrounding courtroom workgroups and the legal process. Students will be exposed to many layers of corrections including incarceration, probation, and parole. Students will also explore ethics, bias and disproportionality within the Justice System. Students will learn about the various roles and functions of criminal justice agencies. Students will also learn basic criminal investigation techniques for various criminal acts.

What does success look like for a student in this program or class? Success for the student is the development of confident public speaking skills, positive conflict resolution, firm grasp of government processes, and a wider world view surrounding the impacts of crime on society.

Are there certifications students can earn being in this program or class? No.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? H.S. Government, U.S. History, Writing Foundations
Early Childhood Careers at Central Campus

Teacher - Younghee Steenhoek  (younghee.steenhoek@dmschools.org)

Key Points for Counselors, Students and Families –

- Offers certificates, practicum/internship, rigor in learning
- Provides career mindset on day one
- Motivates professionalism
- Obtains jobs in early childhood settings

What is it like to be a student in this program or class?

- Students reflect what they have comprehended by discussion, writing, or making visuals
- Apply the skills in internship by teaching at early childhood settings
- Create evidence of learning by planning activities
- Work as a team

What does success look like for a student in this program or class?

- Demonstrate professional conduct in their internship
- Thrive throughout the year and take challenges
- Earn necessary certificates for employment and obtain a job
- Pursue higher education in ECE fields and grown professionally

Are there certifications students can earn being in this program or class?

- Universal Precaution Training Certificate
- Mandatory Reporter Training Certificate
- CPR/First Aid Certificate from American Heart Association
- Child Development Associate National Credential earned during second year of program

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?

- Family Consumer Science courses
- Dream to Teach
- Babysitting/Tutoring
- Urban Teacher Academy

College Credit – DMACC –Year 1 – 18 credits; Year 2 – 4 credits.
Dream to Teach (Year 1 and 2) at Central Campus
Teacher – Meja Pinkney (Meja.Pinkney@dmschools.org)

Key Points for Counselors, Students and Families –
First Year
*Prerequisite: Students should plan to participate in their home school’s Dream to Teach program while enrolled in both years of Dream to Teach classes.
  -Dream to Teach 1 (First semester)
    -Students will be introduced to the field of education
  -Students will be exposed to different career opportunities within education
  -Students will examine the education system through a social justice lens
  -Dream to Teach 2 (Second semester)
    -Students will continue to explore the field of education and related career opportunities
    -Students will write and deliver lessons that reach all students
    -Students will deepen their understanding of the relationship between education and equity
    -Students will reimagine schools using their newly acquired lens
  Students will earn an English credit from the first year of Dream to Teach classes.
Second year
*Prerequisite: First year of Dream to Teach classes (both semesters)
  -Student Teacher Prep (First semester)
    -Students will prepare for their upcoming student teaching experience reviewing topics such as professionalism, mandatory reporting, cultural responsiveness, etc.
    -Students will begin to build their professional portfolio highlighting their experiences, strengths, work examples, etc.
    -Students will develop leadership skills towards becoming agents of change in their schools and communities
  -Teaching Internships (Second semester)
    -Students will begin to work in DMPS classrooms observing, working with students, and teaching
    -Students will reflect on their experiences inside the classroom through writing and discussion
    -Students will continue to build their professional portfolio
  Students will be able to earn an English credit from the second year of Dream to Teach classes.

Are there certifications or college credit students can earn being in this program or class?
-Second year: DMACC 8 credits and mandatory reporter certification

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?
Students should plan to participate in their home school’s Dream to Teach program while enrolled in both years of these classes.
Students should complete the first year of Dream to Teach classes before beginning the second year.
JROTC at Central Campus

Teacher – Robert Webb/David Verdi (robert.webb@dmschools.org) (david.verdi@dmschools.org)

Key Points for Counselors, Students and Families – JROTC is offered to Freshman through Seniors. The program is a leadership program that promotes good citizenship while helping prepare the student for life after high school. The program focuses on values and habits that will help the student excel in college and the workforce. We motivate students to be better citizens through leadership, teamwork and selfless service to the community.

What is it like to be a student in this program or class?

1. The JROTC program is student lead and ran organization. You will lead peers and coach, teach, mentor fellow students as you gain experience. You will adhere to Army Regulations. You will have to opportunity to complete in regional and national competition in drill, raiders and rifle marksmanship.

