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Introduction

This Catalog is a guide for students to provide information on the admissions process; financial aid; resources for students; and programs and courses. The Catalog is for information purposes only and does not constitute a contract.

The Tohono O’odham Community College Catalog is the official catalog for Tohono O’odham Community College for academic years 2020-2022. All information including statements on tuition, fees, course offerings, admissions and graduation requirements, is subject to change without notice, obligation, or liability.

Both the printed and online versions of the catalog are official. The print version is based on the best information available at the time of printing. As information changes, the online catalog will be updated. For the most recent information, view the online catalog at www.tocc.edu

College Contact Information

Tohono O’odham Community College (TOCC)

PO Box 3129 (USPS)

Highway 86, Milepost 125.5 North (UPS/FedEx)

Sells, Arizona 85634

Tel: (520) 383-8401

Fax: (520) 383-8403

Campus Locations

S-Kikig Masciiq:ki Location

4520 North Central Avenue, Suite 555
Phoenix, AZ 85012
(480) 593-3447

Campus Locations
History, Vision, Mission, and Goals

TOCC was chartered in 1998 by the Tohono O’odham Nation. The College was accredited in 2005 by the Higher Learning Commission and has since maintained accreditation. All academic classes were held on the TOCC Komckud E-Was:‘osidk Mascamakud (Central Campus) in Sells until 2013 when Education and Student Services moved to the new S-cuk Du’ag Mascamakud (Main Campus) in the Schuk Toak District, which now houses the majority of academic classes. The Komckud E-Was:‘osidk Mascamakud (Central Campus) in Sells continues to hold Art, Art History, Writing, Math and other classes at that site. The Apprenticeship program; Building and Construction Trades program; GED; Land Grant Office; Development; Institutional Effectiveness; and several grant programs are located on the Wisag Kos Mascamakud (West Campus) five miles west of the Komckud E-Was:‘osidk Mascamakud (Central Campus) in Sells.

TOCC Vision

To become the Tohono O’odham Nation’s center for higher education, and to enhance the Nation’s participation in the local, state, national, and global communities.

TOCC Mission

As an accredited and land grant institution, TOCC’s mission is to enhance our unique Tohono O’odham Himdag by strengthening individuals, families, and communities through holistic, quality higher education services. These services will include research opportunities and programs that address academic, life, and development skills.

TOCC Goals

1. To strengthen academic learning that will reinforce a strong competitive spirit to participate in an ever-changing society.
2. To include O’odham Elders as primary resources, instructors, advisors, and counselors as a means of reinforcing Tohono O’odham Himdag.
3. To recruit highly qualified faculty and staff who are dedicated to the art of teaching, advising and service specifically to the Tohono O’odham Community.
4. To ensure the integration of appropriate Tohono O’odham Himdag in the physical environment, curriculum, and processes of the College.
5. To ensure that curricular offerings are relevant to the needs of individuals and communities in fundamental skills, i.e., general reading, writing and math skills.
6. To establish a technology core that will enable the students and the broader community to meet the challenges of the future.
T-Ṣo: ṣon –Our Core

T-Wohocudadag (Our Beliefs)

We believe that T-Wohocudadag provides balance, strengthens us and helps us respect ourselves, other people, and cultures.

T-Apedag (Our Well-Being)

We believe that T-Apedag is inclusive of what is healthy and good for us (physically, spiritually, emotionally, and mentally), and for all that is around us.

T-Pi:k Elida (Our Deepest Respect)

We believe that T-Pi:k Elida is a deep sense of respect for the land, your surroundings, the people, things upon the land, and also for your own self and your life.

I-We:mta (Working Together)

We believe that I-We:mta is crucial for the success of the College, and includes sharing, working together, and giving back to the community.

College Motto:

Ñia ‘oya g t-taccui ‘am hab ‘e-ju:

Our Dream fulfilled
Welcome from the Board of Trustees

We:sicj ac si s-ape has t-eled mamt hab e-ju: k ‘ia ha’ap dada k ia o i-šonc o ia amjed ba’ic o i-himc g e-mascamdag i:ya id ‘eda Kekel Ha-Mašcamaküç, Tohono O’odham Community College. B ‘ac t-eled mamt ge’e o bei g s-ke:g ha’icu macig ‘i:ya.

We are all honored that you all have chosen to be here to begin or to continue your education at Tohono O’odham Community College (TOCC). We believe that you will gain a wealth of knowledge from being here.

The Board of Trustees welcomes you to TOCC. We strive to make our campus a campus for the whole O’odham community and for all who have chosen to come here. We are committed to promoting a learning community and an environment in which the practice of supporting and helping your fellow being, i-we:mta, helps all students to meet their academic dreams and goals.

Whether you are pursuing a career in building and construction technologies, taking pre-college classes, participating in courses for personal development or preparing to transfer to a four year institution, we can help you achieve whatever goals you may set for yourself.

We sincerely hope that while you are here you will take full advantage of all the services as well as the social experiences TOCC has to offer. We believe that education is not just in the classroom but in the whole environment of the college and the Tohono O’odham community. In the spirit of the motto of TOCC, Nía, ‘Oya G T-taccui ‘Am Hab E-ju:, we know that your dreams too will be fulfilled here at Tohono O’odham Community College.

Sincerely

Ofelia Zepeda, Ph.D.
Chair, TOCC Board of Trustees

Dr. Ofelia Zepeda
Chair
Trustee since 2002
From Stanfield, Arizona

Mr. Bernard G. Siquieros
Vice Chair
Trustee since 2002
From Sells District

Ms. Mary Bliss
Member
Trustee since 2019
From Schuck Toak District

Mr. Anthony M. Chana
Secretary and Elder Member
Trustee since 2007
From Gila Aji District

Ms. Elizabeth ‘Libby’ Francisco
Member
Trustee since 2002
From San Xavier District

Mr. Jonas R. Robles
Elder Member
Trustee since 2007
From Gila Aji District
The President and Cabinet Welcome Students to TOCC

Photo 1 Dr. Paul Robertson, President (Photo by Bernard Siquieros)

Sam ‘a’ i masma! Greetings!

Welcome to Tohono O’odham Kekeł Ha-Mașcamakud (Tohono O’odham Community College). TOCC is committed to helping you succeed in your studies. This catalog is a guide to help you enroll in College, apply for financial aid, select a program of study, register for courses, and enjoy your experience.

If you have any questions or concerns about any aspect of your experience at Tohono O’odham Community College (TOCC) please contact a staff or faculty member. They will either answer your questions or concerns or refer you to someone who can.

Your educational journey may be one of the high points of your entire life. It can be a “life changer.” TOCC is honored to be a part of that experience. Your success is ours as well. We are in this together. I am pleased to be able to commend you on the path you have chosen.

Sincerely,

Paul Robertson, Ph.D.

President T’a’ep ’em-ñeí,
Accreditation

In February 2005, Tohono O’odham Community College (TOCC) was awarded accreditation by the Higher Learning Commission (HLC) of the North Central Association. Accreditation ensures that TOCC courses will transfer to other institutions of higher education and acknowledges that TOCC offers quality education programs and provides a system for accountability and continuous improvement. TOCC received continued accreditation for five years from the HLC in May 2011. TOCC completed the process for continued accreditation by submitting its report to its accrediting body HLC on February 26, 2016. A site visit was conducted on March 28 and 29, 2016 by a three-member Team appointed by the HLC. The Team recommended, and the HLC approved, continued accreditation.

Approval by the HLC means that the College’s degree programs are accredited and will transfer to other colleges and universities. TOCC is also a member of Arizona Transfer (AZTransfer), the Arizona General Education Curriculum network, which coordinates Arizona public university and community college course content to ensure credit transfer among them. For more information on Arizona public higher education, transfer and accreditation, see www.aztransfer.com/home

San Carlos Apache College

In 2017 San Carlos Apache College (SCAC) was approved by the Higher Learning Commission to be recognized as a Tohono O’odham Community College (TOCC) site. SCAC was then given permission to offer courses at the college in San Carlos, Arizona. Courses were offered to 58 students there in Fall semester 2017. The intent is for TOCC to support the site until SCAC is accredited independently, with a target date sometime between 2019 and 2021.
Tohono O’odham Himdag

The Tohono O’odham Himdag is the culture, way of life, and values that are uniquely held by the Tohono O’odham. Tohono O’odham Community College is committed to encouraging and preserving the Himdag for its students and transmitting the knowledge and values of Himdag to future generations.

