Penta Career Center

2015-2016



INFORMATION HANDBOOK

This handbook highlights the College Credit Plus options offered through our partnering colleges, Northwest State Community College and Owens Community College, for the 2015-2016 school year.

Information stated in this handbook is pursuant to Ohio Revised Code 3365: College Credit Plus Program and is subject to change.

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Penta Career Center College Credit Plus Contact Information

College Credit Plus Course Selection and Forms Completion:

Penta Career Center Counselors:

Chris Rehard, Guidance Counselor (419)661-6506 mrehard@pentacc.org Serving: Bowling Green, Elmwood, Swanton, and Woodmore

Karen Schlatter, Guidance Counselor (419)661-6474 kschlatter@pentacc.org Serving: Northwood, Oak Harbor, and Springfield Mary Schultz, Guidance Counselor (419)661-6472 mschultz@pentacc.org Serving: Anthony Wayne, Otsego, and Perrysburg

Dan Stoots, Guidance Counselor (419)661-6475 dstoots@pentacc.org Serving: Genoa, Lake, and North Baltimore

Leslie Zilba, Guidance Counselor (419)661-6473 lzilba@pentacc.org Serving: Eastwood, Maumee, and Rossford

Enrollment Questions:

Jenny Northrup, Curriculum and Instruction Administrative Assistant (419)661-6189 jnorthrup@pentacc.org

General Information:

Christina Kerns, Curriculum and Instruction Supervisor (419)661-6496 ckerns@pentacc.org Dan Weirich, Student Services Supervisor (419)661-6480 dweirich@pentacc.org



College Credit

Why wait for your future?

With College Credit Plus, you can earn college and high school credits at the same time...

And if you take courses from a public college, it's free!

Ohio's new College Credit Plus can help you earn college and high school credits at the same time by taking college courses from colleges and/or universities. The purpose of this program is to promote rigorous academic pursuits and to provide a wide variety of options to college-ready students. Taking a College Credit Plus course from a public college or university is free, which means no cost for tuition, books, or fees. If you choose to attend a private college or university, you may have limited costs.

Your high school may have an agreement with a local college for specific courses; however, you can choose to take College Credit Plus courses that would benefit your future from any college. This includes online courses.





Can I Participate?

If you are a student in grades 7-12 you can apply for College Credit Plus admission to a public or participating private college. The college will admit you based on your college-readiness in one or more subject areas. Your school counselor can help you understand your options, deadlines, and how to proceed. You may not participate in the College Credit Plus program beyond your anticipated high school graduation date.



How Can College Credit Plus Benefit Me?

College Credit Plus provides more options for you to pursue rigorous academic coursework beyond the high school classroom. Under College Credit Plus, you can complete your freshman year of college or more, or explore college content that interests you. Earning college credits while you're in high school can reduce your time and costs of attending college after high school.



Does College Credit Plus Differ from the Previous PSEO Program?

College Credit Plus is a student-directed program. Students and their families can explore courses offered at all Ohio public colleges and participating private colleges for possible participation in College Credit Plus. Unlike PSEO, College Credit Plus is open to students beginning in the seventh grade and districts are not permitted to restrict an otherwise qualified student's participation in any way.



How Do College Courses Earn Me High School Credit?

College Credit Plus allows high school students to earn college credit and apply that credit toward their high school graduation requirements. Successful completion of a three or more credit-hour college course will result in 1.0 Carnegie unit earned at the high school. A two credit-hour college course will earn students 2/3 of a high school credit and a one credit-hour college course will convert to 1/3 of a high school credit.



How Are High School Graduation Requirements Affected?

High school graduation requirements will not be waived as a result of participation in College Credit Plus. You will not receive a diploma until after the course is successfully completed and the graduation requirement is met. However, you may participate in the graduation ceremony if proof is presented that you are progressing satisfactorily one week prior to graduation.



College Credit Plus (CCP) does not replace the requirements to earn a high school diploma. This includes earning 18 points or more on the graduation tests. Even if you are enrolled in college courses, you must take the end-of-course exams in English I, English II, Algebra I and Geometry. You do not have to take the end-of-course exams in Physical Science, American Government, and American History if you are enrolled in College Credit Plus courses that substitute. A CCP student's end-of-course grades in Physical Science, American Government, and American History will correspond with a point scale used for graduation requirements.



Where Can I Take College Classes?

Some college courses under College Credit Plus may be offered at your high school. You may also travel to the college where you have been admitted or enroll in one or more online courses offered by that college.

My High School Has a Formal Arrangement With a Local College to Offer College Credit Plus. Are Those the Only Courses I Can Take?

No. After you are admitted to a college, you can take any courses offered by that college that you are college-ready to take. Also, each Ohio high school has developed two sample pathways – one leading to 15 credits and another to 30 credits. These should be included in your high school's course offerings. However, students have no obligation to take courses identified on a pathway or to complete a pathway. Students can take courses offered in person or online by any public or participating private college in Ohio.



Will College Credit Plus Grades Appear on My High School Transcript?

Yes. High school credit awarded for courses successfully completed under College Credit Plus will satisfy or exceed the graduation requirements and subject area requirements of the school district. Courses successfully completed under College Credit Plus must be listed by course title on the high school transcript. All College Credit Plus courses will be computed into the GPA using the same scale as Advanced Placement and International Baccalaureate courses in your district.



How Does College Credit Plus Impact Athletic Eligibility?

If you are a student athlete, you must remain eligible in accordance with the Ohio High School Athletic Association (OHSAA) bylaws. To be athletically eligible, students must be passing five, one credit courses or the equivalent per grading period with the high school and college courses combined. Most College Credit Plus courses taken during a semester will equal one Carnegie unit, allowing students to earn more than the required five for athletic eligibility. Please check with your counselor to ensure that the course work you are taking is compliant the OHSAA.



What Are My Academic and Social Responsibilities?

You will be expected to follow the rules and regulations set by the college/university. You will also be expected to follow the rules and regulations set for high school students detailed in the student handbook. Once enrolled, you are eligible to receive advising from campus-based support services of that institution. Additionally, you will continue to have access to your school counselor and all other resources available to high school students. Participation in College Credit Plus does not guarantee you admission to college after high school. You should follow the regular undergraduate application process for whatever college you plan to attend after high school.



What Courses Are Available through College Credit Plus?

Once you are admitted to a college for College Credit Plus, you may take any course in the college's course catalogue that is not remedial or religious, and that applies toward a degree or professional certificate, in a subject area in which you are college-ready.



Who Pays for College Admission, Textbooks, Fees, and Transportation?

Students attending a public college will not be charged for tuition, books, or fees. Students attending a private college may be charged based on the particular private college and where the course is delivered, in accordance with law. Although the amount students can be charged may vary, in 2014 the maximum would have been up to \$153 per credit hour. Responsibility for transportation rests with the student. Students who qualify for the free and reduced lunch program may not have to pay any fees to a private college. Please talk with your counselor for details.





What If I Fail a Class?

Classes failed or withdrawn with an "F" will receive an "F" on the high school and college transcripts and will be computed into the high school and college GPA. If you do not receive a passing grade, the district may, in some instances, seek reimbursement for the amount of state funds paid to the college on your behalf for that college course. The school district may withhold grades and credits received for high school courses taken until reimbursement has been made.



Does College Credit Transfer After Graduation?



Thanks to Ohio's Transfer to Degree Guarantee, many entry-level courses earned at an Ohio public college are guaranteed to transfer to any other Ohio public college. Credits earned at private colleges, or those that you want to transfer to an out-of-state institution, will be evaluated on a case-by-case basis by the institution you are seeking to attend. Go to HTTPS://TRANSFERCREDIT.OHIO.GOV to learn more about credit transfer among the state's public institutions of higher education. This tool allows you to find the best pathways to degree completion and launch successful careers! Earning college credit will not affect applications for financial aid/scholarships limited to entering freshmen.



Are Private School and Homeschool Students Eligible for College Credit Plus?

Yes. College Credit Plus is an opportunity available to all 7-12 grade students who are accepted into the program by a college or university within Ohio. The program operates in much the same way regardless of what high school a student attends. However, students attending a private high school and homeschool students must apply to the department of education to receive funding to underwrite their costs. PLEASE CHECK HTTPS://OHIOHIGHERED.ORG/CCP FOR INFORMATION, FORMS AND UPDATES.

I Am Ready to Sign Up. What Are the Next Steps?

- Talk with your school counselor. Discuss your interest in taking college courses and how it fits in with your overall academic plan and career goals.
- Prior to **March 1**, your district will provide information about the College Credit Plus program to all students in grades 7-12. An informational session will be held by March 30 and all colleges and universities within a 30-mile radius will be invited to attend. If you cannot attend, schedule an appointment with your school
- By **April 1**, notify your school counselor if you intend to participate in College Credit Plus next year. After April 1, you will need permission from the school district superintendent to participate.
- You and your family should contact colleges for information, application forms, and criteria for acceptance into College Credit Plus. Some materials are available from your high school counselor and at the college's website. You must go through the procedures established by the colleges/universities to apply to College Credit Plus and to enroll in the course(s). You may have to take a college placement test to make sure you are college-ready. A map showing all Ohio public colleges can be found here: https://ohiohighered.org/ campuses. Ohio private colleges can be found here: http://aicuo.edu/aboutOhiocolleges.html
- Prior to college class attendance, your high school counselor will assist you in determining a course's equivalency to a high school course(s).
- Register for classes and provide a copy of your schedule to your high school counselor for review.

What is College Credit Plus?

The goal of the College Credit Plus (CCP) is to prepare Ohio students for college and career readiness. Under the College Credit Plus program, qualified students in grades 7 through 12 have the opportunity to take non-sectarian college level-course work at an institution of higher education within the state. Students participating in CCP earn transcripted credit.

Enrollment Options:

A student can choose option A or option B under the CCP program.

Option A permits eligible students to enroll in college courses for college credit. Students electing this option will be required to pay all costs incurred, including tuition, books, and fees. The student can elect at the time of enrollment, whether to receive only college credit or high school and college credit for the course(s).

Option B permits eligible students to enroll in college courses for college and high school graduation credit. Under this option, state funds from the high school are used to pay the tuition and fees for the course. The high school is responsible for the cost of the textbooks under this option.

CCP at Penta Career Center:

Eligible students may take a variety of courses which are described in this booklet. Currently, there is no course fee. The student must meet the entrance requirements for the college that is issuing the credit. This includes having a qualifying COMPASS or ACT test score. Refer to the Northwest State Community College section and the Owens Community College section for specific scores.

CCP students at the high school:

- Are taught by either Penta Career Center faculty that meet college faculty requirements or college faculty.
- Use the college textbook, syllabus, and course materials.
- Follow the college/university course objectives and learning outcomes.
- Earn the same credit they would have earned at college if they successfully complete the course.
- Earn high school credit.
- Will have the CCP course(s) appear on their high school transcript.
- Will be starting/continuing their college transcript.

General Information

College Textbooks:

All Penta Career Center CCP students must complete a *College Credit Plus Textbook Agreement Form*. Students are responsible for returning textbooks to the instructor at the end of the course. Students failing to return a textbook will be fined the cost of the book and a financial hold will be placed on the Career Passport until the fine is paid in full.

Transportation and Parking Expenses:

Students who participate in CCP are responsible for providing their own transportation to and from the college or university. Parking expenses are also the cost of the student.

Scheduling College Classes:

Participation in CCP on a part-time basis means that you must schedule classes at Penta Career Center and at a college or university. Yearly schedules and vacation times usually are different between the two institutions. Sometimes it may be difficult (or impossible) to take courses at both the high school and college or university because of scheduling conflicts. College courses need to be scheduled around the student's courses at Penta Career Center. Students may take online courses or courses at the college in the evenings or on the weekends.

Consequences of Non-Attendance or Failing a Course:

The consequences of not completing a course in which the student enrolls could result in the following:

- 1. All costs affiliated with any CCP course, which the student drops or does not attend, will be the responsibility of the student and/or his/her parents.
- 2. The final grade that a student receives in any CCP course will be included in the student's grade point average exactly as reported by the college.
- 3. Lack of award in financial aid from the government upon graduation.

Graduation Requirements:

Any student participating in CCP, must meet their member school graduation requirements in order to earn a high school diploma. Be certain that the number and types of courses taken in CCP will meet member school graduation requirements. In order for a college class to satisfy a graduation requirement in a specific subject area, the college program of study must be comparable to the Penta Career Center program of study. Keep in mind that the grades earned in college courses may impact a student's grade point average, eligibility to graduate, and scholarship opportunities. Each student should review the requirements and his or her academic standing with the guidance counselor.

The College Difference

Every student interested in participating in the CCP must meet certain academic criteria. There are other things for students to consider when determining whether or not they are ready for college coursework, however. The first step is to understand the difference between high school and college.

What is the difference between high school and college?

High School	College				
Structured Environment	Manage Your Own Time				
Daily schedule is routine	Routine changes every day				
Day begins and ends as a school group	 Classes may be online, face-to-face, or a 				
Attend five days a week	combination of both				
Few course choices	Not all instructors take attendance				
Mandatory Attendance	 It may appear that you have "free time" 				
Parents and Teachers as Guides	Student Balances Responsibilities				
 Direct interventions from parents 	Students are treated as adults				
 Teachers hold students accountable 	• Students are expected to initiate contact if				
• Expectations are repeated often and reminders	assistance is needed				
are issued	• Students are expected to follow the course				
	syllabus on their own				
Homework Counts	Tests and Major Papers Count				
Grades are given for most assigned work	Tests are infrequent and often cover large				
Consistent good homework may raise your grade	amounts of material				
 Testing is frequent over small sections 	Review sessions are rare				
	Students must organize their study topics and				
	prepare to be tested				
Will bo all of the state of	Make-up tests may not be available				
Minimal Outside Classroom Work	Significant Outside Classroom Work				
Assigned readings are often done in class	For every hour you spend in class, you should				
Discussion is teacher led	plan on three hours of outside studying and				
Listening in class is enough	assignments.				
Lessons are read and reviewed	(For a 3 credit hour class, you are in class for				
	about 2.5 hours which equals 7.5 hours of				
Effort Counts	studying.) Results Count				
• You can improve your grades with perfect	 Your grade is the result of your performance on 				
attendance and extra credit	tests and papers				
	thwest State Community College				

Other Things to Consider:

- Students are responsible for transportation costs to and from the college campus. Plan for reliable transportation and budget for gas money.
- College courses are more difficult, and the grades earned in those courses count toward graduation. Students must consider how this will impact grade point averages and class rank.
- Even if there are school delays or cancellations due to inclement weather, students are still expected to attend college classes.

Withdrawing from a Course:

If you decide you will no longer participate in CCP before the term has ended, you must file withdrawal forms with the college or university and meet with your high school counselor to develop a new course schedule. Failure to file the necessary forms may result in a failing grade. Withdrawal from the college course may result in a financial obligation for your parents.

*This is the same when you add a new class at the college or university. You must have a current college schedule on file with your Penta counselor at all times.

**Important Notice: Seniors who plan to use federal dollars for financial aid may jeopardize their ability to borrow or receive grants (for up to one year) if a 'W' or withdrawal appears on their transcript. Withdrawals are treated as non-progress grades for federal aid purposes. This could impact eligibility based on Satisfactory Academic Progress (SAP). Any senior thinking of a withdrawal will need to check with the college they plan to attend in regards to their eligibility to receive Federal Pell Grants, Federal SEOG, Federal Direct Subsidized Loans, Federal Direct Unsubsidized Loans, Federal Perkins Loans, and Federal Parent Loans for Undergraduate Students (PLUS).

CCP Advantages:

CCP could benefit students in several ways.

Students:

- 1. Have the opportunity to take courses that may not be offered by the high school.
- 2. Have the opportunity to experience college-level work and college life prior to making a final decision about post-secondary education.
- 3. Can take classes that academically challenge them or are of interest to them.
- 4. Can take college courses and receive both high school and college credits.

CCP Potential Risks:

These are some possible disadvantages to participating in CCP.

Students:

- 1. Will have an increased responsibility for learning.
- 2. Could have increased financial obligations for education, if they choose Option A or if their college course requires special tools or equipment.
- 3. May have reduced opportunities or time for participating in high school activities (athletics, music, band etc.) and part-time employment.
- 4. Grades in college course(s) could impact their high school grade point average and class standing, which also could impact scholarship opportunities.
- 5. Will need to plan for increased travel time to and from the college or university and increased study time.

- 6. Have no guarantee that they will get the courses they want.
- 7. Will be expected to participate in a collegiate interactive classroom environment with other students who could range in age from 18 to 25 or older.
- 8. Who fail or withdraw from a college course can be negatively impacted in relation to the credits they need to graduate from high school.
- 9. Who withdraw from a course or do not attend a course, can be held financially responsible for the cost of the course.

Participating in the College Credit Plus Program:

- 1. Talk with your Penta Career Center counselor. Discuss your interest in taking college courses and how it fits in with your overall academic plan and career goals.
- 2. Prior to <u>March 1, 2015</u> your member school district will provide information about the College Credit Plus program to all students in grades 7-12. An informational session will be held and all colleges and universities within a 30-mile radius will be invited to attend before <u>March 30th</u>. If you will not be able to attend the meeting, schedule an appointment with your Penta Career Center counselor.
- 3. *Even if you are currently enrolled in PSEO or Dual Enrollment Courses at Penta Career Center during the 2014-2015 school year, you still must complete the *Letter of Intent to Participate in College Credit Plus*.
 - Penta Career Center is requesting that all students complete the *Letter of Intent to Participate in College Credit Plus* and submit to Penta Career Center by **April 1, 2015**. Signing the form does not require that you participate during the 2015-2016 school year and you may decide not to participate without consequence. **After April 1, 2015** you will need permission from the Penta Career Center superintendent to participate.
- 4. You and your family should refer to the **College Credit Plus Information Handbook** located on the Penta Career Center High School Home page at **pentacareercenter.org/HighSchool_home.aspx**. The **College Credit Plus Information Handbook** provides detailed information regarding the College Credit Plus program, college enrollment procedures, college class types, 15 and 30 hour pathways, college courses, and more.
- 5. You and your family should contact colleges for information, application forms, and criteria for acceptance into College Credit Plus. Some materials are available in Penta Career Center's College Credit Plus Information Handbook, in addition to the college's website. You must go through the procedures established by the colleges/universities to apply to College Credit Plus and to enroll in the course(s). You may have to take a college placement test to make sure you are college-ready.
- 6. Prior to college class attendance, your Penta Career Center counselor will assist you in determining a course's equivalency to a high school course(s).

Northwest State Community College Enrollment Procedures College Credit Plus: How to Get Started

1. Apply for Admission:

- a. Complete a NSCC College Credit Plus Application for Admission.
- b. Obtain an official copy of your high school transcript from your member school guidance counselor.
- c. Submit the NSCC *College Credit Plus Application for Admission* and a copy of your high school transcript to your Penta guidance counselor.
- d. Your guidance counselor will then submit the items to NSCC.

Students enrolling in a Northwest State Community College (NSCC) course may access the NSCC application by going to: http://northweststate.edu/college-credit-plus-how-to-get-started/.

Application Deadlines: Fall Semester Start – April 15, 2015 and Spring Semester Start – November 1, 2015.

Please note: Current NSCC high school students do not need to complete another application.

2. Complete the COMPASS Assessment or Submit ACT Scores:

When your application has been processed, the NSCC Admissions Office will mail you a student ID, or N number. You will use this to sign up to take the COMPASS Assessment at northweststate.edu/compass-testing. The ACT or COMPASS Assessment will determine your academic readiness for college-level coursework. Refer to the NSCC *Course Placement Scores*. Students must score within the shaded areas to be eligible for classes in that subject area. All College Credit Plus students must earn at least the minimum reading score. ACT or COMPASS Qualification Deadline Fall Semester – June 1, 2015 and Spring Semester – December 1, 2015.

3. Complete an Online Orientation:

To become acclimated with college services and expectations, all College Credit Plus students are required to complete an online orientation prior to registering for classes. Information on the orientation will be sent to the student after all qualification requirements are met.

4. Meet with your Penta Guidance Counselor to Select Classes:

Your guidance counselor will help you choose classes that will fulfill your high school graduation requirements. When you have determined your semester course schedule,

you will complete a registration form to be submitted to NSCC. Refer to the *NSCC Student Registration Form*.

5. Meet with Your NSCC Academic Advisor:

All College Credit Plus students are required to meet with an academic advisor. Your advisor will contact you prior to the withdraw deadline each semester to schedule an appointment.

Class Types:

NSCC offers four options in the College Credit Plus program, so students can take courses that best meet their learning style.

On Campus (Face-to-Face):

If you choose to take a class on NSCC's main campus, you will find yourself in a traditional classroom similar to what you experience in your high school. Classes are offered at a set day and time, and an instructor will lead the class in lecture, group projects and other activities. Classroom sizes at NSCC average 18 students, which allow the instructor to really get to know the students and offer one-on-one assistance with coursework.

At the High School:

Some high schools will offer college-level coursework in their building. These courses will be taught by a qualified college instructor (who may also teach in the high school). These courses are offered within the typical high school day, but contain college-level curriculum.

Hybrid Classes:

These courses combine the best of online and face-to-face classes. Students and instructors will meet in the classroom for fewer hours, and more of the coursework and activities will be completed online. The online component gives students some freedom with when, where, and at what pace they complete the coursework. Hybrid classes offer the convenience of online learning combined with the value of personal interaction and the campus experience.

Online:

Online (web) classes have all content, assignments, projects, discussions and tests online. There is no scheduled class meeting times, so students can work on the coursework whenever their schedule permits. It is important to note that online classes still have due dates and deadlines students must meet in order to keep pace with the class.