2. Students will be required to wear the JROTC uniform every Wednesday they are in class and adhere to the Army grooming standard. The standards are males must have a short off the ears and off the forehead haircuts and must be tapered in appearance. Male students may not wear ear rings or facial piercing in class. Female students must wear their hair in a military style bun on uniform days. Female students must remove facial piercing during class and may only wear one set of ear rings in the earlobes while wearing the uniform.

3. Students will be required to participate in PE once a week and participation is required for all activities without a doctor's excuse. Students will also be required to dress out for PE.

4. Students are expected to present themselves in a respectful manner at all times while in the JROTC uniform.

What does success look like for a student in this program or class? Success for the student is the individual leaves the program with the tools he or she needs to be successful at the next level of their path. This can include college, military or the workforce.

Are there certifications students can earn being in this program or class? Students can earn advance promotion upon enlistment into the military and have the opportunities for Senior ROTC scholarships for college.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? No
Methods of Physical Education at Central Campus

Teacher - Matt Carlson  (matthew.carlson@dmschools.org)

Key Points for Counselors, Students and Families - You will be teaching elementary students their PE curriculum in small groups everyday.

What is it like to be a student in this program or class?
1. You will be working directly with elementary students
2. This will be a different PE experience from the traditional PE class
3. You will be put in leadership roles and have the opportunity to set an example for elementary students.

What does success look like for a student in this program or class?
1. You are able to manage a small group of elementary students
2. You use teaching and management strategies learned in the class
3. You are able to build connections and work alongside classmates
4. You are able to be a contributing member of a small team of students managing elementary students

Are there certifications students can earn being in this program or class?
State of Iowa Certified Official

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?
Early Childhood Career, Dream to Teach, Urban Teacher Academy, JROTC.
Urban Leadership/RunDSM at Central Campus

**Teacher** - Kristopher Rollins & Emily Lang  (kristopher.rollins@dmschools.org | emily.lang@dmschools.org)

**Key Points for Counselors, Students and Families** - Our course looks at issues of social justice through historic and modern lenses. We study immigrant rights, black lives matter, women’s rights, and LGBTQIA+ rights. In addition, students in the course create, develop, and run an annual Teen Summit where students from all Des Moines High Schools are invited to have discussions regarding important topics pressing them. Students at the event also participate in artistic workshops taught by local teaching artists in order to learn how art can act as a form of activism.

**What is it like to be a student in this program or class?** We focus on life experiences as curriculum, rather than textbooks. We LOVE whole class discussions and get free because it’s a safe and brave space. We teach history and topics not covered in other classes. We build community by learning to more fully love ourselves and our peers, laughing, getting real, and sometimes crying together. We study hip-hop and poetry in connection to content. We focus on current events and how they connect to the past.

**What does success look like for a student in this program or class?** Success is increased confidence and self-empowerment. Success looks like a safe and brave community. Success looks like increased bravery. Success looks like recognizing self-worth. Success looks and feels like equity and social justice. Success looks like each student being seen for their individual skill sets. Success looks like student voice. Success looks like not being afraid to speak up when something isn’t right.

**Are there certifications students can earn being in this program or class?** English credit, elective credit, and DMACC career exploration credit (UL 102).

**Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?** N/A

**College Credit** – DMACC – Year 2 – 4 credits
Youth Voice for Equity and Justice (year-long) at Central Campus
Teacher – Kate Peterson (Katherine.Peterson@dmschools.org)

Key Points for Counselors, Students and Families –
-Students will learn about oppressions, justice, and equity
-Students will consider how their social identities influence and are influenced by their learning
-Students will consider perspectives different than their own
-Students will examine the education system through a social justice lens
-Students will participate in action research at their home school to highlight inequities that currently exist
-Students will present their research findings to DMPS leadership and administration

What is it like to be a student in this program or class?
- Relevant and timely curriculum
- Guest speakers including local activists, community leaders, professors, DMPS school board members and leadership, DMPS parents/families, etc.
- Focus on equity and diversity in schools today
- Open discussions
- Strong class community

What does success look like for a student in this program or class?
- Learning how to use their voice for activism and change
- Using research and evidence to support their claims
- Helping to make change in the DMPS educational system regarding equity

Are there certifications students can earn being in this program or class? NA

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?