Weaving Curriculum into Himdag

Throughout its curriculum, TOCC takes steps to encourage growth of students’ cultural knowledge and to transmit learning in a way that respects the Tohono O’odham Himdag. For example, class projects may involve interaction with elders; lectures often include examples from the land and society of the Tohono O’odham; degree programs are developed with the needs of the Tohono O’odham Nation in mind; and the College meets frequently with groups from the community to listen and share plans for the future.

Himdag Requirement

TOCC requires all students, as well as all regular employees, to pass the three-credit course HIS 122 Tohono O’odham History and Culture and a full four-credit course Tohono O’odham Language course (THO 101 or THO 106).
Chapter 1 – Getting Started

Admissions Policies

Tohono O’odham Community College (TOCC) is an open-enrollment institution. That means any person, native or non-native, who meets the criteria listed below is eligible for enrollment at the College. While TOCC students are primarily residents of the Tohono O’odham Nation, many come from other tribal nations in Arizona and other states.

Eligibility for admission is established by meeting one of the following criteria:

- An earned high school diploma; or
- A GED Certificate; or
- Is a transfer student from an accredited college or university; or
- Is a student currently attending another higher education institution; or
- Is dually enrolled; or
- Is a current high school student under age 16 who has received permission from the high school and parents or legal guardian; or
- Is an individual age 16 or over who wants to take college classes for credit. (The individual will not be eligible for Pell grant funding without completion of high school or GED.).

Full-Time and Part-Time Status

Students who enroll for 12 or more credits are full-time student while those taking fewer than 12 are part-time students.

A student taking classes for personal interest are non-degree seeking students. Students and community members are welcome to take courses for personal interest.

TOCC Admission Categories

- Regular degree seeking (any student working towards a degree, certificate, or completion of other program);
- Dual enrollment (high school students who are taking TOCC classes for credit earned at both TOCC and their high school);
- Special admissions;
- Underage student admissions (for students 16 years of age or younger); and,
- Personal interest.

Regular Admissions

A regular student is one who is a high school graduate or GED recipient and who is working toward the completion of a certificate or degree.

Cases for Special Admissions

- A student who is not a high school graduate or a GED recipient and who is enrolling in credit courses and/or programs;
- A student who is enrolled in courses that do not lead to the completion of a certificate and/or degree; or,
- A student who is less than 16 years of age.

**Underage Student Admissions**

An underage student is any student who is 16 years of age or younger. Provided TOCC’s General Parameters for Underage Admission have been met, underage students will not be denied admission to TOCC for any of the following reasons: (1) age, (2) lack of high school diploma, (3) lack of high school certificate or equivalency or (4) school grades. Additionally, underage students will not be denied admission due to lack of permission from school officials, or lack of concurrent enrollment in a public or private school.

Admission to TOCC does not guarantee admission to a specific degree program or to all courses offered by TOCC. For a copy of TOCC’s General Parameters for Underage Admission, please contact the Director of Admissions or visit our website to obtain a copy. The Dean of Student Services or designee will meet with underage students and a parent or legal guardian to explain college wide policies, code of conduct, and procedures of special admission for underage students.

**Student Orientation**

Orientation is designed to help students succeed in college and to provide them with the information about programs and services, transferring to another educational institution, study skills, and deadlines within the academic calendar. Orientation schedules are published each semester on the TOCC website ([www.tocc.edu](http://www.tocc.edu)) and may be obtained from Student Services. Orientations are offered before the start of each semester.

**TOCC Bookstore**

The TOCC Bookstore stocks textbooks for college courses, as well as school supplies, TOCC memorabilia, local souvenirs, and a small collection of everyday necessities. Students should check with their instructors and on the course syllabus for the required textbooks and materials needed for classes.

Before textbooks can be taken from the store, payment must be made in full unless the student is on the list of Pell and other scholarship recipients for the relevant semester. The Bookstore accepts payment for books in cash or credit card, or by presentation of a third-party guarantee. Examples of third-party guarantees are an original purchase order; the copy of a purchase order that has already been sent to TOCC’s Finance Office; or a signed letter from an employer.

Refunds will be given only for textbooks returned in their original condition. For more information, visit the Bookstore on campus or call (520)-383-0026.

**Student Identification Number and Student ID Cards**

Each student admitted to TOCC is issued an Assigned Student Identification Number. This number appears on the student’s identification card and is tied to the student’s record at TOCC. A Student Identification Card will be issued when registering for the first time. It provides access to the TOCC Library, the Bookstore, and the Computer Labs. I.D. cards are obtained in the Library in the I-We:mta Ki: (Main Building) on the S-cuk Du’ag Mascalakud (Main Campus). Evening, online, or weekend students who do not regularly come to campus should contact the College at 520-383-8401 in order to obtain an I.D. card. Student I.D. Cards must be validated each term.
Use of Social Security Numbers

All students who are United States citizens, resident aliens, or non-citizens who have been issued a Social Security Number are required to provide the Social Security Number (SSN) on the Application for Admission, on all local, state, or federal student financial aid applications and forms, and on any forms required for TOCC employees. The SSN is used to match current and future records with any past records in order to ensure that students receive full academic credit for all work. The SSN is also required for reporting tax credit information to the federal government and for financial aid information. Social Security Numbers are not used as Student Identification Numbers.

Third Party Transactions

Students who wish to have a parent, spouse, friend, or other third party complete any transactions, such as registration, which affect their educational records, must provide the third party with the following: 1) the student’s photo I.D.; 2) a statement describing the transaction and granting the third party permission for the student; and 3) the student’s signature and the date on the statement.

Transcript Request

A transcript is a document that lists a student’s courses, grades and grade point average. An official transcript is a sealed copy of this list that has been issued by the educational institution that you attended. To request official transcripts from TOCC, please fill out the Transcript Request Form. The form is available at the Admissions Office, or from the Academic Advisor, and is available for download from the TOCC website (www.tocc.edu).

Privacy of Student Records and Family Educational Rights and Privacy Act (FERPA)

TOCC complies with the Family Educational Rights and Privacy Act (FERPA) of 1974. This act was designed to protect the privacy of educational records, to establish the rights of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students have the right to file complaints with the Family Educational Rights and Privacy Act Office concerning alleged failures by the institution to comply with this Act. Contact the TOCC Admissions and Records Office at (520) 383-8401 for more information.

TOCC designates categories of student information as directory information. This information includes the student’s name, address, telephone number, date of birth, major field of study, classification status (regular, special, full-time, part-time), dates of attendance, degrees, honors, awards received, and most recent previous educational institution attended by the student.

Although TOCC maintains a closed (unpublished) student directory, such information may be disclosed by TOCC for any purpose and at its discretion unless the student has signed a Disclosure of Student Information form requesting nondisclosure. Under the Family Educational Rights and Privacy Act of 1974, currently enrolled students may instruct TOCC not to disclose public or directory information for any purpose.

Student’s Right to Have Information Withheld

Students must submit a signed Disclosure of Student Information Form to the Admissions Office in order to withhold student information. The signed Disclosure of Student Information Form remains in the student’s file indefinitely until the student relinquishes the disclosure. Tohono O’odham Community College will not release any private or directory information unless written authorization is given by any
student who specifically requests release of public or directory information. Questions concerning the privacy of student records may be directed to the Admissions and Records Office at (520) 383-8401.

**Schedule of Classes**

In addition to the TOCC College Catalog, one of the main documents students will need during their college career is the Schedule of Classes. Schedules are published before the registration period for the Fall and Spring semesters and Summer sessions. The Schedule of Classes contains a list of courses being offered, with the dates, times, and locations of each class section. It also provides instructions on when and how to register and has important dates and deadlines for the upcoming semester or sessions. A copy can be obtained online at [www.tocc.edu](http://www.tocc.edu), and print copies are available at all TOCC locations.

**Declaring a Program of Study**

Students should declare a program of study (a major) when applying for admission and should make sure it is listed correctly on their records. Current programs offered by TOCC are listed in Chapter 6. An advisor is available to help students choose the right program of study. The program of study can affect financial aid or veteran’s benefits. Students may change their program of study at any time.

**Maximum Credit Hours**

Students can enroll for a maximum of 18 credit hours in Fall and Spring semesters and for a maximum of nine credit hours during Summer sessions. These limits include resident work, registration with another college, and extension, correspondence, or high school courses taken at the same time that one is taking TOCC classes. Students who wish to register for 18 or more credit hours must obtain approval from the TOCC Academic Dean.