To determine if you are a good match for online classes, take a brief Northwest State online survey at http://northweststate.edu/online-learning-quiz/.

To View a Complete List of Course Descriptions and Course Numbers:

Please visit: http://northweststate.edu/catalog/.

NSCC Calendar and Schedules:

Visit http://northweststate.edu/calendars-schedules/ to access NSCC Calendars and Schedules for up-to-date information on:

- Important semester dates (semester start and end, holiday breaks, etc.)
- Withdraw Calendar
- Exam Schedule
- Complete Course Schedule

Location:

Northwest State Community College 22600 State Route 34 Archbold, OH 43502

Admissions Office Phone Number:

419.267.1320





Please print information <u>clearly</u> with black or blue ink.

1.	I plan to enroll:	□ Fall (August)	☐ Spring (January)	Ye	ear											
2.	Full <u>Legal</u> Name:	LAST						First								M.I.
3.	Permanent <i>Mailing</i>	g Address:														
4.	City:									s	tate:		Zij	p:		
5.	Social Security Nur	ımber:	-			Birth	date:				l		Gende	er: 🗆	Male	□ Female
	**YOUR	APPLICA	TION WILL	NOT BE PR	ROCESSE	D WITI		onth	Day OCIA	Year L SE		YNU	MBER	**		
6.	Phone:			Count	ty:											
7.	Email:															
8.	Country of citizens Immigration status	•		Other (specif	-		For othe	r, please	comple	te Imn	nigratio		s below)		ent 1	☐ Other
9.	Have you resided in	n Ohio for	r the last 12 c	onsecutive	months'	? 🗆 Ye	es 🗆	No	If no,	in wl	nat sta	te did	you re	eside?		
10.	. (optional) Are you Hisp	panic and/	or Latino?	□ Yes □	No											
11.	. (optional-check all that apply)	Ethnicity:	□American	Indian or A	Alaska N	ative [Asian	□Bla	ck/Afı	rican	Amer	ican	□Paci	fic Isl	ander	□White
12.	. Enrollment Goals:	□ Bach	elor Degree	□ Asso	ciate Deg	gree	□ Cert	ificate								
13.	. High School Attend	ding:					(City:						Stat	e:	
14.	Expected Year of H	High Scho	ol Graduation	n:												
ppl	licant Signatur	re:]	Date	e:			

For your College Credit Plus application to be complete:

- 1. Your signature is required on the back of this page.
- 2. An official high school transcript must be submitted to the NSCC Admissions Office.
- 3. ACT scores must be submitted, or COMPASS Assessment completed on campus.

I certify that the information on this application is accurate and I understand that I will need to request my official high school transcripts and provide qualifying placement scores to complete the admission process. It is the policy of NSCC that no person shall be subject to discrimination in any relationship to the College because of race, age, color, sex, religion, disability, national origin or veteran status.





College Expectations

I am applying for admission to Northwest State Community College under the College Credit Plus Program. I understand:

- ACT or COMPASS placement scores must be met to be eligible for college-level classes.
- The college course is taught at the high school by the high school teacher or NSCC instructor, online or on NSCC's campus.
- Official transcripts will be held if textbook is not returned (when applicable).
- College credit will be awarded upon successful completion of the class. Official college transcripts are requested through the NSCC registrar's office.

As a student under the age of 18, I understand:

- The College does not provide extraordinary protection for the student who is a minor.
- The College does not filter or monitor the computers on our campus.
- The class subject matter may contain provocative content.
- The FERPA (Family Educational Rights and Privacy Act) rights belong to the student.

CCP Release of Educational Records

Public Law 93-380, Section 513, "Family Educational Rights and Privacy Act 1974" requires that we have parental permission or student permission if student is 18 years of age, to release information.

I authorize Northwest State Community College to discuss my information related to my application, admission status, and academic progress at Northwest State Community College with my parent(s) or guardian and high school personnel. If requested, by the parent(s) or guardian, these discussions shall occur during a face-to-face meeting on the Northwest State campus in Archbold with the student, parent(s) or guardian being present. In addition, I authorize Northwest State Community College to release a copy of my schedule of classes and an official transcript to my high school district, parent(s) or guardian, and to the Ohio Superintendent of Public Instruction each semester that I am enrolled in any early admit program.

I am applying for admission to Northwest State Community College under an early admit program and certify that the information on this application is true. I understand that I must have parental authorization and that my eligibility for admission will be determined by high school grade point average and assessment evaluations.

Student Signature

Student Signature	Date
Students less than 18 years of age must have parental authorization:	
Parent Signature	Date

NSCC College Credit Plus Deadlines

Intent to Participate to High School: April 1

NSCC CCP Application Submitted: Fall Semester Start-April 15 Spring Semester Start-November 1 ACT or COMPASS Qualification: Fall Semester Start-June 1 Spring Semester Start-December 1

^{*}Your high school may have earlier deadlines. Contact your guidance counselor for more information.

Northwest State Community College College Credit Plus Enrollment Option Student Registration

Co	urse	recom	mendatio	ns for:				
					College Credit Plus Student Name	Date		
				_	NSCC Student ID Number			
				-	High School	Gradua	tion Year	
Fo	ur Di	git CRl	N Cours	se Numbe	r Course Name	Face to Face	Online	@ High School
						l		
					high school guidance counselor and senrollment at Northwest State Co.			
			Colle	ege Credit	Plus Student Signature	_		
			Guid	dance Cou	nselor Signature	_		

Return this completed form to the Admissions Office at Northwest State Community College, 22600 State Route 34, Archbold, Ohio 43502
419-267-1320 phone
419-267-5692 fax
admissions@NorthwestState.edu

COMPASS/ACT Course Placement



	Placement Level	ACT English	COMPASS	Course	Placement Message
		Sub score	Writing	Recommendation	
SH	Developmental	17 & below	0-59	ENG090 Basic Composition	ENG090 is the prerequisite for ENG111.
등	Decision Zone*	N/A	60-68	ENG090/ENG111	*Advisor will determine placement.
ENGLISH	College Level	18 & above	69-94 95-100* *AP considered	ENG111 Composition I	-An expository composition courseRequired for all degree seeking studentsENG111 is the prerequisite for ENG112.
9	Placement Level	ACT Reading Sub score	COMPASS Reading	Course Recommendation	Placement Message
READING	Developmental	20 & below	0-79	ENG080 Reading Comprehension	A critical reading and thinking course for improving comprehension & study skills congruent with college level requirements.
~		21 & above	80-100*	EXEMPT	* Pending final approval. Will go into effect summer semester 2015.
	Placement Level	ACT Math Sub score	COMPASS Math*	Course Recommendation	Placement Message
		N/A	0-31	MTH050 Basic Mathematics	MTH050 is the prerequisite for the MTH078/MTH079 or MTH080 sequence.
		15 & below		MTH 078/MTH079 Beginning Algebra I & II	The MTH078/MTH079 sequence takes place over two semesters OR students
	*Pre-Algebra Developmental		32-100	MTH080 Review of Beginning Algebra	can choose the MTH080 for <u>one</u> <u>semester</u> .
	except BUS110	16-18		BUS110 Business Math/Calculators (for selected programs only)	BUS110 is an option for selected programs. Consult your advisor for more information.
MATH				MTH 078/MTH079 Beginning Algebra I & II	The MTH078/MTH079 sequence takes place over two semesters OR students
2	*Algebra Developmental	N/A	0-30	MTH080 Review of Beginning Algebra	can choose the MTH080 for <u>one</u> semester.
	except MTH 109	19-21	31-51	MTH090 Intermediate Algebra	MTH090 is the prerequisite for MTH109.
		22 & above	52-100	MTH109 College Algebra	MTH109 is Ohio Transfer Module approved.
		22	0-45	MTH109 College Algebra	MTH109 is Ohio Transfer Module approved.
	*College Algebra College Level	N/A	46-65	MTH112 Trigonometry	MTH112 is Ohio Transfer Module approved.
		27 & above	66-100	MTH213 Calculus	MTH213 is Ohio Transfer Module and TAG approved.

ADVISORS: Students who have taken both high school algebra I & II within the last six years with a "C" average or higher meet the college's Beginning Algebra requirement, even if their test score is below the cut off. GSD100 Success Seminar is required of students testing into either MTH050 or MTH080 and either ENG080 or ENG090.

REVISED 2/10/15

Owens Community College Enrollment Procedures

Owens Community College is excited to offer students the opportunity to take college-level coursework under the College Credit Plus program. Owens boasts four locations for classes as well as online courses to fit busy students' schedules. The college also provides a variety of services to students including tutoring, academic advising, student clubs, and career exploration. In addition, College Credit Plus students at Owens can take advantage of college facilities, such as the libraries, fitness centers, and computer labs.

1. Apply for Admission:

Complete the online CCP application at www.owens.edu/collegecreditplus. Click on the "Apply Today!" link.

Application Deadline: June 30, 2015.

Please note: Current OCC high school students do not need to complete another application.

2. Obtain an official copy of your high school transcript from your member school guidance counselor.

3. Complete and Sign the Parent Signature Form:

After completing and signing the Parent Signature Form, make an appointment to meet with your Penta guidance counselor to complete the remaining forms for the enrollment process.

4. Meet with your Penta guidance counselor to complete the *High School Information Form.*

Your Penta guidance counselor will submit your official transcript and all required documents (*Parent Signature Form* and *High School Information Form*) to OCC to finalize the admission process.

Your guidance counselor will mail the Parent Signature Form, High School Information Form, and official high school transcript to:

Owens Community College Attn: Records Office P.O. Box 10,000 Toledo, OH 43699-1947

*Your guidance counselor will help you choose classes that will fulfill your high school graduation requirements.

5. Complete the COMPASS Assessment or Submit ACT Scores:

Students must meet pre and co-requisites required to take courses. Applicants must take the OCC placement test to place into college-level classes on the reading assessment plus the math or the writing assessment. Applicants may waive the placement test if they have achieved the following or better on the ACT: Reading (21) and English (18) or Math (22). Call Testing Services at 567-661-TEST (8378) if you have questions.

6. Meet with Your Owens CCP Academic Advisor:

Upon acceptance, make an appointment for academic advising and registration. Contact the Advising Office on the OCC Campus you plan to attend.

Toledo (567) 661-7777 **Findlay** (567) 429-3509

All College Credit Plus students are required to meet with an academic advisor. Your advisor will contact you prior to the withdraw deadline each semester to schedule an appointment.

Class Types:

Owens Community College offers four different course delivery options with the College Credit Plus program:

At the High School with a Penta Career Center Instructor:

Courses are taught at Penta Career Center by Penta Career Center faculty, who meet the Owens Community College and Ohio Board of Regents requirements for teaching college level courses.

At the High School with an Owens Instructor:

Courses are taught at Penta Career Center by Owens Community College faculty.

On Campus (Face-to-Face):

If you choose to take a class on OCC's main campus, you will find yourself in a traditional classroom similar to what you experience in your high school. Classes are offered at a set day and time, and an instructor will lead the class in lecture, group projects and other activities. Classroom sizes at OCC average 15 students, which allow the instructor to really get to know the students and offer one-on-one assistance with coursework.

Online:

Online (web) classes have all content, assignments, projects, discussions and tests online. There are no scheduled class times, so students can complete the coursework whenever

their schedule permits. It is important to note that online classes still have due dates and deadlines students must meet in order to keep pace with the class.

OCC Things to Note:

- CCP students are college students, and must complete all required coursework. The
 courses are rigorous, and students must adhere to all course requirements, such as
 attendance and deadlines.
- Students are expected to be in class based on the college academic calendar, regardless of the student's high school schedule. This includes holidays, service days, and Spring Breaks.

To View a Complete List of Course Descriptions and Course Numbers:

Please visit: http://catalog.owens.edu/content.php?catoid=5&navoid=1333.

OCC Calendar and Schedules:

Visit https://www.owens.edu/schedules/index.html to access OCC Calendars and Schedules for up-to-date information on:

- Important semester dates (semester start and end, holiday breaks, etc.)
- Withdraw Calendar
- Exam Schedule
- Complete Course Schedule

Location:

Owens Community College, Toledo Campus 30335 Oregon Road Perrysburg, OH 43551

Admissions Office Phone Number:

Toledo-area Campus: (567) 661-7777 or 1-800-GO-OWENS, Ext. 7777



Parent/Legal Signature Form
Office of the Registrar
Oregon Road • P.O. Box 10,000 • Toledo, Ohio 43699-1947 1-800-GO-OWENS, Ext. 7378 • Fax: (567) 661-2101

Semester and Year for which applying	g: Fall (August)	Spring (January)	Summer (May/June)	Year
Have you previously attended Owens	s Community College?	YesNo		
Campus:Toledo-areaF	ndlay-area			
What program of study are you enter	ing?			
PERSONAL DATA Your Social Security Number is confidisclosure and/or use. In compliance reporting.				
OCID:		Social Security	Number:	
Gender: Male I	- emale			
Birth Date: (MM/DD/YYYY)	//			
Please print your name exactly as it	appears on legal documents: (L	ast Name, First Name, Mid	dle Name, Jr./Sr./III, etc).	
Last	First		Middle	
Please print any former names:				
PERMANENT MAILING ADD				
Address:				
City:	State:	Zip Code:		
County:	Natio	on:		
Home Phone: ()		Cell Phone: ()		
Email:				
AGREEMENTS AND AUTHOR The information given above is comp submission of fraudulent information reserves the right to revoke any degradmission if it subsequently transpire expenses incurred. Delinquent accounting Students who are pursuing degrees clinical placements, internships, or profinger printing, or drug screening. In screening process and for delivering in field experiences and internships, be aware that a criminal record may their intended occupation for more deemployment in relevant occupation.	lete and accurate to the best o will be cause for refusal of admee, diploma, or certificate that it is that the information was a fraints will be forwarded to the Ohor certificates leading to applicate actica through their program, such situations, each student may required documentation to the it will be up to the host facility to the programination to the item of the states. Successful completion of By signing this application, I age	nission, cancellation of adm may have been awarded in audulent misrepresentation io Attorney General's Office ation for professional licensu- hould be aware that their hay be responsible for obtain facility. Although the Colleg to determine whether a stud- te certification body. Studer a program of study at the O gree to abide by all policies,	ission, or dismissal from the Coreliance on information contain of fact. I will be responsible to a for actions, as required by the ure or certification, and/or who cost facility may require a crimining and paying for the backgree will make reasonable efforts ent will be allowed to work at this should consult the certificat College does not guarantee lice	ollege. The College ned in the application for pay all fees, interest, are Ohio Revised Code. will be participating in nal background check, ound check or other to place admitted stude hat facility. Students shation body corresponding ensure, certification, or
Print Student Legal Name	Student Signature)	Date	
Print Parent or Legal Guardian Name		of ago, color, disability, pati	Date	

HIGH SCHOOL INFORMATION FORM

	Owens Community College and High School Dual	I Enrollment Agreement		
	State of Ohio Post-Secondary Enrollment Option	Option A	Option B	
1.	Yes, the student and his/her parents or guardian haregarding the Post-Secondary Enrollment Options progr		seling staff and obtained	the required counseling
2.	Yes, I have attached a copy of the student's high s	school transcript to this form.**		
3.	Student's class status for the year he/she wants to particle. Senior Junior	cipate in Post-Secondary Enrollmer	•	Freshman
4.	Number of periods in your high school's day (excluding	lunch)		
5.	Number of Carnegie Units/Credits the student is schedu in Post-Secondary Enrollment Options	•	e academic year in whic	ch he/she plans to participate
6.	Course(s) recommended to be scheduled at Owens Course	mmunity College**		
		Required for High School graduati	on? Yes No	
		Required for High School graduati	on? Yes No	
		Required for High School graduati	on? Yes No	
		Required for High School graduati	on? Yes No	
Stu pla dru del inte rec mo Stu Dis	lection costs incurred. Delinquent accounts will be forwardents who are pursuing degrees or certificates leading to cements, internships, or practica through their program, significant services and such situations, each student may be respicering required documentation to the facility. Although the ernships, it will be up to the host facility to determine where ord may jeopardize licensure by the State certification boarded etails. Successful completion of a program of study at addents who enroll in courses that exceed the maximum retrict or Student/Parent becoming responsible for all tuitions signing this application, I agree to abide by all policing.	application for professional licensus hould be aware that their host faci ponsible for obtaining and paying for college will make reasonable efforther a student will be allowed to wordy. Students should consult the ceithe College does not guarantee licensumber of credit hours approved to and fees incurred for excess college, regulations, and procedures.	re or certification, and/o ity may require a criminal or the background check orts to place admitted stu- ork at that facility. Student tification body correspo- ensure, certification, or by the Ohio Department redit hours.	r who will be participating in clinical al background check, finger printing, or other screening process and for udents in field experiences and nts shall be aware that a criminal nding to their intended occupation for employment in relevant occupation. of Education will result in the School give permission for release of
wil	ormation regarding my progress and attendance to I not be processed until I have signed on the line be		nool/college personn	el. I understand this application
HIC	GH SCHOOL COUNSELOR OR PRINCIPAL			
Ple	ase Print Name	Signatu	re	Date
ST	UDENT			
Ple	ase Print Name	Signatu	re	Date
	ase Print Name	Signatu	re	Date
Und	der the age of 18. Parent or Legal Guardian Signature requ	iired		

Owens Community College promotes equal opportunity regardless of age, color, disability, national origin, race, religion or sex.

^{*} Students must have this form signed by their high school guidance counselor or principal.

^{**} Transcript is required for an Owens Community College advisor to determine eligibility to the program.

Statewide College Credit Transfer

The Ohio Board of Regents has implemented several initiatives to help ease the transition for students who are interested in transferring from one public college or university to another.

Transferology is a nationwide online resource designed to help students who are planning on transferring credits from one college or university to another public college or university. To access the site, please visit: https://www.transferology.com/. Registration is free.

Transferology was first released in the spring of 2014. The goal of Transferology is to save students time and money by providing a quick, intuitive way of getting their college transfer credit questions answered. Students can answer the question "Will my courses transfer?" by adding coursework, exams, and/or military learning experiences to see how many schools in the Transferology network have matching courses that may be awarded when they transfer. They can also find out what their options are for taking classes over the summer (or whenever) at another school to transfer back to their current school by using the "Find a Replacement Course" feature.

It is strongly recommended that students check with the colleges or universities they may be thinking of attending to guarantee the college course(s) will fulfill a degree course or elective requirement. All credits earned from courses marked **Ohio Transfer Module Course** or **(CT)**² will transfer to an Ohio Public College or University.

Remember, the college or university that a student attends after high school graduation has the last and final word of what college courses are accepted for degree course requirements. It is the student's responsibility to contact the college admissions and verify. It is strongly recommended that the student keep each course syllabus and obtain a college transcript at the end of each year to verify that all the college credits completed at Penta Career Center appear on the college transcript. Penta Career Center does not assume any liability or responsibility for what appears on the student's college transcript.

Terminology

ACT (American College Test)- A group of tests administered by ACT and required or recommended by most colleges as part of the admission process. ACT scores range from 1-36. Cost is \$38 for the ACT (No Writing) test and \$54.50 for the ACT Plus Writing.

ARTICULATED CREDIT- Credit earned in high school and awarded when the student is accepted at a college that has pre-approved the credit from the high school. To be eligible for credit, the high school would have a pre-approved agreement with the receiving college. This is directed at one specific college that has the agreement with the program and is not usually transferrable because no grade is attached. This allows a student to have advanced standing at the college. There is no cost to the student.

CAREER TECHNICAL CREDIT TRANSFER (CT)²– Articulated credit that may be accepted by many colleges on a larger scale. Credit is awarded if the sending high school and the receiving college have successfully demonstrated that their course content for a particular course meets the state established guidelines. The courses are technical courses. If (CT)² courses are available in a high school program at Penta, three asterisks (***) will be denoted beside the college courses listed on the pathways. There is no cost to the student. Presently five areas of transfer are being developed: nursing, engineering technology, medical assisting, information technology (networking), and automotive technology.

COMPASS- A comprehensive computer-adaptive testing system from ACT that helps place students into appropriate college courses and maximizes information needed to ensure student success. COMPASS is free; Kent requires it to be taken at Kent State Stark Campus, Stark State College requires it to be taken at Kent, Stark State, or at Perry High School.

DUAL ENROLLMENT CREDIT-(Now called College Credit Plus) Students earn credit for high school and college at the same time. The high school and college have agreed that the course content meets the college expectations and the teacher is qualified to teach at the college level. The students will be awarded a transcript from the college and can access the transcript upon request. The student will need to contact the college he/she will be attending to determine if the transcript credit is accepted. There is no cost to the student.

LETTER OF INTENT- A form signed by the student and parent that serves as official notification of the student's intent to participate in the College Credit Plus program. The Letter of Intent must be provided to the school on or before April 1, 2015. After April 1, 2015 students will need permission from the school district superintendent to participate.

OHIO TRANSFER MODULE CREDIT- The Ohio Transfer Module (OTM), which is a subset or a complete set of a public college's or university's general education requirement that represents a common body of knowledge and academic skills, is comprised of 36-40 semester hours of courses in the following fields: English composition and oral communication; mathematics, statistics and formal/symbolic logic; arts and humanities; social and behavioral sciences; and natural sciences. Additional elective hours from among the five areas make up the total hours for a completed Transfer Module.

PATHWAY- A grouping of college courses and course sequences that total at least 15 and 30 college credit hours.

TEST SCORES- A copy of the student's ACT or COMPASS scores is required when the student is enrolling for the first time or taking a course with different test score requirements.