Students should express an interest in activism around equity and social justice.
Health Sciences
Career Opportunities in Health (COH) at Central Campus

Teacher - Jenna Eppert  (jennifer.eppert@dmschools.org)

Key Points for Counselors, Students and Families - Career Opportunities in Health is a program that allows students to learn about medicine while standing beside medical professionals. COH has 2 components to learning: classroom and observational experiences. The classroom portion builds an educational foundation for students as they decide if healthcare is a career interest beyond high school. The classroom consists of information presented by teacher, students and guest speakers from the healthcare industry, as well as projects that require students to apply the information presented. The observation component allows students to stand next to medical professionals to learn about medicine, medical procedures and how to interact with patients and families; each experience requires students to display their learning in various ways. COH is a semester long program.

What is it like to be a student in this program or class?
1. Stand with medical professionals to observe careers & procedures.
2. Students express areas of interest for observing; teacher finalizes department placements.
3. Classroom projects and hospital projects are done to reflect learning and require organizational and time management skills.
4. Written documentation of attendance at the hospital is required each day; in addition, “notes” should be taken each day at the hospital to assist processing of experiences and creating learning assignments.
5. Learn about a variety of medical and healthcare topics.
6. Attendance is imperative to success within the program.
7. Students discover whether or not they have a passion for healthcare.

What does success look like for a student in this program or class?
1. Attend class daily and on time.
2. Put in the effort to have positive experiences.
3. Become able to turn negative experiences into positive learning lessons.
4. Students learn to be organized and disciplined in time management.
5. Be open minded to see what is “new/different” every day while observing in the hospital.
6. Ask questions in the hospital to learn and understand more about medicine.

Are there certifications students can earn being in this program or class? No

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Anatomy at CC or their home high school or the CC CNA course help students build a foundation for understanding healthcare and the human body. In addition, strong organizational and study skills are extremely helpful for COH students.
Certified Nurse Aide - Basic/Advanced at Central Campus

Teacher - Karin Archer  (karin.archer@dmschools.org)

Key Points for Counselors, Students and Families – The Basic Nurse Aide course is a one semester course that provides the opportunity to learn basic skills to take care of resident/patients in the nursing home; while the Advanced Nurse Aide course provides a two semester course with clinicals in the hospital setting. CNA class is a very hands on experience that gives students the confidence to properly care for themselves, family members, and residents/patients. Students are exposed to various types of bodily fluids.

What is it like to be a student in this program or class?  1. The student will learn a new level of caring/compassion for others. 2. The student will gain confidence of working closely with patients to provide for their basic activities of daily living. 3. The student will see various types of bodily fluids and learn to properly provide elimination care for the resident/patient. 4. Learn how to conduct yourself in a professional setting. 5. Work together with classmates and provide a teamwork approach when working in the lab/clinical setting.

What does success look like for a student in this program or class? Upon completion of the basic nurse aide class, the student will have the opportunity to test for certification in the 75 hour Certified Nurse Aide Registry in Iowa. After completion of Advanced CNA (one year program) the student is eligible to work in the hospital setting as a Patient Care Technician with the 150 hour Certified Nurse Aide completion. Attendance is imperative to success within the program; DMACC requires 90% attendance for passing each semester.

Are there certifications students can earn being in this program or class? Upon Completion of the Basic Nurse Aide course the student is able to test with the State of Iowa for the Certified Nurse Aide registry. Upon passing this examination the student will have a license to work as a Certified Nurse Aide in the nursing home setting.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Career and Opportunities in Health

College Credit – Advanced – DMACC – 7 credits; - Basic - DMACC – 3 credits
Communication Media
**Broadcasting and Film** at Central Campus

**Teacher** - Kirk Johnson (kirk.johnson@dmschools.org) and Tim Coleman (timothy.coleman@dmschools.org)

**Key Points for Counselors, Students and Families** - You can work alone or in small groups to complete important elements like scripts, short films, interviews, game shows and audio recordings. Equipment can be checked out as needed - part of the class time is instructional and the remaining part is studio time. This is a great opportunity to meet kids from the other school districts.

**What is it like to be a student in this program or class?** Students use industry software to manipulate sound and video images in the computer. Students work on production crews with different job descriptions. Students write scripts and make storyboards that accompany each project. Teachers and students watch student-made and professional projects with discussions lead by the instructor.

**What does success look like for a student in this program or class?** Successful students work independently and in groups to create short films and broadcast-ready material. Students should take pride in completing media projects that look and sound like professional content.

**Are there certifications students can earn being in this program or class?** Our program does not offer a certificate of any type, but provides students with hands-on skills needed for entry-level positions in a digital media environment.

**Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?** We encourage students to explore other classes in the arts like journalism, yearbook, drama, etc.... We encourage students to find coursework that centers around media, creative writing, journalism, speech and the performing arts.