**Course Prerequisites**

Before enrolling for certain courses, the student may be required to have previous education, knowledge, or skills; known as prerequisites. In order to enroll in certain classes at TOCC, students must meet course and program prerequisites; otherwise, they must receive approval for an exemption by the instructor’s signature on the Registration Transaction Form. If it is determined by the instructor that a student does not have the proper prerequisites for the class, the instructor may withdraw the student from the course after notifying the student and directing him or her to the prerequisite courses.

**Transfer of Credits**

TOCC policy for transfer of academic credits from post-secondary institutions to TOCC is:

Transfer students are defined as having previously attended another accredited university or community college and have earned college credit. In order for any classes at another college or university to be approved for credit at TOCC, existing official transcripts must be evaluated to determine if they will meet TOCC transfer requirements. The student must have an official transcript sent to TOCC for evaluation from each college attended where credit is sought; formal transfer credit evaluations will not take place until official transcripts are received. Courses that have an earned grade of “C” or higher grade in coursework that is college-level (not developmental) may transfer. All coursework for transfer consideration must have been completed within the last eight years, depending on the field*. A maximum of 75% of credits from accredited institutions can be accepted toward the certificate or degree; i.e., 25% of the credits must be taken at TOCC.

TOCC may accept course credits from colleges and schools accredited by any of the following:
• Middle States Association of Colleges and Secondary Schools
• New England Association of Colleges and Schools, Inc.
• Higher Learning Commission
• Northwest Commission on Colleges and Universities
• Southern Association of Colleges and Schools
• Western Association of Schools and Colleges

For TOCC to determine whether a student’s courses can be approved for credit the student must request that official transcripts from the institution(s) previously attended be sent directly to the TOCC Director of Admissions. Once TOCC receives the official transcript(s) from previously attended institution(s), the transcript(s) will be evaluated within the first semester at TOCC, and the student will be notified of the results. Transfer coursework is identified by Credit Type as TR (Transfer) followed by the grade transferred earned that may be an A, B, or C. The computation of GPA is not included for transfer coursework. In cases where the previous college has quarter credits they will be converted to semester credits using generally accepted academic principles.

If a transfer student is not satisfied with the result of the TOCC evaluation of the transfer request, the student may appeal to the Academic Dean. This appeal must be in writing. The Academic Dean will review the appeal and make a final determination. The student will be notified of the result of the appeal, and a copy of the final decision will be placed in the student's file.

Credit by Examination and Prior Learning

Students can earn college credit based on examination or evaluation of prior learning by submitting official records of their performance to the Director of Admissions and Records.

Opportunities for credit by examination or evaluation include:

• Advanced Placement examinations from high school (AP);
• College Level Examination Program (CLEP) results;
• Special examination for credit (e.g., Tohono O’odham Language fluency may be established by examination).

Students cannot receive credit by examination or evaluation of prior learning for a course that has a lower number than the one in which they are currently enrolled, or for a course for which they have already received credit. Credit by examination may or may not transfer to other colleges or universities.

For more information and to see the official record of exam and evaluation equivalencies, visit the AZTransfer.com website.

Advanced Placement (AP) Credits

Taking Advanced Placement courses in high school can accelerate a college career. At TOCC, a student can earn up to 30 credits toward a degree by passing examinations at the end of AP classes. Credits earned based on exam performance may be counted toward a certificate or degree including General Education requirements. Exams are administered through the College Board each May. Some students take AP exams after taking honors or accelerated courses in their schools. For more information about the AP program, talk to an Academic Advisor or visit the College Board web site at www.collegeboard.org.

College-Level Examination Program

TOCC accepts for college credit the passing scores for both the general and subject examinations of the College-Level Examination Program (CLEP). Students must pay a registration service fee and an
examination fee for each test. Passing scores for subjects credited through the CLEP are recorded with a "P" grade. No record is made of failing scores. CLEP Examinations are available through the Testing Office at the University of Arizona, (520) 6217589.

Application Period

Applications for admission to TOCC are accepted throughout the year. There is no application fee. Application forms are available at the I-We:mta Ki: (Main Building) on S-cuk Du’ag Mascamakud (Main Campus) from Student Services and online at http://tocc.edu/admission_application.htm.

TOCC Admissions – Documents Required for students

1. Photo ID – provide the following:
   If a Native American Student submit one of the following:
   - Tribal ID Card or
   - Certificate of Indian Blood (CIB) AND State Issued ID or Driver’s License
   If a Non-Native American Student (or Non-Enrolled Native Student) submit the following:
   - Driver’s License or State Issued ID

2. Proof of High School completion or equivalent
   - GED Certificate or High School Diploma
   - High School OR GED Transcripts with Graduation Date indicated

3. If degree seeking AND have earned credits at another College, submit an Official Transcript from previous colleges attended.

4. Required document details
   - How and where to submit: Submit documents electronically to admissions@tocc.edu, or fax 520-383-8403, or mail to Tohono O’odham Community College, Office of Admissions and Records, PO Box 3129, Sells, AZ 85634
   - In order to register for classes document(s) from sections 1 and 2 above must be submitted
   - Exception: If you are 16 or above and did not attend high school or college, you only need to submit documents in section 1 above
   - If you attended another college, you must submit your college transcript if you want the courses you took to be evaluated for transfer to TOCC
   - Students who do not submit the Documents required under section 2 above, if applicable, will not be issued Official TOCC Transcripts and will not be able to register for future semesters until the documents are submitted.
   - Additional note: If none of the bullets above fits your situation please email admissions@tocc.edu and we will work with you to find a solution

Placement Testing Requirements

Placement exams determine reading, writing and math academic skill levels and assure that students are enrolled in courses at appropriate levels to succeed at TOCC. With a few exceptions, all new degree and certificate seeking students enrolling for the first time, and students transferring to TOCC, must take a placement exam. If students have previous assessment scores or college-level course work, the information should be submitted with the Application for Admission. The placement exam is computer-based and can be completed at TOCC S-cuk Du’ag Mascamakud, (Main Campus), I-We:mta Ki: (Main Building). Detailed information is included in Chapter 4.

Meet with an Advisor
Once placement assessments are completed, students should meet with the Academic Advisor to review program requirements and make recommendations specific to the selected program major. Students who are taking courses for personal enrichment/interest or professional development do not need to meet with an advisor. Students should plan to spend approximately 30 minutes with the advisor for the first advising session. In the advising meeting a graduation plan will be developed. The Advisor can help:

- Review assessment exam test scores;
- Discuss the different programs TOCC offers;
- Choose a program of study;
- Understand program requirements;
- Learn about transfer opportunities; and,
- Connect with support services.

Advising is available on a drop-in basis with the Academic Advisor and other Student Services personnel. Students can also schedule an advising appointment by calling 520-383-8401. Students may also talk with faculty and other staff members about their programs of study. If the Academic Advisor is unavailable for advising, another Student Services or Education staff member will be available. Students may request an over the phone advising session if they are unable to meet during college hours of operation.

**New Students Registering for Classes**

New students use the same registration process that current students do, one the student has been admitted to the college.

For alternative forms of registration, contact a Student Support Specialist at 520-383-8401.

**Current TOCC Students May Register for Classes Online**

Online registration is available for continuing TOCC students on the TOCC web site: How To Register Online:

1. Go to www.tocc.edu
2. Click on “My TOCC”
3. Enter your MyTOCC Username and Password (If you do not know your username or password, contact IT)
4. Click on “Current Student”
5. Click “Add/Drop Courses” at the bottom of the page
6. In the “Term” drop down box, select the semester you want to register for
7. Click “Search” (All open classes for the selected term will appear)
8. Click on the “Add” box next to the class you want to register for
9. Click on the “Add Courses” box at the bottom of the page
10. Your class schedule will appear

If you have questions, or need assistance, please contact a Student Support Specialist at (520)383-8401.

**Apply for Financial Aid**
TOCC’s Financial Aid Office is the key to accessing a range of financial assistance opportunities. Visit the office in I-We:mta Ki (Main Building): at the S-cuk Du’ag Mascamakud (Main Campus) to learn about the Free Application for Federal Student Aid (FAFSA), Pell Grants, Federal Student Educational Opportunity Grants, Federal Work Study, American Indian College Fund scholarships, and others. The Financial Aid Office has a list of scholarships that are available for you and will also assist you in filling out the scholarship forms. Most students will find that they are eligible for Pell grants that often cover the entire cost of tuition, fees, and books. The FAFSA form, required to be completed to apply for any federal funding or American Indian College Fund scholarships, is available online at www.FAFSA.ed.gov and at the Financial Aid Office. **TOCC’s school code number for FAFSA applications is 037844.**

**NOTE:** TOCC does not offer Student Loans.

For more information, contact the TOCC Financial Aid Office at 520-383-0054 and see details in Chapter 3.