TRANSCRIPT- The official record of high school or college courses and grades, generally required as part of the college application. To obtain an official high school transcript, students must contact their member school guidance counselor. Penta Career Center does not have access to students' official transcripts.

TRANSCRIPTED CREDIT- College credit that is granted by an institution of higher education and is reflected on a student's official record (transcript) at that institution upon completion of a course.

15 and 30 Hour Pathways Aligned to Associate Degree Programs

Penta Career Center has developed approximately thirty pathways through CCP. Each pathway aligns a specific high school program at Penta Career Center to an Associate Degree program at either Northwest State Community College or Owens Community College.

Students have options when selecting a pathway:

- Students are not limited to selecting a pathway that is aligned to the program they are enrolled in at Penta Career Center. For example, a Penta Cosmetology student may pursue the Registered Nurse 15 and 30 hour pathway.
- Students are not limited to one pathway solely. For example, a Penta Medical Technologies student is having a difficult time choosing between the Registered Nurse Program pathway or the Health Information Technology Program pathway. The student examines both pathways to determine common courses: Composition I, Anatomy and Physiology I, Anatomy and Physiology II. The student decides to focus on these three courses first.
- Students are not obligated to complete all of the courses in the pathway. Students may choose to complete only the Ohio Transfer Module Courses that will satisfy requirements with several pathways. Students are encouraged to work at their own pace.

At this time, the following Penta Career Center high school programs do not have a content specific pathway that is aligned to an Associate Degree Program at Northwest State Community College or Owens Community College:

- Agriculture
- Automotive Collision Repair
- Cosmetology
- Floral Design/Greenhouse Production
- Hair Design
- Small Animal Care

The Curriculum and Instruction Office at Penta Career Center continues to seek opportunities for additional college credit with institutions of higher learning.

*Disclaimer: Colleges reserve the right to alter agreements based on curriculum revision or upgrades.

**All credit awarded is based on student performance.

Related High School Program: Any High School Career Tech Program

ASSOCIATE OF SCIENCE, GENERAL SCIENCE CONCENTRATION, AS

15 HOUR PATHWAY					
COURSE NAME	CATALOG NUMBER	CREDIT HOURS			
COMPOSITION I	ENG 111	3			
SPEECH ELECTIVE	SEE ATTACHED ASSOCIATE	3			
	DEGREE FOR INFORMATION				
MATHEMATICS ELECTIVE	SEE ATTACHED ASSOCIATE	3 - 5			
	DEGREE FOR INFORMATION				
ART AND HUMANITIES ELECTIVE	SEE ATTACHED ASSOCIATE	3			
	DEGREE FOR INFORMATION				
SOCIAL AND BEHAVIORAL SCIENCE	SEE ATTACHED ASSOCIATE	3			
ELECTIVE	DEGREE FOR INFORMATION				
		TOTAL HOURS: 15-17			



30 HOUR PATHWAY					
COURSE NAME	CATALOG NUMBER	CREDIT HOURS			
COMPOSTION II	ENG 112**	3			
SCIENCE ELECTIVE	SEE ATTACHED ASSOCIATE	3-4			
	DEGREE FOR INFORMATION				
MATHEMATICS ELECTIVE	SEE ATTACHED ASSOCIATE	3-5			
	DEGREE FOR INFORMATION				
SOCIAL AND BEHAVIORAL SCIENCES	SEE ATTACHED ASSOCIATE	3			
ELECTIVE	DEGREE FOR INFORMATION				
ART AND HUMANITIES ELECTIVE	SEE ATTACHED ASSOCIATE	3			
	DEGREE FOR INFORMATION				
	7	ΓOTAL HOURS: 30-35			

+ ADDITIONAL 30-31 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Associate of Science, General Science Concentration, AS (Owens Code: SGEN) OWENS COMMUNITY COLLEGE

Campus Offered Credits Required

Toledo and Findlay 60-66

Required Courses

1st Semester	
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)	
Speech Elective Credits: 3(Lec: 3)	
Mathematics Elective Credits: 3 to 5(Lec: 3 to 5)	
Art and Humanities Elective Credits: 3(Lec: 3)	
Social and Behavioral Sciences Elective Credits: 3(Lec: 3)	
2nd Semester	
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)	
- Science Elective Credits: 3 to 4(Lec: 3 to 4 Lab: 0 to 3)	
- Mathematics Elective Credits: 3 to 5(Lec: 3 to 5)	
Social and Behavioral Sciences Elective Credits: 3(Lec: 3)	
Art and Humanities Elective Credits: 3(Lec: 3)	
Brd Semester	
Science Elective Credits: 3 to 4(Lec: 3 to 4 Lab: 0 to 3)	
- Science Elective Credits: 3 to 4(Lec: 3 to 4 Lab: 0 to 3)	
General Arts and Sciences Elective Credits: 3(Lec: 3)	
General Arts and Sciences Elective Credits: 3(Lec: 3)	
General Arts and Sciences Elective Credits: 3(Lec: 3)	
Ith Semester	
General Arts and Sciences Elective Credits: 3(Lec: 3)	
- Elective Credits: 3(Lec: 3)	
*Select any combination of Elective courses excluding developmental education courses.	
- Elective Credits: 3(Lec: 3)	
*Select any combination of Elective courses excluding developmental education courses.	
- Elective Credits: 3(Lec: 3)	
*Select any combination of Elective courses excluding developmental education courses.	
- Elective Credits: 3(Lec: 3) *Select any combination of Elective courses excluding developmental education courses	
"Netert any compination of Elective courses excluding developmental education courses	

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This concentration is designed to prepare students for transfer to a four-year college or university and is the equivalent of the freshmen and sophomore years of a Bachelor of Science Degree program. For students who do not have a decided interest in one field of study, the concentration provides a broad knowledge of liberal arts in general while emphasizing mathematics and science. Liberal arts elective courses give the student the flexibility to choose from a number of transferable courses.

Student Learning Outcomes

Student will be able to:

- 1. Demonstrate effective communication in their area or concentration of study.
- 2. Demonstrate their ability to access and interpret information within their area or concentration of study.
- 3. Think critically to anticipate, recognize, and solve problems within their area or concentration of study.
- 4. Add value through service to their community or area/concentration of study.

Related High School Program: Accounting

ACCOUNTING, AAB

15 HOUR PATHWAY					
COURSE NAME	CATALOG NUMBER	CREDIT HOURS			
FINANCIAL ACCOUNTING	ACC 111*	4			
PAYROLL ACCOUNTING	ACC 120	3			
COMPOSITION I	ENG 111**	3			
MATHEMATICS ELECTIVE:	BUS 110*	3			
BUSINESS MATH/CALCULATORS					
SOCIAL BEHAVIOR SCIENCE ELECTIVE	SEE ATTACHED ASSOCIATE	3			
	DEGREE FOR INFORMATION				
		TOTAL HOURS: 16			



30 HOUR PATHWAY			
COURSE NAME	CATALOG NUMBER	CREDIT HOURS	
MANAGERIAL ACCOUNTING	ACC 112	4	
MICROSOFT APPLICATIONS	CIS 114	3	
COMPOSITION II	ENG 211**	3	
MARKETING	MKT 110*	3	
COMPUTER ACCOUNTING ELECTIVE:	ACC 260 *	3	
ACCOUNTING ON COMPUTERS			
		TOTAL HOURS: 32	

+ ADDITIONAL 33 CREDITS FOR ASSOCIATE DEGREE

=NORTHWEST STATE COMMUNITY COLLEGE TRANSFER

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Accounting, AAB NORTHWEST STATE COMMUNITY COLLEGE

Campus Offered Credits Required
Archbold 62

Required Courses

1st Semester

- + ACC111 Financial Accounting 4 credits
- + ACC120 Payroll Accounting 3 credits ENG111 Composition I 3 credits Mathematics Elective 3 credits Social Behavioral Science Elective 3 credits

2nd Semester

+ ACC112 Managerial Accounting 4 credits + ACC140 Individual Income Tax Accounting 3 credits CIS114 Microsoft Applications 3 credits ENG112 Composition II 3 credits Humanities Elective 3 credits

3rd Semester

- + ACC211 Intermediate Accounting I 3 credits
- + ACC221 Cost Accounting I 3 credits
- + Computer Accounting Electives 3 credits
- + Accounting Elective 3 credits Business Elective 3 credits

4th Semester

- + ACC212 Intermediate Accounting II 3 credits
- + ACC222 Cost Accounting II 3 credits
- + ACC230 Auditing 3 credits BUS221 Business Law 3 credits Natural Science Elective 3 credits
- + Students must attain a 2.00 grade point average in these technical courses to graduate.

Course curriculum is subject to change. Please consult with an Academic Advisor for up-to-date information.

Program Information

Students in accounting develop a high degree of technical skills in accounting systems and business organization. The accounting programs provide business-related experience on modern equipment. Courses utilize personal computers and electronic printing calculators. The Accounting degree program is designed to help students attain technical accounting skills and a broad knowledge of business fundamentals. Accounting systems are studied as they are applied every day in business and industrial organizations.

Graduates are qualified as senior clerks or junior accountants, positions as a cost accountant, accounting supervisor, payroll supervisor or office manager.

Career Outlook

As the economy grows, the number of businesses will increase as well as the need for accountants. The accounting profession generally has a low rate of turnover; therefore, openings will be primarily created through retirements and promotions.

Program Learning Outcomes

The students will be able to:

- 1. Create financial statements, reports, and schedules.
- 2. Demonstrate managerial decision making based on their interpretation of financial statements.
- 3. Integrate accounting knowledge into software programs.
- 4. Demonstrate accurate skills in recording and reporting of accounts.
- 5. Demonstrate mastery of a foundation of business understanding.

Electives

Accounting Electives:

ACC240 Business Income Tax Accounting ACC291 Accounting Internship

Computer Accounting Electives:

ACC 260 Accounting on Computers Or all of the following 1 credit hour courses: ACC261 QuickBooks ACC271 Intermediate QuickBooks ACC272 Advanced QuickBooks

Mathematics Electives:

BUS110 Business Math/Calculators MTH109 College Algebra

Business Electives:

BUS160 International/Global Business

BUS211 Business Communications

BUS250 Labor Relations

BUS260 International Trade

CIS113 Microsoft Excel

ECO211 Macroeconomics

ECO212 Microeconomics

Natural Sciences Electives:

BIO100 World of Science

BIO101 Principles of Biology

BIO115 Ecology

BIO131 Nutrition

BIO150 The Human Body

BIO180 Genetics

BIO201 General Biology I

BIO202 General Biology II

BIO231 Anatomy & Physiology

BIO232 Anatomy & Physiology II

BIO257 Microbiology

CHM100 World of Science

CHM101 Principles of Chemistry

CHM201 General Chemistry I

CHM201 General Chemistry II

CHM256 Principles of Biochemistry

PHY100 World of Science

PHY101 Principles of Physical Science

PHY140 Astronomy

PHY150 Geology

MGT110 Management

MGT210 Human Resource Management

MGT280 Business Climate Analysis

MKT230 Salesmanship

All of the following are 1 credit hour courses:

CIS 118 Access

CIS119 PowerPoint

CIS 122 Intermediate Excel

PHY251 Physics: Mechanics & Heat

PHY252 Physics: Electricity & Magnetism

Social/Behavioral Sciences Electives:

HIS101 US History Pre-1876

HIS102 US History Post-1876

HIS203 US Since 1945

HIS210 The Modern World

HIS234 History of the Old Northwest

Territory

PSY110 General Psychology

PSY210 Abnormal Psychology

PSY220 Social Psychology

PSY230 Human Growth & Development

SSC101 Sociology

SSC102 Sociology Sustainable World

SSC110 General Anthropology

SSC120 American Government

SSC130 Comparative Government

SSC210 Cultural Diversity

SSC220 Interpersonal Violence

Related High School Program: Advanced Manufacturing Technologies

APPLIED ENGINEERING TECHNOLOGY, AAS

15 HOUR PATHWAY			
COURSE NAME	CATALOG NUMBER	CREDIT HOURS	
COMPOSITION I	ENG 111**	3	
APPLIED ALGEBRA	MTH 151	2	
PRINCIPLES OF MECHANICAL SYS	AIM 110	3	
APPLIED ELECTRICITY & ELECTRON	AIM 120	3	
OSHA GENERAL SAFETY	ENV 110	3	
BLUEPRINT READING FOR INDUSTRY	AIM 140	2	
		TOTAL HOURS: 16	



30 HOUR PATHWAY			
COURSE NAME	CATALOG NUMBER	CREDIT HOURS	
COMPOSITION II	ENG 112**	3	
POWER DISTRIBUTION CONTROL SYS	AIM 121	3	
FUNDAMENTAL OF FLUID POWER SYS	AIM 130*	3	
MACHINING I	AIM 160*	2	
MACHINING II	AIM 161*	2	
CNC MILL APPLICATIONS	CAM 122*	2	
		TOTAL HOURS: 31	

+ ADDITIONAL 36 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

Additional college credits earned in the related high school program not aligned to this associate degree program:

*CAD 125 (3) PRODUCTION DRAWING

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Applied Engineering Technology, AAS (Owens Code: APET) OWENS COMMUNITY COLLEGE

Campus Offered

Credits Required

Toledo 67

Required Courses

*High school and adult career-technical students who successfully complete specified technical programs are eligible to have technical credit transfer. For more information on career-technical course work that students can complete for transfer, visit The University System of Ohio Board of Regents, Career-Technical Credit Transfer (CT)² website or contact your Advisor.

1st Semester

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ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3) MTH 151 - Applied Algebra Credits: 2(Lec: 2) AIM 110 - Principles of Mechanical Sys Credits: 3(Lec: 2 Lab: 3) AIM 120 - Applied Electricity & Electron Credits: 3(Lec: 2 Lab: 3) AIM 130 - Fundamental of Fluid Power Sys Credits: 3(Lec: 2 Lab: 3) AIM 140 - Blueprint Reading for Industry Credits: 2(Lec: 2)
```

2nd Semester

```
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3) EET 130 - Computer Diagnosis Credits: 3(Lec: 2 Lab: 3) AIM 121 - Power Distribution Control Sys Credits: 3(Lec: 2 Lab: 3) ENV 110 - OSHA General Safety Credits: 3(Lec: 3) AIM 161 - Machining II Credits: 2(Lec: 1 Lab: 3) MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2)
```

3rd Semester

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PHY 151 - Industrial Physics-Mechanics Credits: 2(Lec: 2)
PHY 152 - Industrial Physics-Ht Li Sound Credits: 2(Lec: 2)
EET 165 - Automation Control: PLC I Credits: 2(Lec: 1.50 Lab: 1.50)
AIM 230 - Advanced Fluid Power Systems Credits: 3(Lec: 2 Lab: 3)
CAM 122 - CNC Mill Applications Credits: 2(Lec: 1 Lab: 3)
AIM_____ - Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 AIM Elective credits from: AIM 100, AIM 105 or AIM 160.

or _____ - Electrical Maintenance Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: AIM 125, AIM 141, AIM 225, SKT 184, SKT 285.

or ____ - Programmable Logic Control Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: AIM 141, AIM 225, EET 166, AIM 275.

or ___ - Mechanical Systems Maintenance Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: AIM 142, AIM 210, SKT 156, SKT 238.

or
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- Facility Maintenance Elective Credits: 6(Lec: 4 Lab: 6)

*Select 6 Credits from: AIM 144, SKT 197, SKT 165, SKT 158, SKT 244.

or
- Fluid Power Specialist Elective Credits: 5 to 6(Lec: 3 to 4 Lab: 6)

*Select 6 Credits from: SKT 150, SKT 159, AIM 231, AIM 275.

or
- Computer Aided Machining Elective Credits: 6(Lec: 4 Lab: 6)

*Select 6 Credits from: AIM 143, AIM 165, CAM 120, CAM 124, CAM 126, CAM 216, CAM 218, CAM 230,CAM 231, CAM 232, CAM 291.

or
- Electro-Mechanical Maintenance Elective Credits: 6(Lec: 4 Lab: 6)

*Select 6 Credits from: AIM 125, AIM 141, AIM 230, AIM 231, AIM 270, AIM 291.

or
- Welding Technician Elective Credits: 6(Lec: 4 Lab: 6)

*Select 6 Credits from: WLD 190, WLD 192, WLD 261, WLD 262, WLD 266, WLD 268, WLD 291.
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WLD 191 - Intro to the Welding Processes Credits: 2(Lec: 1 Lab: 3)
PSY 111 - Indust/Organization Psych Credits: 3(Lec. 3)
QCT 204 - Total Prod/Predictive Maint Credits: 2(Lec: 2)
SPE 101 - Public Speaking Credits: 3(Lec: 3)
SPE 210 - Small Group Communication Credits: 3(Lec: 3)
AIM____ - Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 AIM Elective credits from: AIM 100, AIM 105 or AIM 160.
      - Electrical Maintenance Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: AIM 125, AIM 141, AIM 225, SKT 184, SKT 285.
      - Programmable Logic Control Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: AIM 141, AIM 225, EET 166, AIM 275.
      - Mechanical Systems Maintenance Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: AIM 142, AIM 210, SKT 156, SKT 238.
      - Facility Maintenance Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: AIM 144, SKT 197, SKT 165, SKT 158, SKT 244.
      - Fluid Power Specialist Elective Credits: 5 to 6(Lec: 3 to 4 Lab: 6)
*Select 6 Credits from: SKT 150, SKT 159, AIM 231, AIM 275.
      - Computer Aided Machining Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: AIM 143, AIM 165, CAM 120, CAM 124, CAM 126, CAM 216, CAM 218, CAM
230,CAM 231, CAM 232, CAM 291.
       - Electro-Mechanical Maintenance Elective Credits: 6(Lec: 4 Lab: 6).
*Select 6 Credits from: AIM 125, AIM 141, AIM 230, AIM 231, AIM 270, AIM 291.
      - Welding Technician Elective Credits: 6(Lec: 4 Lab: 6)
*Select 6 Credits from: WLD 190, WLD 192, WLD 261, WLD 262, WLD 266, WLD 268, WLD 291.
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program provides students with broad education and hands-on experience required by industry for the 21st-century workplace. This preparation includes coursework in quality, drafting, machining, welding, electricity, safety and materials. Students undertaking this degree program seek employment in supervision, management and maintenance positions in industry.

Student Learning Outcomes

Student will be able to:

- 1. Demonstrate knowledge of industry standards for safety and compliance.
- 2. Troubleshoot equipment and processes within their area of specialization.
- 3. Diagnose, repair, and maintain equipment and processes within their area of specialization.
- 4. Understand and apply proper techniques for analyzing drawings.
- 5. Demonstrate knowledge of quality standards necessary for maintaining and repairing equipment.

Related High School Program: Automotive Technology

AUTOMOTIVE SERVICE MANAGEMENT MAJOR, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION I	ENG 111**	3
AUTO CAREER JOB SEARCH	AUT 101	1
AUTOMOTIVE SERVICE FUNDAMENTAL	AUT 110*	2
AUTOMOTIVE BRAKES	AUT 113***	3
VEHICLE ELECTRIC & ELECTRONICS	AUT 130***	3
CONTEMPORARY BUSINESS	BUS 101	3
FUNDAMENTALS OF COMPUTING	IST 100	1
		TOTAL HOURS: 16



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
MICROECONOMICS	ECO 201**	3
PRINCIPLES OF MANAGEMENT	BUS 120	3
WHEEL ALIGNMENT & SUSPENSIONS	AUT 214***	3
INDUSTRIAL PHYSICS-MECHANICS	PHY 151	2
APPLIED ALGEBRA	MTH 151	2
COMPOSITION II	ENG 112**	3
		TOTAL HOURS: 32

+ ADDITIONAL 33 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Additional college credits earned in the related high school program not aligned to this associate degree program:

- *AUT 133 (3) AUTOMOTIVE ELECTRICAL SYSTEMS
- *AUT 141 (3) AUTOMOTIVE ENGINE FUNDAMENTALS
- ***CTAUT003 (2) ENGINE PERFORMANCE

Automotive Service Management Major, AAS (Owens Code: ASMM) OWENS COMMUNITY COLLEGE

Campus Offered Credits Required

Toledo and Toledo Hybrid

65

Required Courses

*High school and adult career-technical students who successfully complete specified technical programs are eligible to have technical credit transfer. For more information on career-technical course work that students can complete for transfer, visit The University System of Ohio Board of Regents, Career-Technical Credit Transfer (CT)² website or contact your Advisor.

1st Semester

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AUT 101 - Auto Career Job Search Credits: 1(Lec: 1)
AUT 110 - Automotive Service Fundamental Credits: 2(Lec: 1 Lab: 3)
AUT 113 - Automotive Brakes Credits: 3(Lec: 1 Lab: 6)
AUT 130 - Vehicle Electric & Electronics Credits: 3(Lec: 2 Lab: 3)
BUS 101 - Contemporary Business Credits: 3(Lec: 3)
IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

2nd Semester

```
ECO 201 - Microeconomics *Ohio Transfer Module Course Credits: 3(Lec: 3) BUS 120 - Principles of Management Credits: 3(Lec: 3) AUT 214 - Wheel Alignment & Suspensions Credits: 3(Lec: 1 Lab: 6) PHY 151 - Industrial Physics-Mechanics Credits: 2(Lec: 2) MTH 151 - Applied Algebra Credits: 2(Lec: 2)
```

3rd Semester