**College Credit:** Year 1 - up to 12 credits depending on number of blocks enrolled – courses are from DMACC and ICCC. Year 2 - up to 12 credits depending on number of blocks enrolled – courses from DMACC and ICCC.
Commercial Photography at Central Campus

Teacher – Denise Wicker (denise.wicker@dmschools.org)

Key Points for Counselors, Students and Families - Students can take the class for one or two years, as juniors and seniors. They can earn up to 6 college credits the first year and 6 college credits the second year. Photography focuses on three areas; Darkroom, Studio and Computer Lab where Adobe Photoshop and Lightroom are used. It is recommended (but not required) that students bring a 35mm film camera with manual settings, cameras are available if not possible. Equipment can be checked out as needed. Good attendance is strongly encouraged, time in the labs is necessary to get instruction and complete assignments.

What is it like to be a student in this program or class? All students start in the darkroom where they develop their own black and white film and prints. Students get a hands-on experience of what exposure means. They learn the foundation of how a camera works, what is exposure and how the camera settings are used to get capture different visual effects. This working knowledge is the will help them when they get to digital and there are many more settings. Students work independently or in small groups. Instructor and students work together to troubleshoot through steps in a process when results are not correct. Homework consists of taking photos and bringing in film or disk to utilize the labs to complete their work. Class equipment may be shared with other students. Work is modeled after industry standards and quality.

What does success look like for a student in this program or class? Successful students produce a body of work from the school year. Electronic portfolios are made each year that show their work. It is a reflection of the technical skills, professional quality and industry equipment and software they have learned that year. The portfolios can be used for scholarships and potential employment. They can show an employer what they have done, not just words on an application. All students participate in an art exhibit in the spring with the other creative areas at Central. Work is judged by a local professional photographer.

Are there certifications students can earn being in this program or class? Semester two of first year and second year classes are part of the Photography certificate program and associate degree program at DMACC. All credits count toward elective credits at any college or university. Our classes also provide students with hands-on skills needed for entry-level positions in a commercial photography environment.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? There are no set prerequisites; we encourage students to take project based classes like media, computers, acting or art. Attendance is also important. It is a lab based/hands on class so they have to have good attendance to successfully complete their work and earn the college credit.

College Credit: Year 1 - 6 credits, courses from DMACC
Year 2 - 6 credits, courses from DMACC
Graphic Communications at Central Campus

Teacher - Tim Rice  (timothy.rice@dmschools.org)

Key Points for Counselors, Students and Families
Do you like Art? Do you like Graphic Design? What about Screen Print? Then this is the place for you. We take a look design trends, and what is trending in the design world. We offer state of the art equipment and skills to help you become a better designer. We work through design problems to solve any issues that may come up. The students gain the knowledge of the Adobe Creative Suite.
We work with outside clients to create unique designs for their needs.

What is it like to be a student in this program or class?
Students will learn firsthand what it is like to be a graphic designer. The class is set up to feel like a small design studio. Each student has their own set projects that they work on from start to finish. We go through each and every program to gain a working knowledge of what is need to be a graphic designer.
• Students are assigned real-world projects, and specific deadlines.
• Students get the chance to work with clients as well as work on projects for themselves.
• We have small design studio feel to the classroom.

What does success look like for a student in this program or class? To understand success in the field of graphic design is to see your creation on something. This may be print or on a t-shirt. With success there is also a process to achieve this. We gain success by trial and error. We work through any issues that may come up.

Are there certifications students can earn being in this program or class?
• Understanding Adobe Illustrator, Photoshop, and InDesign.
• Know how to set up a job for screen printing.
• Knowing how the right fonts and colors to use for a specific project.
• Understanding color separations and getting a job ready for print.

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Art and Design

College Credit – DMACC – Year 1 – 12 credits ; Year 2 - 11 credits.
**Culinary Arts and Restaurant Management at Central Campus**

**Teacher** - Monica Wilson Cross  
(monica.wilsoncross@dmschools.org)

**Key Points for Counselors, Students and Families** - Become a student chef, create and cook your own menu

- Prepare and serve meals in our student run cafe
- Compete in culinary events and competitions
- Field trips to restaurants around the area
- Participate in classroom cooking labs

**What is it like to be a student in this program or class?**  
As a student in Culinary Class you will learn the basic steps to becoming a Chef or Restaurant Manager. Students participate in hands on cooking and baking labs. You will learn basic knife skills, while creating soups and sauces. You will have the opportunity to plan your own menu that will be used in our student run café. You will also be able to participate in Culinary Competitions and Catering opportunities. The best part, you will be able to eat what you cook!