**Tuition, Books, and Fees**

Financial transactions are made at the TOCC Bookstore, located in the I-We:mta Ki: (Main Building) at S-cuk Du’ag Mascamakud (Main Campus). The TOCC Finance Office, located at the TOCC Komckud E-Was:‘osidk Mascamakud (Central Campus) in Sells, is available for payments if the Bookstore is closed.

Tuition at TOCC is $34.25 per credit hour. Tuition, fees, and attendance costs are listed in this Catalog for 2018-2020 academic years but may be subject to change.

**Textbook Payments**

The TOCC Bookstore accepts payment for textbooks in cash, credit card, or by presentation of a third-party guarantee. Examples of third-party guarantees include:

- Pell award list of students provided by Financial Aid;
- An original purchase order;
- A copy of a purchase order that has already been sent to TOCC’s Finance Office; or,
- A signed letter from an employer.

**Payment Due Date**

Tuition, books, and fees must be paid before the first day of classes each semester, unless one of the third-party guarantees is presented. If you are unable to make your payment in full by the first day of classes, you may request to be put on a payment plan at the bookstore. Payment plans are only for the cost of tuition and fees and books.

**Accepted Forms of Payment**

TOCC accepts cash, personal checks, credit cards, money orders, traveler’s checks, cashier’s checks, and third-party payer purchase orders or checks. TOCC will not accept counter checks.
(checks printed without a name or address), second-party checks, out of country checks, or postdated checks. Non-sufficient funds payments are subject to a $25.00 penalty.

If payment is by third party payer, it is the student’s responsibility to either bring the purchase order or check to the Bookstore by the payment deadline, or to make arrangements for the payment to reach the Bookstore prior to the payment deadline. For additional information on how to do this, contact the Bookstore. Payment may be made in person at the Bookstore. If paying by check, a picture ID is required. Payments may be mailed to the Finance Office at TOCC Finance Office, PO Box 3129, Sells, AZ 85634. Note: Do not mail cash.

Tables of Tuition and Fees

Note: All tuition, fees, books, housing, and other costs are for the 2020-2022 Academic year only, and subject to change in future years.

2020-2022 Tuition and Student Activity Fees

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>34.25</td>
</tr>
<tr>
<td>2</td>
<td>68.50</td>
</tr>
<tr>
<td>3</td>
<td>102.75</td>
</tr>
<tr>
<td>4</td>
<td>137.00</td>
</tr>
<tr>
<td>5</td>
<td>171.25</td>
</tr>
<tr>
<td>6</td>
<td>205.50</td>
</tr>
<tr>
<td>7</td>
<td>239.75</td>
</tr>
<tr>
<td>8</td>
<td>274.00</td>
</tr>
<tr>
<td>9</td>
<td>308.25</td>
</tr>
<tr>
<td>10</td>
<td>342.50</td>
</tr>
<tr>
<td>11</td>
<td>376.75</td>
</tr>
<tr>
<td>12</td>
<td>411.00</td>
</tr>
<tr>
<td>13</td>
<td>445.25</td>
</tr>
<tr>
<td>14</td>
<td>479.50</td>
</tr>
<tr>
<td>15</td>
<td>513.75</td>
</tr>
<tr>
<td>16</td>
<td>548.00</td>
</tr>
<tr>
<td>18</td>
<td>582.25</td>
</tr>
</tbody>
</table>

Processing Fees

<table>
<thead>
<tr>
<th>Semester Processing Fee (nonrefundable due each semester or summer session)</th>
<th>$10.00</th>
</tr>
</thead>
</table>
### Assessment Fees

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment Fee for Non-enrollees</td>
<td>$5.00</td>
</tr>
<tr>
<td>Official Transcripts (per copy)</td>
<td>$5.00</td>
</tr>
<tr>
<td>Graduation Application Fee ($15 per degree or certificate)</td>
<td>$15.00 (per credential)</td>
</tr>
<tr>
<td>First I.D. Card</td>
<td>$2.00</td>
</tr>
<tr>
<td>Reissue of I.D. Card</td>
<td>$5.00</td>
</tr>
<tr>
<td>Course Repeat Fee (for third attempt and beyond)</td>
<td>$39.00</td>
</tr>
</tbody>
</table>

**Note:** TOCC has a Pearson Testing Center at I-We:mta Ki: (Main Building) at S-cuk Du’ag Mascamakud (Main Campus). GED test fees are paid for GED students by TOCC.

### Miscellaneous Credit Course Fees

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Fee</td>
<td>Not to exceed $40.00 per course (for recovery of extraordinary course specific costs).</td>
</tr>
<tr>
<td>Laboratory Fees</td>
<td>Lab fees vary with course.</td>
</tr>
<tr>
<td>Art Courses</td>
<td>Fees depend on the materials used.</td>
</tr>
<tr>
<td>Course-Related Field Trip</td>
<td>Based on actual cost of field trip.</td>
</tr>
<tr>
<td>Withdrawal Charge (from 7 or more credits)</td>
<td>$10.00</td>
</tr>
<tr>
<td>Technology Fee</td>
<td>$2.50 per credit</td>
</tr>
<tr>
<td>Student Activity Fee</td>
<td>$15.00 per semester</td>
</tr>
</tbody>
</table>

### Student Housing Fees

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suite Room Fee (per semester)</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Summer Room Fee (5 week Summer Session)</td>
<td>$275.00</td>
</tr>
<tr>
<td>Summer Room Fee (8 week Summer Session)</td>
<td>$550.00</td>
</tr>
<tr>
<td>Damage Deposit</td>
<td>$150.00</td>
</tr>
<tr>
<td>Key Deposit</td>
<td>$40.00</td>
</tr>
<tr>
<td>Background Process Fee</td>
<td>$37.63</td>
</tr>
</tbody>
</table>

**Note:** Deposits are refundable if the room is clean and undamaged and the key is returned.

**Note:** Housing fees are for the 2018-2020 academic year and subject to change in future years.

### Other Costs and Payments

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past-Due Tuition</td>
<td>Amount of Tuition Due</td>
</tr>
<tr>
<td>Past-Due Book Loan</td>
<td>Amount of Loan</td>
</tr>
</tbody>
</table>
Fee for Late Tuition or Late Repayment of Book Loan | $25.00 - $100.00  
5% of balance: minimum of $25.00, maximum of $100.00 (per occurrence)

Non-sufficient Funds (NSF) Payment Fee | $25 (per occurrence)

Excessive Loss or Breakage | Replacement cost

Lost Library Item | Replacement cost  
Plus $10 processing fee

College Equipment Not Returned | Replacement cost  
Plus $10 processing fee

**Account Holds**

If an outstanding debt is owed to TOCC from a previous term, student records and account will be placed on hold. A student may register for the current term provided that the debt is paid, or arrangements are made with the Finance Office. To release a hold, payments must be made in cash, by check, or by credit card prior to registration. Payments by check require 15 working days before a hold can be released. Some reasons for holds and the amounts needed to clear them are shown in the Account Holds table on the following page. This is not a complete list of possible holds. Rates are subject to change.

**Reasons for Financial Holds**

<table>
<thead>
<tr>
<th>Reason for Hold</th>
<th>Amount to Clear Hold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Due Tuition</td>
<td>Amount of tuition</td>
</tr>
<tr>
<td>Past Due Book Loan</td>
<td>Amount of loan</td>
</tr>
<tr>
<td>Non-Sufficient Funds Payment Fee (each NSF)</td>
<td>Amount of fee</td>
</tr>
<tr>
<td>Lost Library Books or iPad</td>
<td>Amount of replacement cost plus $10 processing</td>
</tr>
<tr>
<td>Late Fees</td>
<td>Amount of late fees</td>
</tr>
</tbody>
</table>

**Tuition Deferment**

Payment of tuition and fees is due at the time of registration. However, TOCC offers a tuition deferment option for those who qualify. The option requires that a student:

- May only defer up to half of the tuition (the other half must be paid when the deferment request is made); and,
- May only defer payment for up to 30 days.