```
ACC 101 - Introductory Financial Acct Credits: 3(Lec: 3)
BUS 130 - Introduction to Small Business Credits: 3(Lec: 3)
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)
AUT 249 - Hybrid Elect & Fuel Cell Veh Credits: 2(Lec: 1.50 Lab: 1.50)
PHY 152 - Industrial Physics-Ht Li Sound Credits: 2(Lec: 2)
MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2)
SPE 101 - Public Speaking Credits: 3(Lec: 3)
```

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AUT 212 - Air Conditioning Credits: 2(Lec: 1.50 Lab: 1.50)
ENG 120 - Business Communications Credits: 3(Lec: 3)
AUT 248 - Engine Perform & Drivability Credits: 8(Lec: 6 Lab: 6)
PSY 111 - Indust/Organization Psych Credits: 3(Lec: 3)
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This major provides the students with the knowledge to diagnose, correct and repair electrical, fuel, emissions and mechanical problems found in today's modern automobile. Additional business coursework necessary for employment in the automotive service industry is also provided.

Student Learning Outcomes

Student will be able to:

- 1. Diagnose and repair automotive electrical/electronic systems.
- 2. Diagnose and repair automotive engines.
- 3. Diagnose and repair automotive suspension, steering, and brake systems.
- 4. Diagnose and repair automotive drivelines.
- 5. Diagnose and repair automotive heating and cooling systems.
- 6. Analyze and summarize repair orders.

Related High School Program: Automotive Technology

AUTOMOTIVE TECHNOLOGY, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION I	ENG 111**	3
AUTO CAREER JOB SEARCH	AUT 101	1
AUTOMOTIVE SERVICE FUNDAMENTAL	AUT 110*	2
AUTOMOTIVE BRAKES	AUT 113***	3
VEHICLE ELECTRIC & ELECTRONICS	AUT 130***	3
AUTOMOTIVE ENGINE FUNDAMENTALS	AUT 141*	3
FUNDAMENTALS OF COMPUTING	IST 100	1
		TOTAL HOURS: 16



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
STANDARD TRANSMISSION	AUT 111	2
ANTI-LOCK BRAKE SYSTEM	AUT 114	2
AUTOMOTIVE ELECTRICAL SYSTEMS	AUT 133*	3
WHEEL ALIGNMENT & SUSPENSIONS	AUT 214***	3
COMPOSITION II	ENG 112**	3
INDUSTRIAL PHYSICS-MECHANICS	PHY 151	2
APPLIED ALGEBRA	MTH 151	2
		TOTAL HOURS: 33

+ ADDITIONAL 36 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

Additional college credits earned in the related high school program not aligned to this associate degree program:

***CTAUT003 (2) ENGINE PERFORMANCE

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Automotive Technology, AAS (Owens Code: AUTO) OWENS COMMUNITY COLLEGE

Campus Offered

Credits Required

Toledo and Findlay

69

Required Courses

*High school and adult career-technical students who successfully complete specified technical programs are eligible to have technical credit transfer. For more information on career-technical course work that students can complete for transfer, visit The University System of Ohio Board of Regents, Career-Technical Credit Transfer (CT)² website or contact your Advisor.

1st Semester

```
AUT 110 - Automotive Service Fundamental Credits: 2(Lec: 1 Lab: 3) AUT 113 - Automotive Brakes Credits: 3(Lec: 1 Lab: 6) AUT 130 - Vehicle Electric & Electronics Credits: 3(Lec: 2 Lab: 3) AUT 141 - Automotive Engine Fundamentals Credits: 3(Lec: 2 Lab: 3) IST 100 - Fundamentals of Computing Credits: 1(Lec: 1) ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3) AUT 101 - Auto Career Job Search Credits: 1(Lec: 1)
```

2nd Semester

```
AUT 111 - Standard Transmission Credits: 2(Lec: 1 Lab: 3)
AUT 114 - Anti-Lock Brake System Credits: 2(Lec: 1.50 Lab: 1.50)
AUT 133 - Automotive Electrical Systems Credits: 3(Lec: 2 Lab: 3)
AUT 214 - Wheel Alignment & Suspensions Credits: 3(Lec: 1 Lab: 6)
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)
PHY 151 - Industrial Physics-Mechanics Credits: 2(Lec: 2)
MTH 151 - Applied Algebra Credits: 2(Lec: 2)
```

3rd Semester

```
AUT 213 - Fund of Automatic Transmission Credits: 2(Lec: 1 Lab: 3) AUT 232 - Vehicle Accessory Systems Credits: 2(Lec: 1.50 Lab: 1.50) AUT 248 - Engine Perform & Drivability Credits: 8(Lec: 6 Lab: 6) PHY 152 - Industrial Physics-Ht Li Sound Credits: 2(Lec: 2) MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2)
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*Students with a dealer sponsorship may substitute four field experiences for AUT 250 and AUT 251 AUT 212 - Air Conditioning Credits: 2(Lec: 1.50 Lab: 1.50)
AUT 215 - Auto Trans Diagnosis Credits: 2(Lec: 1 Lab: 3)
AUT 249 - Hybrid Elect & Fuel Cell Veh Credits: 2(Lec: 1.50 Lab: 1.50)
AUT 250 - Automotive Powertrain Credits: 3(Lec: 1 Lab: 6)
AUT 251 - Advanced Service Operations Credits: 3(Lec: 1 Lab: 6)
PSY 111 - Indust/Organization Psych Credits: 3(Lec: 3)
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program equips and prepares the student with the knowledge and skills needed to compete in today's fast-changing automotive industry. Students are taught to diagnose, correct and repair electrical, fuel, emissions and mechanical problems found in today's modern automobile.

Student Learning Outcomes

Student will be able to:

- 1. Diagnose and repair engines.
- 2. Diagnose and repair automatic transmissions and transaxles.
- 3. Diagnose and repair manual drive train and axles.
- 4. Diagnose and repair suspension and steering systems.
- 5. Diagnose and repair brake systems.
- 6. Diagnose and repair electrical/electronic systems.
- 7. Diagnose and repair heating and air conditioning systems.
- 8. Diagnose engine performance and repair related systems.

Related High School Program: Business Administrative Services

BUSINESS MANAGEMENT, AAB

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
FINANCIAL ACCOUNTING	ACC 111*	4
MICROECONOMICS	ECO 212**	3
COMPOSITION I	ENG 111**	3
MANAGEMENT	MGT 110*	3
MATHEMATICS ELECTIVE	SEE ATTACHED ASSOCIATE	3
	DEGREE FOR INFORMATION	
		TOTAL HOURS: 16



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
MANAGERIAL ACCOUNTING	ACC 112	4
MICROSOFT APPLICATIONS	CIS 114	3
COMPOSITION II	ENG 112**	3
MARKETING	MKT 110	3
NATURAL SCIENCE ELECTIVE	SEE ATTACHED ASSOCIATE	3
	DEGREE FOR INFORMATION	
		TOTAL HOURS: 32

+ ADDITIONAL 33 CREDITS FOR ASSOCIATE DEGREE

=NORTHWEST STATE COMMUNITY COLLEGE TRANSFER

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Business Management, AAB NORTHWEST STATE COMMUNITY COLLEGE

Campus Offered Credits Required
Archbold 65

Required Courses

1st Semester

+ACC111 Financial Accounting 4 credits ECO212 Microeconomics 3 credits ENG111 Composition I 3 credits + MGT110 Management 3 credits Mathematics Elective 3 credits

2nd Semester

+ ACC112 Managerial Accounting 4 credits CIS114 Microsoft Applications 3 credits ENG112 Composition II 3 credits + MKT110 Marketing 3 credits Natural Science Elective 3 credits

3rd Semester

- + BUS221 Business Law 3 credits
- + MGT210 Human Resource Management 3 credits
- + Business Elective 3 credits Humanities Elective 3 credits Social Behavioral Science Elective 3 credits

4th Semester

- + BUS250 Labor Relations 3 credits
- + MGT280 Business Climate Analysis 3 credits
- + MKT230 Salesmanship 3 credits Business Analysis Elective 3 credits Business Elective 3 credits Computer Elective 3 credits
- + Students must attain a 2.00 grade point average in these technical courses to graduate.

Course curriculum is subject to change. Please consult with an Academic Advisor for up-to-date information.

Program Information

Today's successful managers need a variety of skills, including communication and analytical and decision-making skills. The demand for business management personnel has risen with the growing number of small businesses in northwest Ohio. At the same time, large businesses continuously require mid-management and supervisory personnel. The graduate of the business management program is skilled in supervision, labor relations, accounting, marketing, salesmanship, and decision-making. The graduate is qualified for a position as a general manager or assistant manager of a small business or a personnel specialist, foreman or supervisor of a manufacturer, commercial business, or other organization. The business management program offers a weekend college option along with the typical schedule of daytime or evening classes.

Career Outlook

Employment opportunities are varied and will depend on each individual goal. Entry-level management positions are found in the manufacturing, retail, food service, banking and governmental services. Individuals interested in sales positions will find many opportunities. Both nationally and in the state of Ohio, business services sales positions, particularly technical sales, are expected to grow much faster than the average. Companies which are new and existing will be hiring managers. Service industries, such as food service, will experience a faster than average growth.

Program Learning Outcomes

The students will be able to:

- 1. Demonstrate comprehension of the major styles of management.
- 2. Exhibit work skills of attendance, work ethic, and self-motivation.
- 3. Demonstrate comprehension of business ethics.
- 4. Evaluate the history of management and the importance of planning, organizing, leading and controlling.
- 5. Apply the various management principles and concepts with the various organizational designs and how they fit within their advantages and disadvantages.
- 6. Develop an understanding of the communication and interpersonal skills needed for managing organizations and how to manage change, technology, and innovation.
- 7. Create an understanding of individual and group behavior of work teams and apply the various motivations theories to work situations.

Electives

Mathematics Electives:

BUS110 Business Math/Calculators MTH109 College Algebra

Business Analysis Electives:

ACC221 Cost Accounting I STA222 Business Statistics

Computer Electives: (Choose 3 credit hours)

ACC260 Accounting on Computers

CIS113 Microsoft Excel

CIS129 Web Page Development

All of the following are 1 credit hour courses:

ACC261 QuickBooks

ACC271 Intermediate QuickBooks

ACC272 Advanced QuickBooks

CIS118 Access

CIS119 PowerPoint

CIS121 Intermediate Word

CIS122 Intermediate Excel

Business Electives: (6 total credit hours required)

ACC140 Individual Income Tax Accounting

ACC221 Cost Accounting I

ACC240 Business Income Tax Accounting

BUS160 International/Global Business

BUS211 Business Communications

BUS260 International Trade

ECO211 Macroeconomics

MGT221 Entrepreneurship

MGT230 Retail Management

MGT290 Business Management Internship

MKT210 Advertising

REA210 Real Estate Principles

VCT182 Photography

All of the following are 1 credit hour courses:

MKT111 Entrepreneurial Marketing I

MKT112 Entrepreneurial Marketing II

MKT113 Entrepreneurial Marketing III

Natural Sciences Electives:

BIO100 World of Science

BIO101 Principles of Biology

BIO115 Ecology

BIO131 Nutrition

BIO150 The Human Body

BIO180 Genetics

BIO201 General Biology I

BIO202 General Biology II

BIO231 Anatomy & Physiology

BIO232 Anatomy & Physiology II

BIO257 Microbiology

CHM100 World of Science

CHM101 Principles of Chemistry

CHM201 General Chemistry I

CHM202 General Chemistry II

CHM256 Principles of Biochemistry

PHY100 World of Science

PHY101 Principles of Physical Science

PHY140 Astronomy

PHY150 Geology

PHY251 Physics: Mechanics & Heat

PHY252 Physics: Electricity & Magnetism

Humanities Electives:

ENG223 Interpretation of Literature

ENG230 Children's Literature

ENG234 Narrative Literature of the

Old Northwest Territory

ENG240 Introduction to Poetry

ENG241 Introduction to Fiction

ENG250 American Literature through the

Mid-19th Century

ENG251 American Literature since the Mid-

19th Century

ENG260 British Literature through the 18th

Century

ENG261 British Literature 19th Century to

Present

ENG271 Non-Western Literature

HUM209 Humanities and Cultures:

Ancient & Medieval Worlds

HUM210 Humanities and Cultures:

Renaissance to Present

HUM221 Music Appreciation

HUM230 Art Appreciation

PHI110 Critical Thinking & Logic

PHI201 Introduction to Philosophy

PHI210 Ethics

PHI220 Ethics in Health Care

PHI222 Ethics in the Helping Professions

PHI230 World Religions

Social/Behavioral Sciences Electives:

HIS101 US History Pre-1876

HIS102 US History Post-1876

HIS203 US Since 1945

HIS210 The Modern World

HIS234 History of the Old Northwest

Territory

PSY110 General Psychology

PSY210 Abnormal Psychology

PSY220 Social Psychology

PSY230 Human Growth & Development

SSC101 Sociology

SSC102 Sociology Sustainable World

SSC110 General Anthropology

SSC120 American Government

SSC130 Comparative Government

SSC210 Cultural Diversity

SSC220 Interpersonal Violence

Related High School Program: Computer-Aided Design

CAD TECHNOLOGY, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
INTRODUCTION TO AUTOCAD	CAD 115***	3
PRODUCTION DRAWING	CAD 125*	3
CONSTRUCTION MATERIALS	CIV 110	3
COMPUTER CONCEPTS AND APPS	IST 131	3
APPLIED ALGEBRA	MTH 151	2
TECHNOLOGY IN SOCIETY	STM 105	2
		TOTAL HOURS: 16



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
INTRODUCTION TO SOLIDWORKS	CAD 210*	3
COMPOSITION I	ENG 111**	3
ADVANCED SOLIDWORKS	CAD 215*	3
PUBLIC SPEAKING	SPE 101	3
APPLIED GEOMETRY/TRIG	MTH 152	2
	·	TOTAL HOURS: 30

+ ADDITIONAL 34 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

CAD Technology, AAS (Owens Code: CADT) OWENS COMMUNITY COLLEGE

Campus Offered Credits Required

Toledo 64

Required Courses

*High school and adult career-technical students who successfully complete specified technical programs are eligible to have technical credit transfer. For more information on career-technical course work that students can complete for transfer, visit The University System of Ohio Board of Regents, Career-Technical Credit Transfer (CT)² website or contact your Advisor.

1st Semester

```
CAD 115 - Introduction to AutoCAD Credits: 3(Lec: 2 Lab: 3) CAD 125 - Production Drawing Credits: 3(Lec: 2 Lab: 3) CIV 110 - Construction Materials I Credits: 3(Lec: 2 Lab: 3) IST 131 - Computer Concepts and Apps Credits: 3(Lec: 3) MTH 151 - Applied Algebra Credits: 2(Lec: 2) STM 105 - Technology in Society Credits: 2(Lec: 2)
```

2nd Semester

```
CAD 210 - Introduction to SolidWorks Credits: 3(Lec: 2 Lab: 3)
CAD 235 - Construction and Surveying CAD Credits: 3(Lec: 3 Lab: 2)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
MET 130 - Material Science Credits: 3(Lec: 2 Lab: 3)
SPE 101 - Public Speaking Credits: 3(Lec: 3)
MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2)
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3rd Semester

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CAD 215 - Advanced SolidWorks Credits: 3(Lec: 2 Lab: 3)
CAD 230 - Industrial CAD I Credits: 3(Lec: 2 Lab: 3)

- Elective Credits: 3(Lec: 3)

*Select from: CIV 105, CIV 111, CAD 275, CAD 280, CAD 281, CAD 285.
CIV 120 - Intro To Geo Info Systems Credits: 3(Lec: 2 Lab: 3)
AIM 160 - Machining I Credits: 2(Lec: 1 Lab: 3)
PHY 151 - Industrial Physics-Mechanics Credits: 2(Lec: 2)
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CAD 250 - Industrial CAD II Credits: 3(Lec: 2 Lab: 3)
CAD 291 - CAD Tech Field Experience Credits: 3(Oth: 12 to 36)
AIM 161 - Machining II Credits: 2(Lec: 1 Lab: 3)
CAD 144 - GD & T Credits: 2(Lec: 2)
PSY 111 - Indust/Organization Psych Credits: 3(Lec: 3)
PHY 152 - Industrial Physics-Ht Li Sound Credits: 2(Lec: 2)
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program is designed to prepare students to enter the high-demand world of Computer Aided Design (CAD) Technology. Students use their creativity as they bring ideas to life. As CAD technicians they work hand-in-hand with scientists, engineers, architects and designers. CAD technicians prepare detailed CAD drawings based on rough sketches, specifications and calculations. They are an integral part of any industrial project.

Student Learning Outcomes

Student will be able to:

- 1. Understand and apply proper techniques for analyzing and producing manual and computer generated drawings.
- 2. Understand and apply proper techniques for analyzing and producing three-dimensional computer generated models.
- 3. Differentiate the application of common engineering materials.
- 4. Understand and apply proper techniques for analyzing and producing drawings of industrial systems.

Related High School Program: Information Technology

NETWORKING AND INFORMATION SYSTEMS SUPPORT, AAB

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COLLEGE & CAREER PROFESSIONAL	BUS 102	3
COMPOSITION I	ENG 111**	3
COMPUTER CONCEPTS AND APPS	IST 131	3
TROUBLESHOOTING APPS & H'WARE	IST 133***	3
COLLEGE ALGEBRA	MTH 170**	4
or		
MATH FOR COMPUTING	MTH 122	4
		TOTAL HOURS: 16



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
INTRO TO COMPUTER PROGRAMMING	IST 112*	3
OPERATING SYSTEMS	IST 134***	3
COMPOSTION II	ENG 112**	3
INTRO DATABASE DESIGN & SQL	IST 144	3
NETWORKING TECHNOLOGIES	IST 175*	3
PUBLIC SPEAKING	SPE 101	3
		TOTAL HOURS: 34

+ ADDITIONAL 28-29 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Additional college credits earned in the related high school program not aligned to this associate degree program:

CTIT001 (3) IT BASIC CTIT007 (3) CISCO EXPLORATION 1

Networking and Information Systems Support, AAB (Owens Code: NIST) OWENS COMMUNITY COLLEGE

Campus Offered Credits Required

Toledo, Toledo Hybrid, and Findlay

62-63

Required Courses

1st Semester

```
BUS 102 - College & Career Professional Credits: 3(Lec: 3)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
IST 131 - Computer Concepts and Apps Credits: 3(Lec: 3)
IST 133 - Troubleshooting Apps & H'ware Credits: 3(Lec: 3)
MTH 170 - College Algebra *Ohio Transfer Module Course Credits: 4(Lec: 4)
or
MTH 122 - Math for Computing Credits: 4(Lec: 4)
```

2nd Semester

```
IST 112 - Intro to Computer Programming Credits: 3(Lec: 3)
IST 134 - Operating Systems Credits: 3(Lec: 3)
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)
IST 144 - Intro Database Design & SQL Credits: 3(Lec: 3)
IST 175 - Networking Technologies Credits: 3(Lec: 3)
SPE 101 - Public Speaking Credits: 3(Lec: 3)
```

3rd Semester

```
IST 205 - Advanced Networking Technology Credits: 3(Lec: 3) ECO 201 - Microeconomics *Ohio Transfer Module Course Credits: 3(Lec: 3) or ECO 202 - Macroeconomics *Ohio Transfer Module Course Credits: 3(Lec: 3) IST 240 - Microsoft Net Admin I Credits: 3(Lec: 3) IST 241 - Linux Essentials Credits: 3(Lec: 3) IST 268 - Web Based Tech Support & Doc Credits: 3(Lec: 3)
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

The Associate of Applied Business in Networking and Information Systems Support provides a powerful combination of career and continuing education options. This degree provides a milestone for students who are retraining or preparing for quick entry into the profession. Preparation for industry recognized certifications such as COMPTIA Network+ and Microsoft Certified Professional (MCP) are embedded in course sequences within the program.

Student Learning Outcomes

Student will be able to:

- 1. Identify possible causes of network and technical problems.
- 2. Implement and document a solution.
- 3. Demonstrate effective hands-on use of office productivity software.
- 4. Effectively communicate both orally and in written form with management, team members and customers.
- 5. Demonstrate effective research and documentation skills.
- 6. Recognize ethical, legal and socially responsible practices.
- 7. Install and maintain network hardware and systems software.
- 8. Evaluate system performance and security and take corrective action.

Related High School Program: Construction Carpentry

CONSTRUCTION TRADES MAJOR, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION 1	ENG 111**	3
APPLIED ALGEBRA	MTH 151	2
APPRENTICESHIP BLOCK I	SKT 260	4-5
ON BEING A SUPERVISOR	SUP 101	1
SKILLED TRADES ELECTIVE	SEE ATTACHED ASSOCIATE DEGREE FOR	6
	INFORMATION*	
		TOTAL HOURS: 16-17



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
FUNDAMENTALS OF COMPUTING	IST 100	1
COMPOSITION II	ENG 112**	3
APPLIED GEOMETRY/TRIG	MTH 152	2
APPRENTICESHIP BLOCK II	SKT 261	3-7
MANAGING YOURSELF	SUP 102	1
SKILLED TRADES ELECTIVE	SEE ATTACHED ASSOCIATE	6
	DEGREE FOR	
	INFORMATION*	
		TOTAL HOURS: 32-37

+ ADDITIONAL 30-40 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

College credits earned in the related high school program aligned to this associate degree program that satisfies elective requirements:

*SKT 237 (3) MAINTENANCE TOOLS/EQUIPMENT

*SKT 145 (2) BUILDING PRINT READING

*SKT 177 (2) WOOD/METAL CONSTRUCTION

Construction Trades Major, AAS (Owens Code: SKTC) OWENS COMMUNITY COLLEGE

Campus Offered

Credits Required

Toledo and Toledo Hybrid

62-72

Required Courses

1st Semester

ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)

MTH 151 - Applied Algebra Credits: 2(Lec: 2)

SKT 260 - Apprenticeship Block I **Credits:** 4 to 5(Lec: 4 to 5)

*Courses and sequence dependent on the student's trade. See a Skilled Trades advisor for course selection.