**What does success look like for a student in this program or class?**  
Be on time and excited to learn Culinary Skills. Come to class with an open mind ready to cook anything. Attend regularly, missing classes makes it more challenging. You will learn from award winning Chefs from our community. Have passion and take pride in what you create.

**Are there certifications students can earn being in this program or class?**  
- ServSafe certification
- ProStart National Certificate of Achievement

A total of 29 DMACC credits can be earned if completed 3 years

**Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?** Foods 1 and 2

**College Credit** – DMACC – Year 1 – 11 credits; Year 2 – 13 credits; Year 3 – 5 credits
Intro to Fashion and Garment Construction at Central Campus

Teacher – Tracy Holland (tracy.holland@dmschools.org)

Key Points for Counselors, Students and Families – This course is intended for the 10th grade student with very little or no sewing experience who would like to learn the basics of sewing. The course includes construction of two or more simple garments and/or projects. This is a pathway to the Fashion Design & Merchandising Program.

What is it like to be a student in this program or class?
This is a college level course. Project based learning in a serious point of study atmosphere. Fast, fun and fashionable program!

What does success look like for a student in this program or class?
Students will learn basic garment construction skills that will advance in the FD&M program.

Are there certifications students can earn being in this program or class?

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?
A prior sewing classes is recommended. Sophomore students only.
**Fashion Design** at Central Campus

**Teacher** - Tracy Holland  (tracy.holland@dmschools.org)

**Key Points for Counselors, Students and Families** - Within the creative discipline of **Fashion Design**, students discover fascinating fundamentals of the fashion industry and learn about all of the exciting behind-the-scene details that make every show and every display perfect. Study famous and up-and-coming designers explore historical and current trends and learn the importance of alterations and proper fit. In this program students building upon their sewing skills, create fashion drawings, and analyze the designs of others. The program enhances entrepreneurial skills and techniques to successfully market their designs in the fashion industry. The culminating event for this program is a spring fashion show. It showcases collection pieces designed and constructed by the students. The Fashion Show is created and produced by the fashion students and other cooperating Central Campus programs. The FD&M program articulates it college credit with DMACC and ISU offering the student up to 21 college credits over two years. Hands on, fast paced, energetic, fashionable, FUN! College level working environment. Deadline driven and instructor expects hard working students and outcomes! 2 year course for juniors and seniors. Fashion design, pattern making, advance sewing, industrial construction equipment used, modeling, visual display.

**What is it like to be a student in this program or class?** Students are expected to be here every day, on time and have all their supplies and materials with them. Students are expected to reach all deadlines and due dates for all projects. Most projects are hands on, but some lectures will be included.

**What does success look like for a student in this program or class?** For students to display work at annual fashion show, all work must be turned in on time and completed to the satisfaction of the project. End of year Fashion Show where every student displays their designs! AMAZING! High placements at Iowa State University and DMACC and other private and public colleges that major in Fashion.

**Are there certifications students can earn being in this program or class?** Students have the opportunity to earn 21 college credits in the 2 year program.

**Are there exploratory classes or foundational knowledge that are helpful for success in this program or class?** Home high school sewing class. Central Campus new Beginning Sewing class for Sophomores, Fashion classes, and home sewing or basic understanding of garment or the fashion industry.

**College Credit** – DMACC – Year 1 – 9 credits; Year 2 – Up to 11 credits.
Integrated Coursework
Integrated Math - College Technical Math at Central Campus

Teacher - Kylie Nelson (kylie.nelson@dmschools.org)

Key Points for Counselors, Students and Families - This math class uses math you've most likely already learned and applies it towards the class you're taking. For instance, culinary focuses on changing measurements for recipes and finding costs of recipes. This uses fractions, decimals, percents, and the metric system.

What is it like to be a student in this program or class? - 40 minutes 2/3 times a week - most days we cover a new math topic, do an activity relating to it, then try to apply it using an assignment

What does success look like for a student in this program or class? Students can succeed in their chosen field by using the skills taught in my class.

Are there certifications students can earn being in this program or class? 1 year high school math credit

Are there exploratory classes or foundational knowledge that are helpful for success in this program or class? Regular Biology, Earth Science, and/or Environmental Science at home schools would be helpful but not a requirement.

College Credit – DMACC - 3 math credits