If the tuition deferment is not paid by the payment deadline, the student account will be placed on hold. The Tuition Deferment Request form is available at the Bookstore. In extreme cases a payment plan may be requested. A payment agreement will be signed, and monthly payments made, and the balance paid by the end of the term.
Refund Due to Class Cancellation

If the College cancels a class, all applicable tuition and fees will be refunded if another course is not chosen. If the student is receiving federal financial assistance, the refund will be paid back directly to the sponsoring program, as required under federal guidelines. Course materials may be returned to the Bookstore for a full refund if the books and or other materials or software are in original condition.

Semester Refund Deadlines

To be eligible for a full refund of tuition the course must be dropped by the drop/full refund deadline that applies to the course. The “Drop Full/Refund Deadline” is listed on the Academic Calendar, which can be found on TOCC’s homepage, www.tocc.edu.

If the course is dropped after the drop/full refund deadline, a student may be eligible for a partial refund of tuition, as shown in the Refund Rates table.

Refund Rates

<table>
<thead>
<tr>
<th>Timing of Withdrawal</th>
<th>Percentage of Tuition To Be Refunded</th>
</tr>
</thead>
<tbody>
<tr>
<td>By the drop/full refund date</td>
<td>100%</td>
</tr>
<tr>
<td>Between drop/full refund date and withdrawal deadline</td>
<td>67%</td>
</tr>
<tr>
<td>After withdrawal deadline</td>
<td>0%</td>
</tr>
</tbody>
</table>

Special Provisions Refunds

If unforeseen circumstances force a student to totally withdraw from the College after the drop/full refund deadline, a partial refund of paid tuition may be requested, less any applicable fees, provided the circumstances meet one of these five special criteria:

- **Serious Illness or Injury:** Provide a written statement from a physician verifying that the illness or injury prevents the student from attending classes.
- **Death of a Family Member:** Provide a copy of the death certificate. The College defines family members as spouses, children, parents, siblings, grandparents, grandchildren, or in-laws of the student requesting the refund.
- **Military Transfer:** Provide a copy of transfer orders. The orders must verify that the transfer was unforeseen prior to the official semester drop dates.
- **Cultural Requirements:** TOCC recognizes the importance of the Native American cultural and religious practices of its students. The College may grant a special provision for students who participate in activities required by cultural or religious circumstances or practices.
- **Other Situations:** In the event of extenuating circumstances not covered above, the College President or designee will review and rule on any special requests. A Special Provisions Refund Request must be made during the same semester that the withdrawal occurs. Only tuition may be refunded. Fees will not be refunded. Requests for refunds made after the semester has ended will not be granted. If the refund request is approved, the amount will be calculated based on the date of the last withdrawn class, as shown in the Refund Rates table. For
additional information and to submit a Special Provisions Refund Request, contact the Admissions Office.

**Tuition and Fee Refunds**

Students may be eligible to receive either a full or partial refund of tuition and fees under certain circumstances. Refunds for tuition and fees are generally processed as a check, which is usually mailed within five working days after the refund request is processed. Any outstanding debts owed to the College may be deducted from the refund. The Registration Processing Fee of $10.00 is non-refundable.

**Use of Social Security Numbers**

All students who are United States citizens, resident aliens, or non-citizens who have been issued a Social Security Number (SSN), are required to provide the SSN on the Application for Admission, on all local, state, or Federal Student Financial Aid applications and forms. The SSN is used to match current and future records with any past records in order to ensure that students receive full academic credit for all work. The SSN is also required for reporting tax credit information to the federal government and for financial aid information. Social Security Numbers are not used as Student Identification Numbers.

**Third Party Transactions**

Students who wish to have a parent, spouse, friend, or other third party complete any transactions, such as registration, which affect their educational records, must provide the third party with the following: 1) the student’s photo I.D.; 2) a statement describing the transaction and granting the third party permission for the student; and, 3) the student’s signature and the date on the statement.
Chapter 2 – Student Life

Community Life at TOCC

TOCC offers a rewarding life for its students. There are opportunities to get together to share common interests, celebrate diverse cultures, and enjoy recreational and learning activities. There are avenues available to develop and demonstrate leadership qualities, to establish contacts within the College and within the Tohono O’odham Nation’s community, and to be a voice within and for TOCC. Students are encouraged to take the initiative to become involved in the life of the College. Current opportunities include the Student Senate, Archery Club; Business Club, Early Childhood Education Club, and the American Indian Science and Engineering Society (AISES).

Student Services and Resources

TOCC’s Student Services Division is located in the I-We:mta Ki: (Working Together) at the S-cuk Du’ag Mascamakud (Main Campus). For more about the services TOCC offers, see Chapter 1 “Getting Started at TOCC.”

Advising and Mentoring

An Academic Advisors are available to help students choose courses and make decisions that best meet their educational needs. Once placed in a program, students will be assigned to a Faculty Advisor who teaches in the area of the student’s interest. Both walk-in services and appointments are available. Academic advising is introduced in the enrollment process in Chapter 1, “Getting Started at TOCC.” Enrolled students should meet with their academic advisor at least once each semester to ensure that they are on track with their programs of study.

Counseling

A Counselor is available to help students with decisions and situations that go beyond academic advising but may involve educational issues. The Counselor is available to assist students with self-awareness, personal development, stress management, and identifying appropriate community agencies for assistance, if needed. The Counselor is located in the I-We:mta Ki: (Main Building) at S-cuk Du’ag Mascamakud (Main Campus) and is available for walk-in sessions or by appointment. For more information, call (520) 383-0033 (Counselor) or (520) 383-0047 (Student Support Specialist).

Tohono O’odham Himdag

The Tohono O’odham Himdag serves as the foundation to enhance student personal and educational development. Activities for students and community members that focus on Tohono O’odham Himdag and Native American culture include traditional storytelling, traditional singing, rattle making, basket weaving, flower making, woodcarving, pottery making, and talking circles.
Tutoring

Skilled tutors are available to help students develop their skills in math, writing, and a variety of other subjects. Stop by the Library for more information or call (520) 383-0067.

Health and Wellness

The health and wellness of students in mind, body and spirit are important to their success at TOCC. Services are provided to students through forums, health fairs, screenings, lifestyle management classes, safe sex education programs, and disease prevention awareness programs.

Student Clubs and Organizations

TOCC encourages the establishment of student clubs and organizations. Students have a voice in College functions and activities through the Student Senate and other student groups and committees. Students and their Senate representatives are encouraged to sit on various task forces and committees that make recommendations to the Board of Trustees. Although students cannot cast a vote with the official members of the Board of Trustees, they can voice an opinion on agenda items. Students are encouraged to participate in student organizations to gain leadership, citizenship, and volunteer experience.

Ka: g T-Ñi’okî – The Student Senate

Ka: g T-Ñi’okî, the Student Senate at TOCC, has the mission to “represent and be the voice of the student body, working together to bring forth ideas of concern and interest, that would best serve and promote the Tohono O’odham Community College mission, vision, and core values”. Students are encouraged to participate in the Senate to engage in leadership, citizenship, and volunteer experience. Ka: g T-Ñi’okî officers include a President, Vice President, Secretary, Treasurer, Public Relations Officer, Residence Life Representative, S-cuk Du’ag Mascamakud (Main Campus) Representative, Komckud E-Was:’osidk Mascamakud (Central Campus) Representative, and Wisag Kos Mascamakud (West Campus) Representative. A faculty or staff advisor provides support to the Student Senate. To learn more about the Senate, inquire at the Office of the Dean of Student Services in the I-We:mta Ki: (Main Building), or call (520) 383-8401.

The Early Childhood Education (ECE) Community of Practice (COP)

The ECE Community of Practice program is funded by a grant from the United Way and First Things First to support enhanced professional development training for ECE professionals on the Tohono O’odham Nation through community events. The COP program also supports early childhood professionals’ efforts to earn college degrees and Tohono O’odham children transition into kindergarten. Additional information may be found on the TOCC website or by calling (520) 283-8401.

Resources for Students with Disabilities

TOCC will make every effort to ensure that qualified individuals with a disability are provided a reasonable accommodation and will promote respect for the dignity and equal treatment of individuals with disabilities. Student requests for accommodation due to disability are processed through the Counselor. The TOCC Counselor will provide intake assistance, eligibility determination with appropriate documentation, student services plan, faculty notification of accommodation, and monitoring of student accommodations.
TOCC O’ohana Ki: (Library)

The Library provides educational resources and services to TOCC students, faculty, and staff, and to the Tohono O’odham Nation communities. The Library staff members are available to answer reference questions; to assist with the Library computers; to help patrons select electronic and print research resources; to offer reader guidance; and to provide workshops or individual tutoring in library orientation, information literacy skills, and in using print, electronic and multimedia materials and equipment. The online library catalog is at www1.youseemore.com/tocc/.