SUP 101 - On Being a Supervisor **Credits:** 1(Lec: 1)

____ - Skilled Trades Elective **Credits:** 6(Lec: 6)

*Select a Skilled Trades (SKT) course that is not already required for the major, including SKT Apprenticeship blocks V to XVIII, or Journeyperson upgrade courses. Contact a Skilled Trades Advisor for course selection.

2nd Semester

IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)

ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)

MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2)

SKT 261 - Apprenticeship Block II Credits: 3 to 7(Lec: 4)

*Courses and sequence dependent on the student's trade. See a Skilled Trades advisor for course selection.

SUP 102 - Managing Yourself Credits: 1(Lec: 1)

- Skilled Trades Elective **Credits:** 6(Lec: 6)

*Select a Skilled Trades (SKT) course that is not already required for the major, including SKT

Apprenticeship blocks V to XVIII, or Journeyperson upgrade courses. Contact a Skilled Trades Advisor for course selection.

3rd Semester

PHY 151 - Industrial Physics-Mechanics **Credits:** 2(Lec: 2)

BUS 120 - Principles of Management Credits: 3(Lec: 3)

ENG 120 - Business Communications Credits: 3(Lec: 3)

PSY 111 - Indust/Organization Psych Credits: 3(Lec: 3)

SKT 262 - Apprenticeship Block III **Credits:** 3 to 6(Lec: 4)

*Courses and sequence dependent on the student's trade. See a Skilled Trades advisor for course selection.

SUP 103 - Devel Communication Skills Credits: 1(Lec: 1)

4th Semester

```
*Courses and sequence dependent on the student's trade. See a Skilled Trades advisor for course selection.

SPE 210 - Small Group Communication Credits: 3(Lec: 3)

SUP 104 - Leadership Credits: 1(Lec: 1)

SUP 105 - Improving Prod & Quality Credits: 1(Lec: 1)

_____ - Skilled Trades Elective Credits: 7(Lec: 7)

*Select a Skilled Trades (SKT) course that is not already required for the major, including SKT Apprenticeship blocks V to XVIII, or Journeyperson upgrade courses. Contact a Skilled Trades Advisor for course selection.
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This major provides students currently working in a registered apprenticeship program, or those who have a journeyperson's certificate from a registered program, an opportunity to use their technical training to achieve an associate degree. The program focuses on the areas of carpentry, plumbing, sheet metal, construction millwrights and other construction trades.

Related High School Program: Construction Electricity

ELECTRICAL MAJOR, AAS

15	S HOUR PATHWAY	
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION I	ENG 111**	3
APPLIED ALGEBRA	MTH 151	2
ELEC PRINTREADING & CONTROL	SKT 122*	2
MANUAL DRAFTING	CAD 120	2
BUILDING PRINT READING	SKT 145	2
ELECTRICITY: DC PRINCIPLES	SKT 171*	2
SPEECH ELECTIVE	SEE ATTACHED ASSOCIATE	3
	DEGREE FOR INFORMATION	
		TOTAL HOURS: 16



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION II	ENG 112**	3
APPLIED GEOMETRY/TRIG	MTH 152	2
ELECTRICAL PRINTS: CONTROLS	SKT 132	2
NATIONAL ELECTRICAL CODE	SKT 184	2
ELECTRICITY: MAG/DC MOTORS/GEN	SKT 172	2
ELECTRICITY: AC PRINCIPLES	SKT 174	3
		TOTAL HOURS: 30

+ ADDITIONAL 35 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Additional college credits earned in the related high school program not aligned to this associate degree program:

SKT 170 (3) MAINTENANCE ELECTRICITY

Electrical Major, AAS (Owens Code: SKTE)

OWENS COMMUNITY COLLEGE

Campus Offered Toledo

Credits Required

65

Required Courses

1st Semester

```
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3) MTH 151 - Applied Algebra Credits: 2(Lec: 2) SKT 122 - Elec Printreading & Control Credits: 2(Lec: 1.50 Lab: 1.50) CAD 120 - Manual Drafting Credits: 2(Lec: 1.50 Lab: 1.50) SKT 145 - Building Print Reading Credits: 2(Lec: 2) SKT 171 - Electricity: DC Principles Credits: 2(Lec: 2)
```

2nd Semester

```
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3) MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2) PHY 151 - Industrial Physics-Mechanics Credits: 2(Lec: 2) SKT 132 - Electrical Prints: Controls Credits: 2(Lec: 2) SKT 184 - National Electrical Code Credits: 2(Lec: 2) SKT 172 - Electricity: Mag/DC Motors/Gen Credits: 2(Lec: 2) SKT 174 - Electricity: AC Principles Credits: 3(Lec: 3) SKT 181 - Motor Control Systems: I Credits: 2(Lec: 1.50 Lab: 1.50)
```

3rd Semester

```
EET 130 - Computer Diagnosis Credits: 3(Lec: 2 Lab: 3)
PHY 152 - Industrial Physics-Ht Li Sound Credits: 2(Lec: 2)
PSY 111 - Indust/Organization Psych Credits: 3(Lec: 3)
SKT 175 - Electricity: Electric Applicat Credits: 3(Lec: 3)
SKT 182 - Motor Control Systems: II Credits: 2(Lec: 1.50 Lab: 1.50)
______ - Speech Elective Credits: 3(Lec: 3)
*Select from: SPE 101, SPE 102, or SPE 210.
SKT 183 - Motor Control & Syst:PLC's Credits: 2(Lec: 1.50 Lab: 1.50)
or
EET 165 - Automation Control: PLC I Credits: 2(Lec: 1.50 Lab: 1.50)
```

```
ENG 120 - Business Communications Credits: 3(Lec: 3)
SKT 281 - Electronics: Princ/Applicat Credits: 3(Lec: 2 Lab: 3)
SKT 255 - Motor Control & Syst: Adv PLC Credits: 2(Lec: 1.50 Lab: 1.50)
or
```

```
EET 166 - Automation Control: PLC II Credits: 2(Lec: 1.50 Lab: 1.50)

ENV 110 - OSHA General Safety Credits: 3(Lec: 3)

BUS 101 - Contemporary Business Credits: 3(Lec: 3)

or

BUS 120 - Principles of Management Credits: 3(Lec: 3)
```

Petition for Degree Completion

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Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This major encompasses a variety of courses in the industrial electrical environment. Students are instructed in diagnostics, troubleshooting, repair and circuit construction. The program also provides theory and hands-on instruction in several interdisciplinary areas such as programmable logic controls, and digital electronics.

Related High School Program: Construction Masonry

CONSTRUCTION TRADES MAJOR, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION 1	ENG 111**	3
APPLIED ALGEBRA	MTH 151	2
APPRENTICESHIP BLOCK I	SKT 260	4-5
ON BEING A SUPERVISOR	SUP 101	1
SKILLED TRADES ELECTIVE	SEE ATTACHED ASSOCIATE DEGREE FOR	6
	INFORMATION*	
		TOTAL HOURS: 16-17



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
FUNDAMENTALS OF COMPUTING	IST 100	1
COMPOSITION II	ENG 112**	3
APPLIED GEOMETRY/TRIG	MTH 152	2
APPRENTICESHIP BLOCK II	SKT 261	3-7
MANAGING YOURSELF	SUP 102	1
SKILLED TRADES ELECTIVE	SEE ATTACHED ASSOCIATE	6
	DEGREE FOR INFORMATION	
TOTAL HOURS: 32-37		

+ ADDITIONAL 30-40 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

College credits earned in the related high school program aligned to this associate degree program that satisfies elective requirements:

*SKT 237 (3) MAINTENANCE TOOLS/EQUIPMENT

Construction Trades Major, AAS (Owens Code: SKTC) OWENS COMMUNITY COLLEGE

Campus Offered

Credits Required

Toledo and Toledo Hybrid

62-72

Required Courses

1st Semester

ENG 111 - Composition I *Ohio Transfer Module Course **Credits:** 3(Lec: 3)
MTH 151 - Applied Algebra **Credits:** 2(Lec: 2)
SKT 260 - Apprenticeship Block I **Credits:** 4 to 5(Lec: 4 to 5)
*Courses and sequence dependent on the student's trade. See a Skilled Trades advisor for course selection.
SUP 101 - On Being a Supervisor **Credits:** 1(Lec: 1)
______ - Skilled Trades Elective **Credits:** 6(Lec: 6)
*Select a Skilled Trades (SKT) course that is not already required for the major, including SKT Apprenticeship blocks V to XVIII, or Journeyperson upgrade courses. Contact a Skilled Trades Advisor for course selection.

2nd Semester

ENG 112 - Composition II *Ohio Transfer Module Course **Credits:** 3(Lec: 3)

MTH 152 - Applied Geometry/Trig **Credits:** 2(Lec: 2)

SKT 261 - Apprenticeship Block II **Credits:** 3 to 7(Lec: 4)

*Courses and sequence dependent on the student's trade. See a Skilled Trades advisor for course selection.

SUP 102 - Managing Yourself **Credits:** 1(Lec: 1)

______ - Skilled Trades Elective **Credits:** 6(Lec: 6)

*Select a Skilled Trades (SKT) course that is not already required for the major, including SKT Apprenticeship blocks V to XVIII, or Journeyperson upgrade courses. Contact a Skilled Trades Advisor for course selection.

3rd Semester

PHY 151 - Industrial Physics-Mechanics **Credits:** 2(Lec: 2)
BUS 120 - Principles of Management **Credits:** 3(Lec: 3)
ENG 120 - Business Communications **Credits:** 3(Lec: 3)
PSY 111 - Indust/Organization Psych **Credits:** 3(Lec: 3)
SKT 262 - Apprenticeship Block III **Credits:** 3 to 6(Lec: 4)
*Courses and sequence dependent on the student's trade. See a Skilled Trades advisor for course selection.
SUP 103 - Devel Communication Skills **Credits:** 1(Lec: 1)

4th Semester

SKT 263 - Apprenticeship Block IV Credits: 3 to 5(Lec: 4)

IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)

*Courses and sequence dependent on the student's trade. See a Skilled Trades advisor for course selection.

SPE 210 - Small Group Communication Credits: 3(Lec: 3)

SUP 104 - Leadership Credits: 1(Lec: 1)

SUP 105 - Improving Prod & Quality Credits: 1(Lec: 1)

____ - Skilled Trades Elective **Credits:** 7(Lec: 7)

*Select a Skilled Trades (SKT) course that is not already required for the major, including SKT Apprenticeship blocks V to XVIII, or Journeyperson upgrade courses. Contact a Skilled Trades Advisor for course selection.

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This major provides students currently working in a registered apprenticeship program, or those who have a journeyperson's certificate from a registered program, an opportunity to use their technical training to achieve an associate degree. The program focuses on the areas of carpentry, plumbing, sheet metal, construction millwrights and other construction trades.

Related High School Program: Public Safety/Criminal Justice

CRIMINAL JUSTICE TECHNOLOGY, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
INTRO TO CRIMINAL JUSTICE	CJS 101*	3
CRIMINAL LAW & PROCEDURE	CJS 121	3
SOCIOLOGY	SOC 101**	3
COMPOSITION I	ENG 111**	3
GENERAL PSYCHOLOGY	PSY 101**	3
		TOTAL HOURS: 16



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
JUVENILE JUSTICE SYSTEM	CJS 104	3
PATROL OPERATIONS	CJS 120	3
CONSTITUTIONAL LAW & EVIDENCE	CJS 123	3
MATHEMATICS ELECTIVE	SEE ATTACHED ASSOCIATE	3-5
	DEGREE FOR INFORMATION	
SPEECH ELECTIVE	SEE ATTACHED ASSOCIATE	3-5
	DEGREE FOR INFORMATION	
TOTAL HOURS: 30-34		

+ ADDITIONAL 30 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Criminal Justice Technology, AAS (Owens Code: CJST) OWENS COMMUNITY COLLEGE

Campus Offered

Credits Required

Toledo, Toledo Hybrid, and Findlay

60-64

Required Courses

1st Semester

```
CJS 101 - Intro to Criminal Justice Credits: 3(Lec: 3)
CJS 121 - Criminal Law & Procedure Credits: 3(Lec: 3)
SOC 101 - Sociology *Ohio Transfer Module Course Credits: 3(Lec: 3)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
PSY 101 - General Psychology *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

2nd Semester

3rd Semester

```
CJS 205 - Report Writing for Crim Justic Credits: 3(Lec: 3)
CJS 212 - Criminal Investigation Credits: 3(Lec: 3)
CJS 230 - Supervision for Criminal Just Credits: 3(Lec: 3)
SOC 240 - Criminology *Ohio Transfer Module Course Credits: 3(Lec: 3)
GOV 205 - State and Local Government *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

4th Semester

```
CJS 245 - Victimology Credits: 3(Lec: 3)

CJS 260 - Professional Standards Credits: 3(Lec: 3)

- Criminal Justice Sciences Elective Credits: 3 (Lec: 3)

*Select from CJS 105, CJS 150, CJS 265, CJS 270.

- Art and Humanities Elective Credits: 3 (Lec: 3)

PSY 220 - Abnormal Psychology *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

Petition for Degree Completion

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Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program equips students with the technical skills to begin their careers in the criminal justice field. In addition to the technical courses, general education courses develop students to be more prepared to deal with social issues that confront them in the performance of their duty. The curriculum has been adapted to include contemporary areas such as homeland security and community policing.

Student Learning Outcomes

Student will be able to:

- 1. Demonstrate the ability to make ethical decisions.
- 2. Apply basic criminal law to various situations.
- 3. Apply U.S. Constitution and principles of evidence in search and seizure situations.
- 4. Demonstrate appropriate oral communication during stops and arrests.
- 5. Effectively record, report and document incidents.
- 6. Demonstrate correct procedure in various situations (stops, arrest, affidavits, etc.).
- 7. Identify the fundamental steps of a criminal investigation.
- 8. Properly process crime scenes.
- 9. Become familiar with different societal backgrounds (social, economic, sexual orientation, race, religious, etc.).

Related High School Program: Culinary Arts

CULINARY ARTS PROGRAM, AAS

15 H	HOUR PATHWAY	
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION I	ENG 111**	3
INTRO TO CUL ARTS & GASTRONOMY	FNH 101***	2
QUANTITY FOOD PREPARATION	FNH 112	3
RECIPE MANAGEMENT	FNH 114	2
BASIC NUTRITION	FNH 121	2
DINING ROOM & BEV MGT	FNH 130	2
MIXOLOGY	FNH 132	1
SERVSAFE	FNH 135*	2
		TOTAL HOURS: 17



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION II	ENG 112**	3
FUNDAMENTALS OF COMPUTING	IST 100	1
BLS HEALTHCARE PROVIDERS	HSC 120	0.5
RISK MGT IN HOSP INDUSTRY	FNH 136***	0.5
BAKING & PASTRY I	FNH 150	3
MENU DEVELOPMENT	FNH 160	2
AMERICAN REGIONAL CUISINE	FNH 170	3
		TOTAL HOURS: 30

+ ADDITIONAL 40-42 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Additional college credits earned in the related high school program not aligned to this associate degree program:

- ***CTCF003 (2) FOOD PRODUCTION LABORATORY
- ***CTCFOO4 (1) COOPERATIVE WORK EXPERIENCE

Culinary Arts Program, AAS (Owens Code: CAPP) OWENS COMMUNITY COLLEGE

Successful completion of a program of study at the College does not guarantee licensure, certification, employment in a relevant occupation, or transferability/admission to other educational institutions or programs.

Campus Offered

Credits Required

Toledo

70-72

Required Courses

*All students enrolled in the program must earn a "C" grade or better in each Food, Nutrition & Hospitality (FNH) course and maintain a 2.0 grade point average.

*Students who currently hold the ServSafe certificate and/or current CPR should see the Department Chair as some coursework may be waived.

1st Semester

```
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3) FNH 101 - Intro to Cul Arts & Gastronomy Credits: 2(Lec: 2) FNH 112 - Quantity Food Preparation Credits: 3(Lec: 2 Lab: 4) FNH 114 - Recipe Management Credits: 2(Lec: 2) FNH 121 - Basic Nutrition Credits: 2(Lec: 2) FNH 130 - Dining Room & Bev Mgt Credits: 2(Lec: 1 Lab: 3) FNH 132 - Mixology Credits: 1(Lec: 1) FNH 135 - ServSafe Credits: 2(Lec: 2)
```

2nd Semester

```
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3) IST 100 - Fundamentals of Computing Credits: 1(Lec: 1) MTH 108 - Modern College Mathematics Credits: 4(Lec: 4) HSC 120 - BLS Healthcare Providers Credits: .50(Lec: 8) FNH 136 - Risk Mgt in Hosp Industry Credits: .50(Lec: .50) FNH 150 - Baking & Pastry I Credits: 3(Lec: 2 Lab: 4) FNH 160 - Menu Development Credits: 2(Lec: 2) FNH 170 - American Regional Cuisine Credits: 3(Lec: 2 Lab: 4)
```

3rd Semester - Summer

```
FNH 270 - Techniques of Healthy Cooking Credits: 3(Lec: 2 Lab: 3) FNH 295 - Career & Professional Dev Credits: 1(Lec: 1)
```

```
ENG 120 - Business Communications Credits: 3(Lec: 3)
```

```
_____ - Art and Humanities Elective Credits: 3(Lec: 3)
FNH 212 - Essentials of Supervision Credits: 2(Lec: 2)
FNH 271 - Garde Manger Credits: 3(Lec: 2 Lab: 4)
FNH 272 - International Cuisine Credits: 3(Lec: 2 Lab: 4)
_____ - Food, Nutrition & Hospitality Elective Credits: 2 to 3(Lec: 1 to 3 Lab: 0 to 4)
*Select from: FNH 210, FNH 211, FNH 214, FNH 215, FNH 220, FNH 240, FNH 250, or FNH 251.
```

5th Semester

```
IDS 190 - Inter Approach Soc Diversity *Ohio Transfer Module Course Credits: 3(Lec: 3) FNH 213 - Hospitality Facilities Design Credits: 2(Lec: 1 Lab: 3) FNH 230 - Purchasing & Cost Controls Credits: 3(Lec: 3) FNH 241 - Catering & Banquet Operations Credits: 3(Lec: 2 Lab: 4) _____ - Food, Nutrition & Hospitality Elective Credits: 2 to 3(Lec: 1 to 3 Lab: 0 to 4) *Select from: FNH 210, FNH 211, FNH 214, FNH 215, FNH 220, FNH 240, FNH 250, or FNH 251. FNH 293A - Culinary Arts Co-op Exp Credits: 3(Lec: 1 Oth: 20)
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

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Program Information

The Culinary Arts Program prepares students with the skills and knowledge necessary for a successful career in the rapidly growing culinary arts industry. This degree prepares students for food preparation positions in restaurants, hotels, healthcare facilities, resorts and country clubs. Students complete a combination of management, nutrition and menu design courses, in addition to instruction in fundamental, intermediate and advanced culinary skills. The Program reinforces these skills through hands-on experience in the culinary arts field during the 320-hour co-operative work experience education course and the student-run restaurant, "The Terrace View Café."

Students interested in seeking "front of the house" employment in hotels, restaurants, country clubs and resorts should check out the Hospitality Management Program, AAB (Owens Code: HOSP). Students interested in training for entry-level food service positions should explore the Culinary Arts Certificate (Owens Code: ZCAC).

Student Learning Outcomes

Student will be able to:

1. Demonstrate the preparation of food items served by the professional kitchen by applying the cooking and baking methods prescribed by the core competencies of the American Culinary Federation.

- 2. Describe the historical background of the culinary profession and identify the principles and terminology used in the contemporary culinary arts field.
- 3. Demonstrate safe and sanitary food handling practices as stipulated in local, state and federal laws.
- 4. Identify basic nutrition concepts and describe the nutritional concerns of professional food service operations.
- 5. Demonstrate food service cost control techniques and procedures.
- 6. Identify and demonstrate the basic elements of dining room service.
- 7. Describe and apply the techniques of menu planning for a variety of food service operations.
- 8. Demonstrate communication skills necessary for success in the culinary arts.
- 9. Utilize critical thinking skills during job performance.
- 10. Demonstrate leadership techniques necessary to manage a diverse workforce.

Related High School Program: Dental Assistant

DENTAL HYGIENE PROGRAM, AAS

15 HOUR PATHWAY				
COURSE NAME	CATALOG NUMBER	CREDIT HOURS		
ANATOMY AND PHYSIOLOGY I	BIO 211**	4		
INTRODUCTORY STATISTICS	MTH 213**	3		
BASIC NUTRITION	FNH 121	2		
ENGLISH COMPOSITION I	ENG 111**	3		
GENERAL PSYCHOLOGY	PSY 101**	3		
		TOTAL HOURS: 15		



30 HOUR PATHWAY				
COURSE NAME	CATALOG NUMBER	CREDIT HOURS		
INORGANIC & ORGANIC CHEMISTRY	CHM 115	4		
CLINICAL PROCEDURES	DHY 100	1		
PRECLINIC	DHY 101	3		
PREVENTIVE DENTISTRY	DHY 110	1		
ORAL ANATOMY & PHYSIOLOGY	DHY 120	2		
DENTAL HISTOLOGY AND ANATOMY	DHY 122	2		
DENTAL RADIOGRAPHIC IMAGING	DHY 138	2		
		TOTAL HOURS: 30		

+ ADDITIONAL 42 CREDITS FOR ASSOCIATE DEGREE

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Dental Hygiene Program, AAS (Owens Code: DHYP) OWENS COMMUNITY COLLEGE

Successful completion of a program of study at the College does not guarantee licensure, certification, employment in a relevant occupation, or transferability/admission to other educational institutions or programs.

Campus Offered

Credits Required

Toledo

72

Required Courses

Summer Semester (8 Week Session)