The Library’s collections include books, journals, photographs, maps, vertical files, CDs, audiotapes, videos, DVDs, posters, grey literature, artwork, software loaded on the computers, indexes, dissertations, electronic subscription databases, Internet access, artwork, the online Ready Reference collection, and the Danny Lopez Special Collections. Subscription databases are password protected. Please see the Librarian for more information.

Computers are available for use by students and community members. Special Collections focus on all materials in all media that pertain to the O’odham, including the Tohono O’odham, the Akimel O’odham and the Hiaced O’odham. Special Collections materials, as well as videos and DVDs, may be viewed in the Library and are not available for check out.

TOCC students, faculty, staff, and community members may borrow materials from the Library with a current TOCC I.D. Go to the Library to obtain your TOCC I.D. card. The holder of the I.D. card is responsible for all materials checked out on the card, including replacement of any item that is damaged or lost. Replacement charges include the Library’s cost to replace the item plus a $10.00 non-refundable processing fee.

TOCC does not charge for overdue materials, but any overdue item will be considered to be lost until it is returned in good, usable condition. Lost items may result in a student not being able to obtain grades, transcripts or a diploma; to register for classes; or borrow Library materials. Community members may have their Library privileges suspended until the items are returned or replaced.

Interlibrary Loan

Tribal colleges and universities, including TOCC, that belong to the American Indian Higher Education Consortium (AIHEC) participate in interlibrary loan with each other. If an AIHEC member library does not have what a student needs, there may be additional ways to access the material. For more information, please contact the Librarian.

Library Locations and Hours

O’ohan Ki: the Main Library, is located in the I-We:mta Ki: building (Working Together) at the S-cuk Du’ag Mascamakud (Main Campus) and supports academic and general education. The Wisag Kos Mascamakud, West Campus, Library (WCL) supports occupational and apprenticeship programs; child development education; agriculture and natural resources; and GED education. The Main Library hours are Monday through Friday from 8:00 a.m. to 5:00 p.m. The WCL is open Monday through Friday from
7:00 a.m. to 4:00 p.m. Contact the Library for more information. Libraries are closed on Saturday and Sunday and all TOCC holidays. Library staff members can be reached at these contacts:

- (520) 383-0032 (Main)
- (520) 383-8401 (College receptionist)
- (520) 383-8403 (Fax)
- (520) 383-0066 (WCL)
- www1.youseemore.com/tocc/ (Click the Librarian tab for online reference help by email) • www.tocc.edu/library/ (General information)

**Residence Life**

Tohono O’odham Community College is pleased to offer a residential experience for students on the S-cuk Du’ag Mascamakud (Main Campus). Each of the residential suites for students has shared living space (including a full kitchen, bathroom, laundry room, and sitting area) and four bedrooms, each of which houses three students. The fourth suite is an apartment for Residence Life staff and a student lounge with computers. There is no cafeteria available on campus; students often cook together. They can also buy breakfast and lunch in the I-We:mta Ki: (Main Building) through TOCC’s food service on Mondays through Thursdays when classes are in session.

**Accommodations in the Residence Halls include:**

- A bed, desk with chair, closet, dresser;
- Full size refrigerator, stove, pots, pans, utensils, pitcher, plates, cups, bowls, washer, dryer;
- Sofas, flat screen TV with satellite TV and DVR, WIFI connection

**Residence Life Application and Information**

The Application, Release of Information, Policy Agreement, Roommate Questionnaire, and Agreement forms are available on the TOCC website and must be submitted via email or mail for consideration to live in the residence halls. Living on campus is an experience that will help students further their educational goals. The student housing is an alcohol-free, tobacco-free, drug-free, and weapon-free environment.

**Requirements**

- Enrolled Full-time (12 credits)
- Sign Residence Hall Policy Agreement Form
- Submit Release of Information Form (Background Check)
- Fill out a Roommate Questionnaire
- Vehicle Registration Form
- Refundable Damage Deposit: $150.00
- Key Deposit: $40.00

**Costs and fees**

- Dorm Room Fee (per semester)
  - $1,200.00 (Fall or Spring Semester)
Tohono O'odham Community College - 2020-2022 (v. 21.38-2)

- $275.00 (5-week Summer Session)
- $550.00 (8-week Summer Session)

- Damage Deposit
  - $150.00
- Key Deposit
  - $40.00
- Background Process fee:
  - $40.00
- Deposits are refundable if the room is clean and undamaged and the key is returned.
- All costs, fees, and deposits should be paid in the Bookstore.

Food

- Kitchen Vendors at S-cuk Du’ág Masca’makud (Main Campus) Mon-Thurs.
- No Meal Plans / No Cafeteria
- Dorms come with a full kitchen
- Grocery Store is 15 minutes away from dorms. (Weekly grocery store trips provided)
- Cooking Classes/Demo will be provided
- Personal Food Storage

Contact Information

For further information, contact the Residence Life Coordinator at (520)383-0068.

TOCC Food Program

The TOCC Food Program proudly provides delicious and healthy meals along with providing Good Food Safety practices. Breakfast and lunch for students, employees and community members are provided Monday through Thursday during Fall, Spring and Summer Sessions at the S-cuk Du’ág Masca’makud (Main Campus) in I-We:mta Ki: building (Main Building). Weekly menus are posted on the electronic bulletin boards and distributed through your emails.

You must purchase a Ticket at the Front Desk. See below for detailed information on costs and mealtimes.

Breakfast is served from 8:00 am –9:30 am

Tickets will not be sold after 9:30 am

Student Cost- $2.00
Community, Faculty, and Staff Cost- $4.00

Lunch is served from 11:30 am -1:00 pm

Tickets will not be sold after 12:45 pm

Student Cost- $3.00
Community, Faculty, and Staff Cost- $5.00
Student Rights and Responsibilities

Student rights and responsibilities are fully described in the TOCC Student Handbook. The Handbook is available online and from the Student Services Office.

Drug-Free School and Communities Act Information


Legal Sanctions

Tohono O’odham Nation, federal, and state laws prohibit the unlawful possession, use, or distribution of illicit drugs and alcohol. Conviction for violating these laws can lead to imprisonment, fine, probation, and/or assigned community service. Students convicted of a drug- and/or alcohol-related offense will be ineligible to receive federally funded or subsidized grants, loans, scholarships, or employment. TOCC fully subscribes to and cooperates with Tohono O’odham Nation, federal, and state authorities in the enforcement of all laws regarding the unlawful possession, use, or distribution of illicit drugs and alcohol.

Support Resources

TOCC will assist students with appropriate referrals and information concerning drug and alcohol education, counseling, treatment, rehabilitation, or re-entry programs that may be available in the community. Contact the Counselor at (520) 383-0033, or Student Services at (520) 383-8401 for help.

American Indian Higher Education Consortium (AIHEC) and American Indian College Fund (AICF)

AIHEC and AICF provide opportunities to TOCC students. TOCC usually selects one student to accompany College administrators to the AIHEC winter meetings in Washington, D.C. Each spring, several TOCC students travel to the AIHEC student conference, a gathering of student representatives from tribal colleges and universities throughout the country. The AICF annually awards scholarships to an AICF Student of the Year at each tribal college or university. This is a prestigious award recognizing academic achievement and community service. The Student of the Year Award is presented at the AIHEC Student Conference and the TOCC student is recognized again at TOCC’s Commencement. The award is accompanied by a scholarship currently sponsored by the Castle Rock Foundation.
Chapter 3 – Financial Aid

Applying for Financial Aid at TOCC

Tohono O’odham Community College Financial Aid Office will make every effort to provide financial assistance to TOCC students. The Financial Aid Office works with students to meet unmet financial needs to the maximum amounts from federal, state, and private sources. Financial aid is awarded for one academic year, and students must reapply annually.

The Financial Aid Office provides information for financial aid programs, including TOCC scholarships. Other sources include the federal government, the Tohono O’odham Nation, and private donors accessed through the American Indian College Fund (AICF). Funds are awarded to students based on financial need, academic achievement and program of study. For more information, please stop in or call the Financial Aid Office at (520) 383-0075.

Financial Aid: The Steps to Follow

- Visit the TOCC Financial Aid Office to meet with the Financial Aid Technician to fill out
- a Free Application for Federal Student Aid (FAFSA) form and to obtain an FSA ID user name and password needed to fill out the FAFSA and sign the form electronically. Information about other funding sources such as scholarships, Federal Work Study and the Federal Supplemental Educational Opportunity Grant (FSEOG), and the process to apply for them is available through the Financial Aid Office.
- The TOCC Financial Aid Office will assist students in filling out the FAFSA. If the student is a “dependent” student, parents or a legal guardian will need to sign the FAFSA. The form is also available online at www.FAFSA.ed.gov.
- The FAFSA must be completed each calendar year, which begins on October 1st for the coming school year that begins with the Fall semester in August at TOCC. It is recommended to apply early.

TOCC’s school code is 037844.

General Eligibility Requirements

Eligibility for most federal student aid programs is based on financial need, rather than on academic achievement. To have their financial need determined, students must complete and file a Free Application for Federal Student Aid (FAFSA). A student must demonstrate financial need to be eligible for most federal student aid. At its simplest level, a student’s financial need is the difference between the student’s cost of attendance at school and the amount the family is expected to contribute to the student’s education.
Additionally, to be eligible for federal student aid, a student must meet each of these criteria:

- Have a high school diploma (this can be from a foreign school if it is equivalent to a U.S. high school diploma); or have a recognized equivalent of a high school diploma, such as a general educational development or GED certificate; or be enrolled as a regular student in an eligible degree for a certificate program.
- Be a U.S. citizen or eligible noncitizen.
- Have a valid Social Security number (with the exceptions of students from the Republic of the Marshall Islands, Federated States of Micronesia, or the Republic of Palau).
- Make satisfactory academic progress.
- Sign certifying statements on the FAFSA, such as agreeing to use federal student aid funds only for educational expenses.

A student who does not have a high school diploma, GED, or a high school transcript showing that he or she completed high school will not be eligible to receive any Federal funding such as a Pell Grant, Federal Work Study or the Federal Supplemental Educational Opportunity Grant.

**Need Analysis**

The process of analyzing a student’s financial need, known as Need Analysis, focuses on determining how much the family reasonably can be expected to contribute toward the student’s education. Determination of an applicant’s need is achieved by collecting information about the family’s income, assets, and living expenses. For the federal student aid programs, the law specifies a need analysis formula that produces the Expected Family Contribution (EFC). The EFC and the school’s cost of attendance are used by the school to establish the student’s need, as well as to award grants and campus-based aid.

**Planning Early with FAFSA4caster**

**FAFSA4caster** is a service of the U.S. Department of Education that helps students to explore financial aid options and eligibility while still in high school, or before they enroll in college.


**Getting a Federal Student Aid ID (FSA ID)**

It is recommended that students and parents save time by requesting the FSA ID before the student applies for financial aid.

**How Does a Student or Parent Use an FSA ID?**

The FSA ID can be used to sign the FAFSA electronically, greatly decreasing the processing time. The FSA ID can be used in the following ways (among others):

- As the applicant’s electronic signature, or the parent’s electronic signature on the FAFSA (if the parent obtains his or her own FSA ID);
- To gain access to online information about federal student aid the student has received;
- To gain access to the applicant’s information on FAFSA on the Web, to view FAFSA processing results, to make corrections, or to file a FAFSA based on data the student filed in previously.

**Why Does a Parent Need an FSA ID?**

At least one parent or legal guardian of a dependent student must sign that student’s FAFSA, and using the FSA ID to sign electronically is the most efficient way to sign. Each person signing a FAFSA electronically must have their own FSA ID, including the student and the parent or legal guardian of a
dependent student. If a parent or legal guardian of a dependent student does not have an FSA ID the paper signature section of the FAFSA must be signed manually and mailed to the Department of Education. Doing this extends the financial aid process because it takes at least three weeks for the school to receive approval from the Department for the student’s financial aid. Using the FSA ID and signing electronically expedites the financial aid process for the student.

Gathering Documents for the Free Application for Federal Student Aid (FAFSA)

To complete the FAFSA, students (and their parents, if applicable) need their Social Security numbers, driver’s licenses (optional), federal income tax returns, W-2 Form(s), current bank statements, and records of any stocks, bonds, or other investments and assets.

When to Apply

Students and parents should fill out their income tax forms and the FAFSA as early as possible. Those who are unable to complete income tax forms early should estimate amounts as accurately as possible and fill out the FAFSA accordingly, correcting the information with actual amounts once the income tax forms are complete. Note that most states have specific deadlines for students who want to be considered for state aid, and some schools have limited institutional funds that are awarded on a “first-come, first-served” basis to eligible students. The student who completes the FAFSA early has a better opportunity to meet financial aid deadlines and to be considered for awards from institutional funds.

How to Apply: FAFSA on the Web

FAFSA on the Web, available in both English and Spanish, allows students to complete their FAFSAs faster and more easily than any other application method. This Internet application offers detailed online help for each question, as well as live, online, one-to-one communication with customer service representatives. The address for FAFSA on the Web is www.fafsa.ed.gov.

Saving the FAFSA with a Passkey

Students do not have to complete the FAFSA on the Web in one sitting. At the beginning of the process, the student is asked to supply a passkey. If the student is interrupted, needs to leave the application before completing it, or if the site automatically logs the student off due to 30 minutes of inactivity, the information will be saved and will remain available via the passkey or 45 days. The student should keep the passkey in a safe place. The passkey is different from the FSA ID (username & password). The FSA ID allows the student to electronically sign the FAFSA or to access processed FAFSA data, whereas the passkey created solely to access the incomplete application at a later time.

Signing the Application with an ID or Signature Page

At the end of the FAFSA, the student (or the dependent student’s parent or legal guardian) signs electronically using his or her ID number. If the student or parent, or legal guardian, do not have an FSA ID the signature must be done manually, and the signature section will be sent to the Department of Education, which extends the financial aid process for at least three weeks. Electronic signature using an FSA ID is recommended.

Submitting the FAFSA and Getting an Estimated Expected Family Contribution (EFC)

When the student submits his or her information at FAFSA on the Web, a confirmation page appears. The confirmation page verifies that the application was submitted successfully, displays an estimated Expected Family Contribution (EFC), and indicates whether the student might be eligible for a Federal Pell Grant. The official EFC will appear on the Student Aid Report (SAR).
Applying through TOCC
It is recommended that students file their FAFSA at the TOCC Financial Aid Office, as it expedites the financial aid process. The student provides the necessary information such as IRS income tax information, enters the information electronically, and then sends it to the Central Processing System. Please contact the Financial Aid Office (520) 383-0075 for assistance.

Paper Application Method
Students may complete a paper FAFSA (available in English and Spanish) and submit it for processing using an envelope. If completing a paper FAFSA, it will take more than three weeks for the FAFSA to be processed.

Student Aid Report (SAR)
The Student Aid Report (SAR) is the document that students receive from the U.S. Department of Education in response to their FAFSA. The SAR informs the student of the Expected Family Contribution (EFC) and of their available federal student aid. Unless the student’s SAR is identified as having problems, the EFC is printed on the upper right corner of the front page of the report. The SAR also includes instructions, such as how to make corrections to the data the student supplied on the original FAFSA.

Major Federal Student Aid Programs
The U.S. Department of Education offers three major types of financial aid. The Pell Grant and the Federal Supplemental Education Grants are “gift aid” and do not have to be repaid unless an overpayment has resulted due to the student withdrawing before the end of the enrollment period for which the grant was awarded. It is the school’s responsibility to inform the student whether any funds must be returned to the Department of Education. The other major type of financial aid is the Federal Work-Study that provides income (which does not have to be repaid) from part-time employment, either on campus or in the community. A fourth type of federal aid is Veteran’s Benefits.

Federal Grants: The Pell Grant
Federal Pell Grants are awarded according to rules set by Congress. Every year the U.S. Department of Education publishes updated tables used in the Expected Family Contribution calculation. The EFC is a measure of how much the student and his or her family can be expected to contribute to the cost of the student’s education for the year. The EFC is calculated according to a formula specified by law. If a student is eligible on the basis of these rules, an eligible school will receive the federal funds to pay the student his or her grant. The amount of funding a student receives through the Pell Grant is based on the student’s EFC and the number of classes in which the student is enrolled.

How Much Federal Pell Grant Funding Can a Student Receive?
Each year, the Federal Pell Grant Program publishes the Regular Payment Schedule for Determining Pell Grant Awards, which varies from year to year. To determine the amount of a student’s Federal Pell Grant, the TOCC Financial Aid Administrator considers the cost of attendance, the Expected Family Contribution (EFC), and other factors.