```
BIO 211 - Anatomy and Physiology I *Ohio Transfer Module Course Credits: 4(Lec: 3 Lab: 3) MTH 213 - Introductory Statistics *Ohio Transfer Module Course Credits: 3(Lec: 3) FNH 121 - Basic Nutrition Credits: 2(Lec: 2)
```

1st Semester

```
CHM 115 - Inorganic & Organic Chemistry Credits: 4(Lec: 3 Lab: 3) DHY 100 - Clinical Procedures Credits: 1(Lab: 3) DHY 101 - Preclinic Credits: 3(Lec: 1 Lab: 9) DHY 110 - Preventive Dentistry Credits: 1(Lec: 1) DHY 120 - Oral Anatomy & Physiology Credits: 2(Lec: 2) DHY 122 - Dental Histology and Anatomy Credits: 2(Lec: 2) DHY 138 - Dental Radiographic Imaging Credits: 2(Lec: 1 Lab: 3)
```

2nd Semester

```
BIO 212 - Anatomy and Physiology II *Ohio Transfer Module Course Credits: 4(Lec: 3 Lab: 3) DHY 102 - Preventive Practice I Seminar Credits: 2(Lec: 2) DHY 103 - Preventive Practice I Lab Credits: 3(Lab: 9) DHY 107 - Intro to Periodontology Credits: 1(Lec: 1) DHY 150 - Dental Materials Credits: 2(Lec: 1 Lab: 2) ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

Summer Semester (8 Week Session)

```
BIO 231 - Microbiology & Immunology Credits: 4(Lec: 3 Lab: 3)
DHY 131 - Local Anesthesia & Pain Control Credits: 2(Lec: 1 Lab: 3)
PSY 101 - General Psychology *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

3rd Semester

```
DHY 204 - Preventive Practice II Seminar Credits: 2(Lec: 2 Lab: 1)
DHY 205 - Preventive Practice II Lab Credits: 3(Lab: 12)
DHY 207 - Periodontology II Credits: 1(Lec: 1)
DHY 226 - General & Oral Pathology Credits: 2(Lec: 2)
```

```
DHY 230 - Pharmacology Credits: 2(Lec: 2)
DHY 250 - Community Dental Health I Credits: 1(Lec: 1)
```

4th Semester

```
DHY 210 - Preventive Pract III Seminar Credits: 2(Lec: 2)
DHY 211 - Preventive Practice III Lab Credits: 3(Lab: 12)
DHY 251 - Community Dental Health II Credits: 1(Lab: 3)
DHY 255 - Trends in Practice Credits: 1(Lec: 1)
SOC 101 - Sociology *Ohio Transfer Module Course Credits: 3(Lec: 3)
PHL 250 - Medical Ethics Credits: 3(Lec: 3)
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

Associate of Applied Science Degree

A Dental Hygienist is a preventive oral health professional licensed to provide educational, clinical and therapeutic services to the dental consumer.

The Dental Hygiene Program provides a scientifically current, competency-based curriculum focusing on mental, psychomotor, and affective education, which is essential to become a competent Dental Hygienist.

While each state has its own specific regulations governing the dental hygienist's responsibilities, typical services provided in Ohio include: scaling and polishing teeth, taking and developing dental radiographs (x-rays), patient screening procedures, applying preventive materials such as sealants and fluorides, taking impressions for study models, nutritional counseling, and teaching oral hygiene techniques.

Board Exams

Students who successfully complete the program will be eligible to sit for the Dental Hygiene National Board Exam (NBDHE), North East Regional Board and/or other state and regional boards. The Ohio State Dental Board (OSDB) has restrictions on granting licensure to individuals who have prior felony convictions or mental incompetence. Check the OSDB Website (www.dental.ohio.gov) for further information.

Student Learning Outcomes

Student will be able to:

- 1. Exhibits professional conduct in dental hygiene care.
- 2. Provides a safe, healthy and compliant environment.
- 3. Demonstrates the Dental Hygiene Model of Care (Assessment, Diagnosis, Planning, Implementation, Evaluation, Documentation).
- 4. Works with a culturally diverse population.
- 5. Provides effective oral health and community education.

Related High School Program: Digital Video Production

COMMERCIAL ART TECHNOLOGY, AAS

15 HOUR PATHWAY				
COURSE NAME	CATALOG NUMBER	CREDIT HOURS		
COMPOSITION I	ENG 111**	3		
HISTORY OF GRAPHIC DESIGN	CRT 101	3		
MICRO CONCEPTS & APPS FOR MAC	CRT 105	1		
DIGITAL IMAGING	CRT 115	3		
VECTOR GRAPHIC DESIGN	CRT 120	3		
DIGITAL VIDEO	CRT 235*	3		
		TOTAL HOURS: 16		



30 HOUR PATHWAY				
COURSE NAME	CATALOG NUMBER	CREDIT HOURS		
GRAPHIC FUNDAMENTALS	CRT 110	2		
ELECTRONIC PAGE LAYOUT	CRT 125	3		
DIGITAL DESIGN AND TYPOGRAPHY	CRT 210	3		
PHOTOGRAPHY ELECTIVE	SEE ATTACHED ASSOCIATE	3		
	DEGREE FOR INFORMATION			
MATHEMATICS ELECTIVE	SEE ATTACHED ASSOCIATE	3-5		
	DEGREE FOR INFORMATION			
	r	ΓΟΤΑL HOURS: 30-32		

+ ADDITIONAL 31 CREDITS FOR ASSOCIATE DEGREE

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Commercial Art Technology, AAS (Owens Code: CART) OWENS COMMUNITY COLLEGE

Campus Offered
Toledo
Credits Required
61-63

Required Courses

*Any student enrolling in CRT 115 or CRT 120 must have completed or be enrolled in CRT 105. It is suggested to take this course in the summer before beginning your regular course load. Please refer to the Testing Center for information on CRT 105proficiency testing. CRT 115 and CRT 120 must be completed before attempting advanced coursework.

1st Semester

```
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3) CRT 101 - History of Graphic Design Credits: 3(Lec: 3) CRT 105 - Micro Concepts & Apps for Mac Credits: 1(Lec: 1) CRT 115 - Digital Imaging Credits: 3(Lec: 2 Lab: 3) CRT 120 - Vector Graphic Design Credits: 3(Lec: 2 Lab: 3) ART 106 - Fundamentals of Drawing Credits: 3(Lec: 2 Lab: 3)
```

2nd Semester

```
CRT 110 - Graphic Fundamentals Credits: 2(Lec: 2)
CRT 125 - Electronic Page Layout Credits: 3(Lec: 2 Lab: 3)
CRT 210 - Digital Design and Typography Credits: 3(Lec: 2 Lab: 3)
- Photography Elective Credits: 3(Lec: 2 Lab: 3)
*Select from PHO 103, PHO 121 or PHO 130.
- Mathematics Elective Credits: 3 to 5(Lec: 3 to 5)
```

3rd Semester

```
ART 110 - Foundations In 2D Design Credits: 3(Lec: 2 Lab: 3) CRT 220 - Interactive Multi-Media Credits: 3(Lec: 2 Lab: 3) CRT 225 - World Wide Web Design Credits: 3(Lec: 2 Lab: 3)

- Commercial Art Elective Credits: 3(Lec: 2 Lab: 3)

*Select from CRT 241, CRT 245, CRT 255.

ENT 111 - Entrepreneurial Marketing Credits: 3(Lec: 3)
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```
BUS 101 - Contemporary Business Credits: 3(Lec: 3)

- Photography Elective Credits: 3(Lec: 2 Lab: 3)

*Select from PHO 103, PHO 121 or PHO 130.

CRT 235 - Digital Video Credits: 3(Lec: 2 Lab: 3)

- Commercial Art Elective Credits: 3(Lec: 2 Lab: 3)

*Select from CRT 241, CRT 245, CRT 255.

CRT 295 - Portfolio Presentation Credits: 1(Lab: 3)
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	- S	ocial	and	Beha	iviora	l Sciei	ices E	Elective	Credits:	3	(Lec:	3)
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Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program provides training required to succeed in the ever-changing technical graphics and documentation marketplace. The program focuses on extensive commercial art coursework and is intended for students who are completing their education with this degree.

Student Learning Outcomes

Student will be able to:

- 1. Understand the basic operations of a computer.
- 2. Understand the fundamental principles of the graphic design industry.
- 3. Understand fundamentals for typographic and graphic design.
- 4. Know and apply the principles of digital video production.
- 5. Know the fundamentals of electronic page layout and design.
- 6. Produce finished interactive multimedia projects.
- 7. Develop World Wide Web pages using graphically pleasing and functional design.
- 8. Reinforce basic oral and written communication skills.

Related High School Program: Early Childhood Education

EARLY CHILDHOOD EDUCATION TECHNOLOGY, AAS

15 HOUR PATHWAY				
COURSE NAME	CATALOG NUMBER	CREDIT HOURS		
INTRO EARLY CHILDHOOD EDUC	ECE 100*	3		
CHILD DEVELOPMENT	EDU 101	3		
COMPOSITION I	ENG 111**	3		
LIFE-AN INTRO TO BIOLOGY	BIO 101	4		
FUNDAMENTALS OF COMPUTING	IST 100	1		
MATH FOR EDUCATION MAJORS I	MTH 118	3		
		TOTAL HOURS: 17		



30 HOUR PATHWAY				
COURSE NAME	CATALOG NUMBER	CREDIT HOURS		
EMERGENT LITERACY	ECE 104	3		
ASSESSMENT & OBSERVATION IN ED	ECE106	3		
EDUCATIONAL TECHNOLOGY	EDU 120	3		
COMPOSITION II	ENG 112**	3		
CHILD AND YOUTH HEALTH	ECE 216*	3		
		TOTAL HOURS: 32		

+ ADDITIONAL 37 CREDITS FOR ASSOCIATE DEGREE

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Early Childhood Education Technology, AAS (Owens Code: ECET) OWENS COMMUNITY COLLEGE

Campus OfferedToledo and Findlay

Credits Required

69

Required Courses

1st Semester

```
ECE 100 - Intro Early Childhood Educ Credits: 3(Lec: 3)
EDU 101 - Child Development Credits: 3(Lec: 3)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
BIO 101 - Life-An Intro to Biology Credits: 4(Lec: 3 Lab: 3)
IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)
MTH 118 - Math for Education Majors I Credits: 3(Lec: 3)
```

2nd Semester

```
ECE 104 - Emergent Literacy Credits: 3(Lec: 3)
ECE 106 - Assessment & Observation in Ed Credits: 3(Lec: 3)
ECE 109 - Play, Learning & Environment Credits: 3(Lec: 3)
EDU 120 - Educational Technology Credits: 3(Lec: 3)
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)
EDU 100 - Introduction to Education Credits: 3(Lec: 3)
```

3rd Semester

```
_____ - Diversity Elective Credits: 3(Lec: 3)
ECE 203 - Guiding Children's Behavior Credits: 3(Lec: 3)
ECE 202 - Teaching Preschoolers Credits: 4(Lec: 3 Lab: 3)
EDU 210 - Individuals w/Exceptionalities Credits: 4(Lec: 3 Lab: 3)
EDU 215 - Family, Communities & Schools Credits: 3(Lec: 3)
PSY 101 - General Psychology *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

4th Semester

```
ECE 216 - Child and Youth Health Credits: 3(Lec: 3)
ECE 221 - Professional Leadership Issues Credits: 3(Lec: 3)
ECE 298 - Practicum and Seminar Credits: 5(Lec: 3 Lab: 2)
*Meets 16 hours per week for 14 weeks
EDU 280 - Educational Psychology *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program develops attitudes and values in students that are indicative of caring, competent and committed early childhood education professionals. The curriculum includes both class and laboratory experiences planned to increase the student's knowledge and skills in programs concerned with the development of young children. During the practicum experience, students work with a qualified cooperating teacher in a prekindergarten setting.

Student Learning Outcomes

The Teacher Education Department is guided by the 2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs. These standards provide a common core of professional knowledge and abilities needed by all early childhood educators. They also present detailed expectations about high-quality professional preparation. Course work in early childhood education is designed to prepare early childhood educators who work directly with young children in a variety of early childhood settings, who must accommodate children with a range of abilities and special needs, and who must work collaboratively with families and other professionals.

Standard 1. Promoting Child Development and Learning

Students prepared in early childhood degree programs are grounded in a child development knowledge base. They use their understanding of young children's characteristics and needs and of multiple interacting influences on children's development and learning, to create environments that are healthy, respectful, supportive, and challenging for all children.

Standard 2. Building Family and Community Relationships

Students prepared in early childhood degree programs understand that successful early childhood education depends on partnerships with children's families and communities. They know about, understand, and value the importance and complex characteristics of children's families and communities. They use this understanding to create respectful, reciprocal relationships that support and empower families, and to involve all families in their children's development and learning.

Standard 3. Observing, Documenting, and Assessing to Support Young Children and Families Students prepared in early childhood degree programs understand that child observation, documentation, and other forms of assessment are central to the practice of all early childhood professionals. They know about and understand the goals, benefits, and uses of assessment. They know about and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence children's development.

Standard 4. Using Developmentally Effective Approaches to Connect with Children and Families

Students prepared in early childhood degree programs understand that teaching and learning with young children is a complex enterprise, and its details vary depending on the children's ages,

characteristics, and the settings within which teaching and learning occur. They understand and use positive relationships and supportive interactions as the foundation for their work with young children and families. Students know, understand, and use a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning.

Standard 5. Using Content Knowledge to Build Meaningful Curriculum

Students prepared in early childhood degree programs use their knowledge of academic disciplines to design, implement, and evaluate experiences that promote positive development and learning for each and every young child. Students understand the importance of developmental domains and academic (or content) disciplines in early childhood curricula. They know the essential concepts, inquiry tools, and structure of content areas, including academic subjects, and can identify resources to deepen their understanding. Students use their own knowledge and other resources to design, implement and evaluate meaningful, challenging curricula that promote comprehensive developmental and learning outcomes for every young child.

Standard 6. Becoming a Professional

Students prepared in early childhood degree programs identify and conduct themselves as members of the early childhood profession. They know and use ethical guidelines and other professional standards related to early childhood practice. They are continuous, collaborative learners who demonstrate knowledgeable, reflective and critical perspectives on their work, making informed decisions that integrate knowledge for a variety of sources. They are informed advocates for sound educational practices and policies.

Related High School Program: Exercise Science/Sports Health Care

EXERCISE SCIENCE CONCENTRATION, AS

15 HO	UR PATHWAY	
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION I	ENG 111**	3
ANATOMY AND PHYSIOLOGY I	BIO 211**	4
MATHEMATICS ELECTIVE	SEE ATTACHED ASSOCIATE	3-5
	DEGREE FOR INFORMATION	
INTRO TO EXERCISE SCIENCE	EXS 101	3
HEALTH AND PHYSICAL EDUCATION ELECTIVE	SEE ATTACHED ASSOCIATE	1
	DEGREE FOR INFORMATION	
		TOTAL HOURS: 14-16



30 HOUR PATHWAY				
COURSE NAME	CATALOG NUMBER	CREDIT HOURS		
ANATOMY AND PHYSIOLOGY II	BIO 212**	4		
COMPOSITION II	ENG 112**	3		
ATHLETIC STRENGTH AND CONDITIONING	EXS 102	4		
MATHEMATICS ELECTIVE	SEE ATTACHED ASSOCIATE	3-5		
	DEGREE FOR INFORMATION			
TECH PHYSICS I	PHY 111	4		
or				
PHYSICAL SCIENCE FOR TECH	PHY 115	4		
or				
INDUSTRIAL PHYSICS-MECHANICS	PHY 151	2		
		TOTAL HOURS: 30-36		

+ ADDITIONAL 30 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Additional college credits earned in the related high school program not aligned to this associate degree program:

*HIT 125 (3) LANGUAGE OF MEDICINE

Exercise Science Concentration, AS (Owens Code: EXSC) OWENS COMMUNITY COLLEGE

Campus OfferedToledo and Findlay

Credits Required

60-66

Required Courses

1st Semester

2nd Semester

3rd Semester

BIO 125 - The Science of Nutrition Credits: 3(Lec: 3)
EXS 201 - Exercise Technology and Fitness Assessment Credits : 3(Lec: 2 Lab: 3)
EXS 205 - Biomechanics Credits: 3(Lec: 2 Lab: 3)
EXS 209 - Exercise Physiology Credits: 4(Lec: 3 Lab: 3)
Social and Behavioral Sciences Elective Credits: 3(Lec: 3)

EXS 280 - Exercise Science Practicum Credits: 2(Lec: 1 Clinical: 7)	
PSY 101 - General Psychology *Ohio Transfer Module Course Credits: 3(Lec:	: 3)
- Art and Humanities Elective Credits: 3(Lec: 3)	
- Art and Humanities Elective Credits: 3(Lec: 3)	
- Speech Elective Credits: 3(Lec: 3)	

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

Owens' Community College's Health & Exercise Science houses two unique programs. Our central focus is supporting the College's transfer mission by offering the Associate of Science Concentration in Exercise Science. This degree prepares students for transfer into programs that fall under the diverse field of Exercise Science.

This concentration is designed to prepare students to effectively participate in bachelor's degree seeking options through local four-year institutions in several related fields including but not limited to: Sports Management, Athletic Training, Exercise Physiology, Exercise Science, Kinesiology, and Leisure and Recreation. Further degree seeking options at the master's level include: occupational therapy and physical therapy. Students with this background can also pursue employment in the following areas: fitness coach, personal trainer, and aerobics instructor.

Additionally, the Department coordinates the nearly 30 unique physical activity courses and personal wellness courses on campus which contribute to a culture of wellness for both students and employees.

Student Learning Outcomes

- 1. Discuss the physiological basis of the major components of physical fitness: cardiorespiratory fitness, muscular strength and endurance, body composition, flexibility, and functional movement.
- 2. Describe and demonstrate assessment techniques and methods for: cardiorespiratory fitness, muscular strength and endurance, body composition, flexibility, and comprehensive wellness.
- 3. Define the psychological principles which are critical to health/wellness behavior change.
- 4. Competently apply the personal communication skills necessary to develop rapport in order to motivate clients to participate in a wellness program.
- 5. Describe, discuss, contrast, compare and evaluate the roles of modern healthcare and physical fitness.
- 6. Identify and apply the skills needed for problem solving and critical thinking.
- 7. Distinguish between various exercise training modalities and their outcomes.
- 8. Describe, demonstrate and apply knowledge of the components and functions of the human anatomy and the body in motion as related to exercise training.
- 9. Design exercise-training programs based upon evaluation, goal setting, accepted training

- principles and maintenance of healthy levels of fitness.
- 10. Identify, evaluate, operate, and be able to instruct with, various types of exercise training equipment.
- 11. Actively experience the various modalities of exercise training.
- 12. Access and assess information technology and data appropriately.

Related High School Program: Gas & Diesel Engine Systems

DIESEL TECHNOLOGY, AAS

15 HOUR PATHWAY				
COURSE NAME	CATALOG NUMBER	CREDIT HOURS		
HYDRAULIC THEORY & OPER	DSL 101	2		
PREVENTIVE MAINT. & SERVICE	DSL 182	2		
FUNDAMENTALS OF ENGINES	DSL 241	3		
SHOP TRUCK OPERATION	DSL 253	2		
TRUCK BRAKE SYSTEMS	DSL 254	4		
FUNDAMENTALS OF COMPUTING	IST 100	1		
APPLIED ALGEBRA	MTH 151	2		
		TOTAL HOURS: 16		



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
DRIVE LINES	DSL 112	3
VEHICLE ELECTRONICS	DSL 130	3
TRUCK SUSP/STEERING/CHASSIS	DSL 261	2
COMPOSITION I	ENG 111**	3
APPLIED GEOMETRY/TRIG	MTH 152	2
INTRO TO THE WELDING PROCESSES	WLD 191	2
		TOTAL HOURS: 31

+ ADDITIONAL 35 CREDITS FOR ASSOCIATE DEGREE

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Diesel Technology, AAS (Owens Code: DSLT) OWENS COMMUNITY COLLEGE

Campus Offered
Toledo
Credits Required
66

Required Courses

*High school and adult career-technical students who successfully complete specified technical programs are eligible to have technical credit transfer. For more information on career-technical course work that students can complete for transfer, visit The University System of Ohio Board of Regents, Career-Technical Credit Transfer (CT)² website or contact your advisor.

1st Semester

```
DSL 101 - Hydraulic Theory & Oper Credits: 2(Lec: 1 Lab: 3)
DSL 182 - Preventive Maint. & Service Credits: 2(Lec: 1 Lab: 3)
DSL 241 - Fundamentals of Engines Credits: 3(Lec: 1 Lab: 6)
DSL 253 - Shop Truck Operation Credits: 2(Lec: 1 Lab: 3)
DSL 254 - Truck Brake Systems Credits: 4(Lec: 2 Lab: 6)
IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)
MTH 151 - Applied Algebra Credits: 2(Lec: 2)
```

2nd Semester

```
DSL 112 - Drive Lines Credits: 3(Lec: 2 Lab: 3)
DSL 130 - Vehicle Electronics Credits: 3(Lec: 2 Lab: 3)
DSL 261 - Truck Susp/Steering/Chassis Credits: 2(Lec: 1 Lab: 3)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2)
WLD 191 - Intro to the Welding Processes Credits: 2(Lec: 1 Lab: 3)
```

3rd Semester

```
DSL 133 - Vehicle Electrical Systems Credits: 3(Lec: 1 Lab: 6)
DSL 215 - Transmission & Torque Conv. Credits: 3(Lec: 2 Lab: 3)
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)
PHY 151 - Industrial Physics-Mechanics Credits: 2(Lec: 2)
SPE 101 - Public Speaking Credits: 3(Lec: 3)
PSY 111 - Indust/Organization Psych Credits: 3(Lec: 3)
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BUS 120 - Principles of Management Credits: 3(Lec: 3)
DSL 212 - Air Conditioning Systems Credits: 2(Lec: 1.50 Lab: 1.50)
DSL 245 - Diesel Eng Perf-Anal & Tune Credits: 3(Lec: 1 Lab: 6)
DSL 268 - Computer Ctrld Diesel Engines Credits: 2(Lec: 1 Lab: 3)
PHY 152 - Industrial Physics-Ht Li Sound Credits: 2(Lec: 2)
______ - Elective Credits: 2 (Lec: 1 Lab: 3)
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*Select from: DSL 103, DSL 111, DSL 203, WLD 190, WLD 192, WLD 193, or WLD 262.
______ - Elective Credits: 2 (Lec: 1 Lab: 3)
*Select from: DSL 103, DSL 111, DSL 203, WLD 190, WLD 192, WLD 193, or WLD 262.
```

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program prepares students to diagnose, service and repair diesel engines, diesel-powered equipment and the equipment connected, pulled, pushed, lifted or operated with diesel and/or gas engines.

Student Learning Outcomes

Student will be able to:

- 1. Diagnose and repair medium and heavy-duty truck engines.
- 2. Diagnose and repair medium and heavy-duty truck suspension and steering systems.
- 3. Diagnose and repair medium and heavy-duty truck brake systems.
- 4. Diagnose and repair medium and heavy-duty truck electrical/electronic systems.
- 5. Diagnose and repair medium and heavy-duty truck Preventive maintenance systems.
- 6. Diagnose and repair medium and heavy-duty truck drivelines.
- 7. Diagnose and repair medium and heavy-duty truck heating, ventilation and air conditioning systems.
- 8. Diagnose and repair medium and heavy-duty truck fluid power systems.

Related High School Program: Heating & Air Conditioning Technology

BUILDING MAINTENANCE MAJOR, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION I	ENG 111**	3
APPLIED ALGEBRA	MTH 151	2
ELEC PRINTREADING & CONTROL	SKT 122	2
MANUAL DRAFTING	CAD 120	2
MAINTENANCE ELECTRICITY	SKT 170	3
MAINTENANCE TOOLS/EQUIPMENT	SKT 237	3
		TOTAL HOURS: 15



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPUTER DIAGNOSIS	EET 130	3
COMPOSITION II	ENG 112**	3
ELECTRICITY: HVACR PRINCIPLES	SKT 176*	2
REFRIGERATION-A/C PRINCIPLES	SKT 158*	3
SKILLED TRADES ELECTIVE	SEE ATTACHED ASSOCIATE	6
	DEGREE FOR INFORMATION*	
		TOTAL HOURS: 32

+ ADDITIONAL 40 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

College credits earned in the related high school program aligned to this associate degree program that satisfies elective requirements:

SKT 159 (3) PIPEFITTING/PLUMBING CONSTRUCTION

Building Maintenance Major, AAS (Owens Code: SKTB) OWENS COMMUNITY COLLEGE

Campus Offered Credits Required

Toledo 72

Required Courses

1st Semester

```
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3) MTH 151 - Applied Algebra Credits: 2(Lec: 2) SKT 122 - Elec Printreading & Control Credits: 2(Lec: 1.50 Lab: 1.50) CAD 120 - Manual Drafting Credits: 2(Lec: 1.50 Lab: 1.50) SKT 170 - Maintenance Electricity Credits: 3(Lec: 3) SKT 237 - Maintenance Tools/Equipment Credits: 3(Lec: 3)
```

2nd Semester

```
EET 130 - Computer Diagnosis Credits: 3(Lec: 2 Lab: 3)
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)
MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2)
SKT 145 - Building Print Reading Credits: 2(Lec: 2)
SKT 165 - Gas Heating Principles Credits: 2(Lec: 1 Lab: 3)
SKT 176 - Electricity: HVACR Principles Credits: 2(Lec: 1 Lab: 3)
SKT 158 - Refrigeration - A/C Principles Credits: 3(Lec: 3)
```

3rd Semester

```
ENG 120 - Business Communications Credits: 3(Lec: 3)
PHY 152 - Industrial Physics-Ht Li Sound Credits: 2(Lec: 2)
SKT 177 - Wood/Metal Construction Credits: 2(Lec: 1 Lab: 3)
SKT 195 - Low/High Pressure Boiler Credits: 4(Lec: 4)
______ - Speech Elective Credits: 3(Lec: 3)
```

```
*Select from: SPE 101, SPE 102, or SPE 210.
_____ - Art and Humanities Elective Credits: 3(Lec: 3)
```

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This major provides students with the understanding and application of maintenance concepts in electricity, plumbing, heating, air conditioning, security alarm systems and energy management control systems as they apply to hospitals, churches, schools/universities, high-rise buildings, and commercial businesses, along with heating and air conditioning contractors.

Related High School Program: Interactive Media

VISUAL COMMUNICATION-GRAPHIC DESIGN, AAB

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
BEGINNING DRAWING	ART 103	3
MICROSOFT APPLICATIONS	CIS 114	3
COMPOSITION I	ENG 111**	3
INTRODUCTION TO VISUAL	VCT 103	3
COMMUNICATION		
PHOTO EDITING	VCT 108*	2
PHOTOGRAPHY	VCT 182	3
		TOTAL HOURS: 15



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
VECTOR GRAPHICS	VCT 120*	3
LAYOUT & DESIGN	VCT 111*	3
MULTIMEDIA PRODUCTION	VCT 266*	3
VIDEO PRODUCTION	VCT 268*	3
MATHEMATICS ELECTIVE	SEE ATTACHED ASSOCIATE	3
	DEGREE FOR INFORMATION	
		TOTAL HOURS: 30

+ ADDITIONAL 34 CREDITS FOR ASSOCIATE DEGREE

=NORTHWEST STATE COMMUNITY COLLEGE TRANSFER

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Visual Communication-Graphic Design, AAB NORTHWEST STATE COMMUNITY COLLEGE

Campus Offered Credits Required
Archbold 64

Required Courses

1st Semester

ART103 Beginning Drawing 3 credits
CIS114 Microsoft Applications 3 credits
ENG111 Composition I 3 credits
+ VCT103 Introduction to Visual Communication 3 credits

- + VCT108 Photo Editing 2 credits
- + VCT182 Photography 3 credits

2nd Semester

- + CIS119 PowerPoint 1 credit
- + CIS129 Web Page Development 3 credits ENG112 Composition II 3 credits
- + VCT111 Layout & Design 3 credits
- + VCT120 Vector Graphics 3 credits Mathematics Elective 3 credits

3rd Semester

ACC111 Financial Accounting 4 credits
HUM230 Art Appreciation 3 credits
+ VCT261 3D Computer Modeling 3 credits
+ VCT268 Video Production 3 credits
Natural Science Elective 3 credits

4th Semester

- + VCT204 Concepts of Visual Communication 3 credits
- + VCT266 Multimedia Production 3 credits
 Communication Elective 3 credits
 Program Elective* 3 credits
 Social Behavioral Science Elective 3 credits
- + Students must attain a 2.00 grade point average in these technical courses to graduate.

Course curriculum is subject to change. Please consult with an Academic Advisor for up-to-date information.

* Students planning to transfer to a four-year college should take MTH112 Trigonometry.

Program Information

The visual communication-graphic design degree prepares students for a variety of positions utilizing computer graphics and imaging skills. Graduates are prepared to produce public relations materials including print, video and electronic media.

Graduates may transfer as juniors to complete a bachelor's degree in visual communications.

Career Outlook

Opportunities within this field are expected to grow due to the emphasis on visual appeal in product design, advertising, marketing, web design and television. Willingness to relocate, however, may be an important factor since many of the opportunities will be in larger metropolitan areas.

Program Learning Outcomes

The students will be able to:

- 1. Produce, analyze, and evaluate photos and video taken under various conditions.
- 2. Analyze, edit, and prepare photos for various uses.
- 3. Apply knowledge of graphics and drawing skills to create a product.
- 4. Manipulate software programs to create and enhance graphics, web pages, and print layouts.
- 5. Plan, prepare, and produce a multimedia project.

Electives

Communication Electives:

BUS211 Business Communications ENG113 Speech ENG210 Technical Writing ENG214 Discussion & Conference Methods ENG217 Introduction to Creative Writing

Mathematics Electives:

BUS110 Business Math/Calculators MTH109 College Algebra (Transfer)

Program Electives:

ART210 Oil/Acrylic Painting
ART220 Beginning Sculpture
BUS221 Business Law
CAD111 CAD I
MGT110 Management
MTH112 Trigonometry (Transfer)

VCT289 VCT Co-Op Experience

Natural Sciences Electives:

BIO100 World of Science

BIO101 Principles of Biology

BIO115 Ecology

BIO131 Nutrition

BIO150 The Human Body

BIO180 Genetics

BIO201 General Biology I

BIO202 General Biology II

BIO231 Anatomy & Physiology

BIO232 Anatomy & Physiology II

BIO257 Microbiology

CHM100 World of Science

CHM101 Principles of Chemistry

CHM201 General Chemistry I

CHM202 General Chemistry II

CHM256 Principles of Biochemistry

PHY100 World of Science

PHY101 Principles of Physical Science

PHY140 Astronomy

PHY150 Geology

PHY251 Physics: Mechanics & Heat

PHY252 Physics: Electricity & Magnetism

Social/Behavioral Sciences Electives:

HIS101 US History Pre-1876

HIS102 US History Post-1876

HIS203 US Since 1945

HIS210 The Modern World

HIS234 History of the Old Northwest Territory

PSY110 General Psychology

PSY210 Abnormal Psychology

PSY220 Social Psychology

PSY230 Human Growth & Development

SSC101 Sociology

SSC102 Sociology Sustainable World

SSC110 General Anthropology

SSC120 American Government

SSC130 Comparative Government

SSC210 Cultural Diversity

SSC220 Interpersonal Violence

Related to High School Program: Landscape & Turfgrass Management

LANDSCAPE AND TURFGRASS MANAGEMENT PROGRAM, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION I	ENG 111**	3
APPLIED PRACTICAL MATH	MTH 155	3
SOIL SCIENCE, FERTILIZER & PEST	LTM 102*	4
WOODY LANDSCAPE PLANTS	LTM 136	5
		TOTAL HOURS: 15



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
PLANT SCIENCE	LTM 101	3
COMPOSITION II	ENG 112**	3
TURFGRASS MANAGEMENT I	LTM 132	3
ARBORICULTURE	LTM 140	3
TURFGRASS EQUIPMENT REPAIR	LTM 110*	2
FIELD EXPER IN NATURAL SCIENCE	LTM 291	1
		TOTAL HOURS: 30

+ ADDITIONAL 36 CREDITS FOR ASSOCIATE DEGREE

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Landscape and Turfgrass Management Program, AAS (Owens Code: LTMP) OWENS COMMUNITY COLLEGE

Campus Offered
Toledo

Credits Required

66

Required Courses

1st Semester

```
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3) MTH 155 - Applied Practical Math Credits: 3(Lec: 3) LTM 101 - Plant Science Credits: 3(Lec: 2 Lab: 3) LTM 102 - Soil Science, Fertilizer & Pest Credits: 4(Lec: 3 Lab: 3) LTM 136 - Woody Landscape Plants Credits: 5(Lec: 4 Lab: 3)
```

2nd Semester

```
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)
LTM 132 - Turfgrass Management I Credits: 3(Lec: 3)
LTM 140 - Arboriculture Credits: 3(Lec: 2 Lab: 3)
LTM 181 - Prof Issues In Land & Turf Credits: 2(Lec: 2)
LTM 291 - Field Exper in Natural Science Credits: 1(Oth: 1)
IST 131 - Computer Concepts and Apps Credits: 3(Lec: 3)
```

3rd Semester - Summer

```
LTM 182 - Spec Problems in Land/Turf Credits: 2(Lec: 2)
LTM 292 - Field Exper in Nat Science II Credits: 2(Oth: 2)
```

4th Semester

```
LTM 150 - Landscape Construction & Maint Credits: 3(Lec: 2 Lab: 3)
LTM 156 - Herbaceous Plant Material Credits: 3(Lec: 2 Lab: 3)
LTM 250 - Landscape Graphics Credits: 3(Lec: 2 Lab: 3)
_____ - Landscape and Turfgrass Management Elective Credits: 3(Lec: 2 Lab: 3)
*Select from: LTM 154, LTM 170, LTM 174 or other approved LTM Elective.
SPE 101 - Public Speaking Credits: 3(Lec: 3)
or
SPE 210 - Small Group Communication Credits: 3(Lec: 3)
```

```
LTM 138 - Diseases & Insect Pest of Orn Credits: 4(Lec: 4)
LTM 251 - Landscape Design Credits: 3(Lec: 2 Lab: 3)
______ - Social and Behavioral Sciences Elective Credits: 3(Lec: 3)
LTM 110 - Turfgrass Equipment Management Credits: 2(Lec: 1 Lab: 3)
```

```
or
DSL 103 - Small Engine Repair Credits: 2(Lec: 1 Lab: 3)
LTM 252 - Landscape CAD Credits: 2(Lec: 1 Lab: 3)
or
LTM 260 - Spanish for the Green Industry Credits: 2(Lec: 2)
LTM 295 - Land-Turf Management Capstone Credits: 1(Lec: 1)
```

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program prepares students for entry- and supervisory-level positions in firms that provide maintenance and management services in the landscape, turfgrass and related horticultural industries. The rapidly growing markets for these services offer excellent opportunities for graduates.

Student Learning Outcomes

Student will be able to:

- 1. Identify a wide range of woody and herbaceous landscape plants.
- 2. Understand many horticultural practices such as; planting, pruning, watering, fertilizing and others
- 3. Identify and recommend control measures for a variety of insects and diseases.
- 4. Understand the design, estimating and installation process for landscape projects.
- 5. Understand the "Science of Plants", including things such as: morphology, anatomy, growth and development, soil science and overall plant health.

Related High School Program: Marketing

MARKETING AND SALES TECHNOLOGY, AAB

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COLLEGE & CAREER PROFESSIONAL	BUS 102*	3
COMPOSITION I	ENG 111**	3
CONTEMPORARY BUSINESS	BUS 101*	3
COMPUTER CONCEPTS AND APPS	IST 131	3
MATHEMATICS OF FINANCE	MTH 121	3
		TOTAL HOURS: 15



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION II	ENG 112**	3
MICROECONOMICS	ECO 201**	3
MARKETING	MKT 101*	3
PRINCIPLES OF MANAGEMENT	BUS 120	3
PERSONAL SELLING	MKT 125*	3
		TOTAL HOURS: 30

+ ADDITIONAL 32 CREDITS FOR ASSOCIATE DEGREE

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Marketing and Sales Technology, AAB (Owens Code: MKTS) OWENS COMMUNITY COLLEGE

Campus Offered

Credits Required

Toledo and Toledo Hybrid

62

Required Courses

1st Semester

```
BUS 102 - College & Career Professional Credits: 3(Lec: 3)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
BUS 101 - Contemporary Business Credits: 3(Lec: 3)
IST 131 - Computer Concepts and Apps Credits: 3(Lec: 3)
MTH 121 - Mathematics of Finance Credits: 3(Lec: 3)
```

2nd Semester

```
ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3) ECO 201 - Microeconomics *Ohio Transfer Module Course Credits: 3(Lec: 3) MKT 101 - Marketing Credits: 3(Lec: 3) BUS 120 - Principles of Management Credits: 3(Lec: 3) MKT 125 - Personal Selling Credits: 3(Lec: 3)
```

3rd Semester

```
ENG 120 - Business Communications Credits: 3(Lec: 3)
MTH 213 - Introductory Statistics *Ohio Transfer Module Course Credits: 3(Lec: 3)
MKT 242 - Marketing on the Web Credits: 3(Lec: 3)
ACC 101 - Introductory Financial Acct Credits: 3(Lec: 3)
MKT 270 - Market Info & Consumer Analy Credits: 3(Lec: 3)
```

```
PHL 101 - Intro to Philosophy *Ohio Transfer Module Course Credits: 3(Lec: 3)

Or

PHL 102 - Principles of Ethics *Ohio Transfer Module Course Credits: 3(Lec: 3)

PSY 101 - General Psychology *Ohio Transfer Module Course Credits: 3(Lec: 3)

Or

SOC 101 - Sociology *Ohio Transfer Module Course Credits: 3(Lec: 3)

BUS 200 - The Legal Environment of Bus Credits: 3(Lec: 3)

MKT 210 - Marketing Planning & Mgmt Credits: 3(Lec: 3)

MKT 230 - Mkt of Service Businesses Credits: 3(Lec: 3)

MKT 115 - Retailing Management Credits: 3(Lec: 3)

Or

MKT 225 - Sales Management Credits: 3(Lec: 3)

Or

MKT 245 - Advertising Credits: 3(Lec: 3)
```

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

Students completing this program are prepared for numerous jobs, such as sales representatives, retail store managers, etc. This program focuses on understanding and satisfying consumer needs and highlights the marketing firm's environment and influence. The program features a one-semester cooperative work experience, which provides an environment for the application of learned classroom techniques while under faculty and management supervision.

Related High School Program: Medical & Legal Office Management

MEDICAL OFFICE SUPPORT MAJOR, AAB

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
CONTEMPORARY BUSINESS	BUS 101	3
COMPOSITION I	ENG 111**	3
FUNDAMENTALS OF COMPUTING	IST 100*	1
MATHEMATICS OF FINANCE	MTH 121	3
BEGINNING KEYBOARDING	OAD 100*	2
DOCUMENT FORMATTING	OAD 101*	2
INTRO TO OFFICE ADMINISTRATION	OAD 135	3
		TOTAL HOURS: 17



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION II	ENG 112**	3
WORD PROCESSING APPS-WORD	OAD 102*	3
KEYBOARD SPEED & DEVELOP	OAD 103	1
LANGUAGE OF MEDICINE	HIT 125	3
PRESENTATION MGMT-POWER POINT	OAD 270*	3
ELECTRONIC HEALTH RECORDS	OAD 262*	2
		TOTAL HOURS: 32

+ ADDITIONAL 30.5 CREDITS FOR ASSOCIATE DEGREE

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Medical Office Support Major, AAB (Owens Code: MDOF) OWENS COMMUNITY COLLEGE

Campus Offered

Credits Required

Toledo, Toledo Hybrid, and Findlay

62.5

Required Courses

1st Semester

*If not keyboarding proficient (25wpm) enroll in OAD 100 in the 1st 8 Week Session and IST 100 in the 2nd 8 Week Session.

BUS 101 - Contemporary Business Credits: 3(Lec: 3)

ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)

IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)

MTH 121 - Mathematics of Finance Credits: 3(Lec: 3)

OAD 100 - Beginning Keyboarding Credits: 2(Lec: 2)

OAD 101 - Document Formatting Credits: 2(Lec: 2)

OAD 135 - Intro to Office Administration Credits: 3(Lec: 3)

2nd Semester

ACC 101 - Introductory Financial Acct Credits: 3(Lec: 3)

ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)

IST 235 - Spreadsheet Applications-Excel Credits: 3(Lec: 3)

OAD 102 - Word Processing Apps–Word Credits: 3(Lec: 3)

OAD 103 - Keyboard Speed & Develop Credits: 1(Lec: 1)

HIT 125 - Language of Medicine **Credits:** 3(Lec: 3)

3rd Semester

ECO 201 - Microeconomics *Ohio Transfer Module Course Credits: 3(Lec: 3)

OAD 110 - Integrated Office Communication Credits: 3(Lec: 3)

OAD 140 - Office Procedures Credits: 3(Lec: 3)

OAD 270 - Presentation Mgmt-Power Point **Credits:** 3(Lec: 3)

OAD 250 - Medical Law and Ethics **Credits:** 2(Lec: 2)

HSC 120 - BLS Healthcare Providers Credits: .50(Lec: 8)

4th Semester

OAD 262 - Electronic Health Records **Credits:** 2(Lec: 2)

OAD 260 - Admin Office Management Credits: 3(Lec: 3)

OAD 265 - Medical Office Simulation Credits: 2(Lec: 2)

OAD 293 - Office Admin Co Op Work Exp Credits: 2(Lec: 1 Other: 10)

SOC 260 - Medical Sociology **Credits:** 3(Lec: 3)

MAP 230 - Coding and Reimbursement Credits: 2(Lec: 2)

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This major prepares students for the following career categories: Medical Office Assistant; Medical Receptionist; Medical Office Specialist. The Medical Office Support program prepares individuals, under the supervision of office managers and other professionals, to perform administrative duties in a medical, clinical, or health care facility/system office environment. Includes instruction in general office skills, data processing, office equipment operations, principles of medical record-keeping and business regulations, medical/clinical office procedures and communication skills.

Student Learning Outcomes

Student will be able to:

- 1. Identify and perform basic problem solving and critical thinking skills to solve office-related problems.
- 2. Demonstrate effective hands-on use of computer application software.
- 3. Demonstrate effective research skills and tools related to the job.
- 4. Demonstrate effective communication with the technologies that may be utilized in an office setting.
- 5. Demonstrate workplace skills related to the field of office administration.
- 6. Employ appropriate customer service skills.
- 7. Understand and identify medical ethics and law pertinent to the allied health and related professions.
- 8. Understand medical terminology used in the allied health and related professions.
- 9. Demonstrate the understanding of patient data, billing, insurances, and collections.

Related High School Program: Medical Technologies

HEALTH INFORMATION TECHNOLOGY, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
HLTH INFO MAGMT & APPLICATIONS	HIT 102	4
LANGUAGE OF MEDICINE	HIT 125*	3
PATHOPHYSIOLOGY	HIT 236	3
ANATOMY AND PHYSIOLOGY I	BIO 211**	4
COMPUTER CONCEPTS AND APPS	IST 131	3
		TOTAL HOURS: 17



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
PHARMACOLOGY	HIT 231	2
CLIN CLASSIFICATION SYST I	HIT 233	5
ANATOMY AND PHYSIOLOGY II	BIO 212**	4
COMPOSITION I	ENG 111*	3
		TOTAL HOURS: 31

+ ADDITIONAL 34 CREDITS FOR ASSOCIATE DEGREE

^{*}Denotes Dual Enrollment Courses Offered in the High School Program

^{**}Denotes Ohio Transfer Module Course

^{***}Denotes Career Technical Credit Transfer: (CT)²

Health Information Technology, AAS (Owens Code: HINF) OWENS COMMUNITY COLLEGE

Successful completion of a program of study at the College does not guarantee licensure, certification, employment in a relevant occupation, or transferability/admission to other educational institutions or programs.

Campus Offered

Credits Required

Toledo and Toledo Hybrid

65

Required Courses

1st Semester

```
HIT 102 - Hlth Info Mgmt & Applications Credits: 4(Lec: 3 Lab: 3)
HIT 125 - Language of Medicine Credits: 3(Lec: 3)
HIT 236 - Pathophysiology Credits: 3(Lec: 3)
BIO 211 - Anatomy and Physiology I *Ohio Transfer Module Course Credits: 4(Lec: 3 Lab: 3)
IST 131 - Computer Concepts and Apps Credits: 3(Lec: 3)
```

2nd Semester

```
HIT 231 - Pharmacology Credits: 2(Lec: 2)
HIT 233 - Clin Classification Syst I Credits: 5(Lec: 4 Lab: 3)
BIO 212 - Anatomy and Physiology II *Ohio Transfer Module Course Credits: 4(Lec: 3 Lab: 3)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
MTH 213 - Introductory Statistics *Ohio Transfer Module Course Credits: 3(Lec: 3)
```

3rd Semester

```
HIT 223 - Legal Concepts in Health Care Credits: 2(Lec: 2)
HIT 230 - Professional Practice Exp I Credits: 1(Seminar: 1 Clinical: 5)
HIT 232 - Ancillary Health Records Credits: 2(Lec: 2)
HIT 235 - Healthcare Stats & Registries Credits: 2(Lec: 2)
HIT 241 - Clin Classification Syst II Credits: 3(Lec: 2 Lab: 3)
PHL 250 - Medical Ethics Credits: 3(Lec: 3)
IST 132 - Data Mgmt Using Excel & Access Credits: 3(Lec: 3)
```

```
HIT 234 - Professional Practice Exp II Credits: 1(Seminar: 1 Clinical: 5) HIT 237 - Health Care Information System Credits: 3(Lec: 2 Lab: 3) HIT 242 - Healthcare Quality Improvement Credits: 2(Lec: 2) HIT 243 - Reimbursement Methodologies Credits: 2(Lec: 2) HIT 246 - Management of Health Info Svcs Credits: 2(Lec: 2) HIT 248 - Clin Classification Sys III Credits: 3(Lec: 2 Lab: 3) HIT 296 - HIT Capstone Credits: 2(Lec: 2)
```

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account. Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

Health Information is the profession that focuses on health care data and the management of health care information resources. Health information management represents a continuum of practice concerned with health related information and the management of systems to collect, store, process, retrieve, analyze, disseminate and communicate information related to the research, planning, provision, financing and evaluation of health services. A career in health information technology combines the knowledge of and skills from the discipline of medicine, information management, business applications and computer technology within the healthcare industry.

Graduates of associate degree educational program are known as health information technicians. The tasks or functions performed by the health information technicians are numerous and continually change within the work environment. The job title and work setting will dictate the actual tasks performed by the health information technician. However, in general these individuals perform a variety of technical health information functions including organizing, analyzing, and technically evaluating health information; compiling various administrative and health statistics; and coding diseases, operations, and other procedures for research data bases and reimbursement.

Responsibilities also include maintaining and using a variety of health information indexes, creating special registries for researchers, and storage and retrieval systems; input and retrieve computerized health data, and controlling the use and release of health information. Their task responsibility may also include general supervision.

Student Learning Outcomes

Student will be able to:

- 1. Demonstrate ability to conduct quantitative and qualitative analysis of health records.
- 2. Apply quality improvement tools and techniques to improve departmental processes.
- 3. Collect, compute, analyze, interpret and present statistical data related to health care services.
- 4. Code, classify and index diagnoses and procedures for the purpose of reimbursement, standardization, retrieval and statistical analysis.
- 5. Apply principles of supervision and leadership and the tools used to effectively manage human resources, financials and the methods for analyzing and improving departmental systems.
- 6. Apply legal principles, policies, regulations and standards for the control and use of health information.
- 7. Apply knowledge of HIM Principles in professional work place setting.
- 8. Demonstrate behaviors reflective of professionalism.

Related High School Program: Medical Technologies

REGISTERED NURSE PROGRAM, AAS

1	15 HOUR PATHWAY	
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSTION I	ENG 111**	3
BASIC NUTRITION	FNH 121	2
ANATOMY AND PHYSIOLOGY I	BIO 211**	4
SPEECH ELECTIVE	SEE ATTACHED ASSOCIATE	3
	DEGREE FOR INFORMATION	
INTRODUCTORY STATISTICS	MTH 213**	3
		TOTAL HOURS: 15



30	HOUR PATHWAY	
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
FUNDAMENTALS OF COMPUTING	IST 100	1
ANATOMY AND PHYSIOLOGY II	BIO 212**	4
COMPOSTION II	ENG 211**	3
GENERAL PSYCHOLOGY	PSY 101**	3
MICROBIOLOGY & IMMUNOLOGY	BIO 231	4
		TOTAL HOURS: 30

+ ADDITIONAL 42 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Additional college credits earned in the related high school program not aligned to this associate degree program:

*HIT 125 (3) LANGUAGE OF MEDICINE

Registered Nurse Program, AAS (Owens Code: NRSP) OWENS COMMUNITY COLLEGE

Successful completion of a program of study at the College does not guarantee licensure, certification, employment in a relevant occupation, or transferability/admission to other educational institutions or programs.

Campus Offered

Credits Required

Toledo, Toledo Hybrid, and Findlay

72

Required Courses

1st Semester

*Upon acceptance into the Registered Nursing Program, NRS 121 and NRS 130 may be taken one semester prior to NRS 122.

FNH 121 - Basic Nutrition Credits: 2(Lec: 2)

BIO 211 - Anatomy and Physiology I *Ohio Transfer Module Course Credits: 4(Lec: 3 Lab: 3)

NRS 121 - Nursing Concepts Credits: 3(Lec: 3)

NRS 122 - Nursing Skills Credits: 5(Lec: 1 Lab: 3 Oth: 9)

NRS 130 - Pharmacology Credits: 3(Lec: 3)

IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)

2nd Semester

BIO 212 - Anatomy and Physiology II *Ohio Transfer Module Course Credits: 4(Lec. 3 Lab. 3)

ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)

NRS 123 - Adult Health Issues I **Credits:** 6(Lec: 3 Lab: 9)

NRS 131 - Pathophysiology **Credits:** 3(Lec: 3)

PSY 101 - General Psychology *Ohio Transfer Module Course Credits: 3(Lec: 3)

3rd Semester

BIO 231 - Microbiology & Immunology Credits: 4(Lec: 3 Lab: 3)

ENG 112 - Composition II *Ohio Transfer Module Course Credits: 3(Lec: 3)

NRS 224 - Adult Health Issues II **Credits:** 5(Lec: 2.60 Lab: 1 Clinical: 6.21) (9 Week Course)

NRS 225 - Adult Mental Health Issues **Credits:** 4(Lec: 2.80 Clinical: 3.60) (6 Week Course)

NRS 230 - Community/Family Health Issues **Credits:** 2(Lec: 2)

4th Semester

NRS 226 - Adult Health Issues III Credits: 3(Lec: 1.7 Lab: .60 Clinical: 3.3) (5 Week Course)

NRS 227 - Mat & Neonatal Health Issues Credits: 3(Lec: 1.70 Lab: .60 Clinical: 3.30) (5 Week Course)

NRS 228 - Child Health Issues Credits: 3(Lec: 1.70 Lab: .60 Clinical: 3.30) (5 Week Course)

NRS 296 - Nursing Clinical App - RN **Credits:** 2(Lec: 1 Oth: 7)

*Includes 112 hours of clinical experience with an RN preceptor in a community agency and 16 hours of scheduled seminars with a nursing faculty member weekly throughout the semester.

_____ - Speech Elective **Credits:** 3(Lec: 3)

^{*}Select from: SPE 101, SPE 102, or SPE 210.

Petition for Degree Completion

Students are eligible to become a candidate for an Associate Degree when the student has completed all necessary requirements. Students who are registering for their final semester of course work and plan to graduate must submit a petition for degree completion by accessing their Ozone account.

Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

This program is designed to prepare graduates for Registered Nursing positions in a variety of healthcare settings. The program combines studies at Owens Community College with planned and guided experience in client care in healthcare facilities and community agencies.

Student Learning Outcomes

Registered Nursing Graduates will be able to:

- 1. Establish a caring, therapeutic relationship, within a culturally diverse population.
- 2. Utilize the nursing process and evidence-based practice to make valid clinical judgments and manage care in a collaborative effort with health team members.
- 3. Provide a supportive and protective nursing environment, by consistently demonstrating nursing practice that reduces patient safety risk.
- 4. Use patterns of knowing; personal, empirical, ethical, and aesthetic, to promote health education and management.
- 5. Incorporate communication skills when collaborating with the patient, family members, and other health team members.
- 6. Apply principles of teaching and learning in the delivery of care.
- 7. Demonstrate responsibility and accountability for professional self-growth and for the growth of the nursing profession through mentoring of other nurses.
- 8. Use various health information systems and current technology to manage patient care.

Related High School Program: Public Safety/EMT-Fire Science

EMERGENCY SERVICES TECHNOLOGY, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
COMPOSITION I	ENG 111**	3
ANATOMY AND PHYSIOLOGY I	BIO 211**	4
PHYSICAL SCIENCE FOR TECH	PHY 115	4
EMERGENCY MEDICAL TECHNICIAN-B	EMM 270	5
FUNDAMENTALS OF COMPUTING	IST 100	1
		TOTAL HOURS: 17



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
INTRODUCTORY STATISTICS	MTH 213**	3
INTRO TO TECHNICAL COMM	ENG 130	3
FIRE FIGHTER I	FST 151	5
SPEECH ELECTIVE	SEE ATTACHED ASSOCIATE	3
	DEGREE FOR INFORMATION	
		TOTAL HOURS: 31

+ ADDITIONAL 32 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

Additional college credits earned in the related high school program not aligned to this associate degree program:

***CTEMTB002 (7) EMERGENCY MEDICAL TECHNICIAN-BASIC

Emergency Services Technology, AAS (Owens Code: EMST) OWENS COMMUNITY COLLEGE

Successful completion of a program of study at the College does not guarantee licensure, certification, employment in a relevant occupation, or transferability/admission to other educational institutions or programs.

Campus Offered

Credits Required

Toledo 63

Required Courses

1st Semester

```
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
BIO 211 - Anatomy and Physiology I *Ohio Transfer Module Course Credits: 4(Lec: 3 Lab: 3)
PHY 115 - Physical Science for Tech Credits: 4(Lec: 3 Lab: 3)
EMM 270 - Emergency Medical Technician-B Credits: 5(Lec: 4 Lab: 4)
IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)
```

2nd Semester

```
EMM 277 - Paramedic I Credits: 8(Lec: 5 Lab: 6 Clinical: 5)
FST 151 - Fire Fighter I Credits: 5(Lec: 3 Lab: 7)
______ - Speech Elective Credits: 3(Lec: 3)
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3rd Semester

```
FST 152 - Fire Fighters II Credits: 4(Lec: 3 Lab: 4)
EMM 279 - Paramedic II Credits: 8(Lec: 5 Lab: 6 Clinic: 5)
BIO 212 - Anatomy and Physiology II *Ohio Transfer Module Course Credits: 4(Lec: 3 Lab: 3)
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4th Semester

```
EMM 281 - Paramedic III Credits: 8(Lec: 3 Lab: 9 Clinic: 16)
MTH 213 - Introductory Statistics *Ohio Transfer Module Course Credits: 3(Lec: 3)
ENG 130 - Intro to Technical Comm Credits: 3(Lec: 3)
```

Petition for Degree Completion

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Visit the Owens website for petition deadline dates and fee information. For more information regarding degree requirements and graduation refer to the Graduation Requirements Policy and Procedures.

Program Information

The Emergency Services Technology program prepares graduates to compete for entry level positions at local fire/EMS stations with dual certifications as a Nationally Registered Paramedic and Firefighter I & II in the State of Ohio. Firefighter certifications are ProBoard eligible.

Student Learning Outcomes

- 1. Students will effectively communicate.
- 2. Students will access and interpret information.
- 3. Students will problem solve.
- 4. Students will achieve entry level competency for both Fire Science and Paramedic studies.

Related High School Program: Welding

WELDING MAJOR, AAS

15 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
SYS OF ENG & INT SYSTEMS	AIM 105	3
BLUEPRINT READING FOR INDUSTRY	AIM 140	2
MACHINING I	AIM 160	2
COMPOSITION I	ENG 111**	3
APPLIED ALGEBRA	MTH 151	2
WELDING: BLUEPRINT READING	WLD 190*	2
INTRO TO THE WELDING PROCESSES	WLD 191*	2
		TOTAL HOURS: 16



30 HOUR PATHWAY		
COURSE NAME	CATALOG NUMBER	CREDIT HOURS
MACHINING II	AIM 161	2
FUNDAMENTALS OF COMPUTING	IST 100	1
OSHA GENERAL SAFETY	ENV 110	3
SMAW (FLAT & HORIZONTAL)	WLD 192*	2
GMAW WELDING	WLD 262*	2
ELECTIVE CREDITS	SEE ATTACHED ASSOCIATE	6
	DEGREE FOR INFORMATION*	
		TOTAL HOURS: 30

+ ADDITIONAL 31 CREDITS FOR ASSOCIATE DEGREE

=OWENS COMMUNITY COLLEGE TRANSFER

- *Denotes Dual Enrollment Courses Offered in the High School Program
- **Denotes Ohio Transfer Module Course
- ***Denotes Career Technical Credit Transfer: (CT)²

College credits earned in the related high school program aligned to this associate degree program that satisfies elective requirements:

*WLD 267 (2) WELDING FABRICATION & LAYOUT

***CTW001 (3) TIG GTAW PLATE

WELDING

***CTW002 (3) TIG GTAW PIPE WELDING

***CTW003 (3) SMAW PLATE WELDING ***CTW004 (3) SMAW PIPE WELDING ***CTW005 (3) GMAW PLATE WELDING ***CTW006 (3) GMAW PIPE WELDING

Welding Major, AAS (Owens Code: WELD) OWENS COMMUNITY COLLEGE

Campus Offered
Toledo

Credits Required

61

Required Courses

*High school and adult career-technical students who successfully complete specified technical programs are eligible to have technical credit transfer. For more information on career-technical course work that students can complete for transfer, visit The University System of Ohio Board of Regents, Career-Technical Credit Transfer (CT)² website or contact your advisor.

1st Semester

```
AIM 105 - Sys of Eng & Int Systems Credits: 3(Lec: 2 Lab: 3)
AIM 140 - Blueprint Reading for Industry Credits: 2(Lec: 2)
AIM 160 - Machining I Credits: 2(Lec: 1 Lab: 3)
ENG 111 - Composition I *Ohio Transfer Module Course Credits: 3(Lec: 3)
MTH 151 - Applied Algebra Credits: 2(Lec: 2)
WLD 190 - Welding: Blueprint Reading Credits: 2(Lec: 2)
WLD 191 - Intro to the Welding Processes Credits: 2(Lec: 1 Lab: 3)
```

2nd Semester

```
AIM 161 - Machining II Credits: 2(Lec: 1 Lab: 3)
IST 100 - Fundamentals of Computing Credits: 1(Lec: 1)
ENV 110 - OSHA General Safety Credits: 3(Lec: 3)
STM 105 - Technology in Society Credits: 2(Lec: 2)
WLD 192 - SMAW (Flat & Horizontal) Credits: 2(Lec: 1 Lab: 3)
WLD 262 - GMAW Welding Credits: 2(Lec: 1 Lab: 3)
```

3rd Semester

```
AIM 165 - Material Science Credits: 2(Lec: 1 Lab: 3)
MTH 152 - Applied Geometry/Trig Credits: 2(Lec: 2)
PHY 151 - Industrial Physics-Mechanics Credits: 2(Lec: 2)
PHY 152 - Industrial Physics-Ht Li Sound Credits: 2(Lec: 2)
PSY 111 - Indust/Organization Psych Credits: 3(Lec: 3)
WLD 193 - SMAW (Vertical and Overhead) Credits: 2(Lec: 1 Lab: 3)
WLD 261 - Pipe Welding Credits: 2(Lec: 1 Lab: 3)
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4th Semester

```
QCT 110 - Statistical Quality Control Credits: 3(Lec: 3)
______ - Speech Elective Credits: 3(Lec: 3)
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WLD 264 - Welding: Plate Pre-Cert & Test Credits: 2(Lec: 1 Lab: 3)

WLD 265 - Pipe Welding Pre-Cert & Test Credits: 2(Lec: 1 Lab: 3)

_____ - Elective Credits: 6

*Select from: AIM 100, AIM 105, AIM 110, AIM 120, AIM 130, AIM 143, CAD 115, CAM 120, QCT 120,WLD 110, WLD 124, WLD 263, WLD 267, WLD 268, WLD 269, WLD 270, WLD 291.
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Petition for Degree Completion

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Program Information

This major provides students with knowledge and skills for job placement in the welding field. Students are trained in all aspects of welding including stick, gas, MIG and TIG welding. Students who excel in welding skills may take an Owens Community College plate or pipe welding precertification test. I-CAR Automotive Steel GMAW (MIG) Welding Qualification Test (WQT) is offered to welding and auto body students who wish to achieve the latest certification for auto body welding.

Student Learning Outcomes

Student will be able to:

- 1. Demonstrate knowledge of industry standards for safety and compliance.
- 2. Demonstrate the proper use of manufacturing equipment.
- 3. Understand and apply proper techniques for analyzing and producing drawings.
- 4. Demonstrate an understanding of welding processes, codes, and procedures.
- 5. Differentiate manufacturing processes and their applicability.



Letter of Intent to Participate in College Credit Plus Penta Career Center

PLEASE PRINT
Date AFTER APRIL 1, YOU WILL NEED PERMISSION FROM THE PENTA CAREER CENTER SUPERINTENDENT TO PARTICIPATE.
AFTER APRIL 1, YOU WILL NEED PERMISSION FROM THE PENTA CAREER CENTER SUPERINTENDENT TO PARTICIPATE.
Student Name
Parent/Guardian Name
Home Address
PLEASE INDICATE PREFERRED METHOD OF CONTACT:
Parent Phone Number (Day)(Evening)
Parent Email Address
Student Contact Phone Number
Member School Grade for 2015-2016 School Year
I would like to declare my intent to participate in the College Credit Plus program. I understand tha signing this form does not require that I participate during the coming school year and I may decide not to participate without consequence. I also understand that it is my responsibility to notify my school if I do not gain admission to my selected.
institution of higher education or choose not to participate for some other reason.
In addition, I know that I will need to receive counseling about the College Credit Plus program concerning the rules and regulations for both my school and the college, so that I will understand my responsibilities the benefits and possible risks of participating in the College Credit Plus program.
I have attended a College Credit Plus event that explained the details of the College Credit Plus program. If so, Location:Counselor:Date:
I have not attended a College Credit Plus event that explained the details of the College Credit Plus program.
Student Signature
Parent Signature

Penta Career Center College Credit Plus Textbook Agreement

As a student participating in the College Credit Plus program through Penta Career Center, you are entitled to be provided the textbooks required for the course(s) you are enrolled in free of charge. These textbooks are the property of Penta Career Center and are being loaned to you for the duration of the respective college course for which you are enrolled.

By signing below, I/we agree to the following:

- I understand that if I earn an "F" or withdraw from the course after the specified withdrawal deadline may bring about a financial obligation, which includes the costs of textbooks.
- I understand that if I fail to return the college textbook(s) I will be required to pay for the book and my Career Passport will be held until the fee is paid in full.
- I understand that I am to return the textbook(s) in the same condition I received it/them and failure to do so will result in paying a repair or replacement fee, and my Career Passport will be held until the fee is paid in full.

Oate
Date

[Office use information including textbook name & numbers here]