Payment Due Date for Pell Grant Recipients
Under certain circumstances, there are students who have filled out their Free Application for Federal Student Aid (FAFSA) and have registered to attend school but who cannot pay for tuition, textbooks, and fees at the time of registration. In these cases, when a student has an Institutional Student Information
Record (ISIR) that has been approved for a Pell Grant on file with the TOCC Financial Aid Office, the Financial Aid Officer will provide the student with a “Book Waiver,” for the student to take to the Bookstore to obtain books. With approval by the student all fees, tuition and expenses will be deducted from the student’s Pell award once received by the College.

**Campus-Based Programs: Federal Supplemental Educational Opportunity Grants and Federal Work-Study**

Campus-based programs are administered by the Financial Aid Office at eligible schools that choose to participate. The U.S. Department of Education provides funding for the campus-based programs at TOCC. All students who apply for either the Federal Supplemental Education Grant or the Federal Work Study must fill out a FAFSA.

**Veterans Benefits**

Brief descriptions follow of major benefits programs administered by the U.S. Veterans Administration (VA). For more information about VA education programs, visit the Financial Aid Office, call (888) 24-2551, or visit [www.gibill.va.gov](http://www.gibill.va.gov).

**Chapter 30**

The Montgomery GI Bill-Active Educational Assistance program provides up to 36 months of education benefits for a variety of programs.

**Chapter 33- Post 911 Yellow Ribbon Program**

The Post-9/11 Yellow Ribbon Program GI Bill will pay you:

- All resident tuition and fees for a public college; or,
- The lower of the actual tuition and fees, or the national maximum per academic year, for a private college.

**Dependents’ Educational Assistance Program (DEA)**

Students may qualify for DEA benefits if they are spouses or children of:

- Veterans who die or are permanently and totally disabled as the result of a service connected disability arising from active service in the armed forces;
- Veterans who died from any cause while rated permanently and totally disabled from the service-connected disability;
- Service persons missing in action or captured in the line of duty by a hostile force;
- Service persons forcibly detained or interned in the line of duty by a foreign government or power; or,
- Service persons hospitalized or receiving outpatient treatment for a service connected permanent and total disability and likely to be discharged for that disability.

**Veterans Educational Assistance Program (VEAP)**

Veterans Educational Assistance Program (VEAP) benefits are available to certain veterans who entered active duty between January 1, 1977, and June 30, 1985.

**Reserve Educational Assistance Program (REAP)**

The Reserve Educational Assistance Program (REAP), also known as Chapter 1607, makes certain reservists who served for at least 90 days after September 11, 2001, eligible either for education
benefits or for increased benefits. For more information, visit https://www.benefits.va.gov/gibill/reap.asp.

Other Sources of Funding for College

Financial aid may be awarded from nonfederal sources in the form of scholarships. The Financial Aid Office requires that the student submit a scholarship application in addition to the Free Application for Federal Student (FAFSA), which assists in determining the student’s Expected Family Contribution (EFC). The best source of information on aid available at a college is the college’s Financial Aid Office.

Tohono O’odham Education Assistance Program & Higher Education Services

TOCC encourages students to contact the Tohono O’odham Education Assistance Program & Higher Education Services Office, located in the Tohono O’odham Nation Department of Education to pursue possible sources of financial aid from the Nation. Call (520) 383-6571 for more information. Students may also seek financial support from their District Council Education Committees.

American Indian College Fund

The American Indian College Fund (AICF) was established in 1989 under the American Indian Higher Education Consortium (AIHEC). The mission of AICF is to raise scholarship funds for American Indian Students to use at qualified tribal colleges and universities and to broaden awareness of those institutions and of the Fund itself. The AICF also raises money and resources for other needs at the colleges, including capital projects, operations, endowments or program initiatives. The AICF conducts fundraising and related activities for Board-directed initiatives. Students interested in applying for an AICF Scholarship may go www.collegefund.org to search for scholarship listings, as well as ask the TOCC Financial Aid Office for assistance.

American Indian Education Foundation

The American Indian Education Foundation (AIEF) was established to support educational opportunities for American Indian and Alaska Native students. Its vision is to enhance strong, self-sufficient American Indian communities. Scholarships are awarded for each academic year and recipients are chosen by a national selection committee. More information on the AIEF can be found at the TOCC Financial Aid Office or on the foundation’s website at www.aiefprograms.org, or by calling AIEF regarding the Fund’s scholarship program at (800) 881-8694.

Gewkdag Scholarship

TOCC provides students who graduated from High School or who earned a GED within one year prior to enrolling in TOCC with free tuition and fees plus $250 toward their books. Requirements include registering for 12 or more credits and graduating from a school or GED facility on or near the Tohono O’odham Nation. If the Gewkdag Scholarship recipient earns a cumulative GPA of 2.0 with a full-time load (12 or more credits) during their first semester, then their second semester is also free and another $250 in book fees will be provided.

Additional Scholarship Information

The TOCC Financial Aid Office provides scholarship information for over 200 agencies throughout the U.S. that provide scholarships to both college and university students. Students who are interested in receiving the names of these agencies should contact the Financial Aid Office for assistance.
Satisfactory Academic Progress (SAP) Requirements for Federal Financial Aid Title IV Recipients

Satisfactory Academic Progress (SAP) must be maintained to be eligible for financial aid and other benefits. SAP is based on Grade Point Average (GPA) and on the percentage of courses completed. As long as the cumulative (overall) GPA meets or exceeds the standards listed in the table below, one of the two major requirements for Satisfactory Academic Progress is met.

**GPA Requirement for Satisfactory Academic Progress at TOCC**

<table>
<thead>
<tr>
<th>Total Credits Completed</th>
<th>Minimum Grade Point Average (GPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>1.0</td>
</tr>
<tr>
<td>4-9</td>
<td>1.2</td>
</tr>
<tr>
<td>10-14</td>
<td>1.3</td>
</tr>
<tr>
<td>15-24</td>
<td>1.5</td>
</tr>
<tr>
<td>25-48</td>
<td>1.75</td>
</tr>
<tr>
<td>49 or more</td>
<td>2.0</td>
</tr>
</tbody>
</table>

In addition to maintaining a minimum GPA as described in the table above, you must complete 2/3, or 67%, of the credits you take each semester. For example, if you take 12 credits you must complete 8 in order to maintain SAP.

Examples of the quantitative requirements under Title IV:

- Complete 67% of all courses attempted each semester.
- Duration of eligibility: Pell will be awarded only up to 150% of the credits required for a program of study.
- A student must complete the requirements for the degree within 150% of the time it normally takes to complete the degree.

Example: 63 credits required for degree × 150% = 94 credit hours a student may attempt while working on the degree. Each semester, the student must pass 67% of the credits in which he or she is enrolled.

Example: 18 credits × 67% = 12 credits; 15 credits × 67% = 10 credits

Courses with the following grades will not be considered as credits successfully completed, but will be counted as credits attempted in computing SAP:

- F – Failure
- W – Withdrawal
- WIP – Work in Progress
- I – Incomplete
- P – Pass
- FW – Faculty Withdrawal

Each student receiving financial aid will have his or her academic progress and duration of eligibility reviewed annually. Students who fall below the SAP requirements will be placed on Financial Aid Probation and will have their academic progress and duration of eligibility reviewed each semester. A student may become ineligible to receive Financial Aid if they continue to fall below the SAP requirements.
Duration of Eligibility for Multiple Degrees

Students who receive Title IV funding (financial aid contributions from the Federal Government, such as Pell Grants, etc.) to pursue multiple degrees must meet additional guidelines for duration of eligibility. Students desiring a second degree must be officially admitted to the new program of study, and all courses from previous programs that are applicable will be counted as courses completed for the new program of study.

Example: A student has attempted 95 credits and his second program of study requires 63 credits to complete.

Students reaching their duration of eligibility may appeal to the Financial Aid Committee (AKA Scholarship Committee) in writing. They may request to receive Title IV additional questions or information about Title IV Funds, please contact the Financial Aid Office.
Chapter 4 – Grades and Graduation

Mastering the Basics of the College Experience

To get off to a good start, students should become familiar with the basic terms, rules, and regulations that apply during their college experience. This Chapter provides an overview of this information. Included is information about TOCC’s grade structure, the requirements to keep grades at required passing levels for graduation, how grades are calculated, and developmental level coursework and placement testing.

Frequently Asked Questions (FAQ)

What is a “grade” and why is it important?

A grade is a mark that you earn by taking a class. The Instructor decides how well you have done in class and assigns a grade. The grade goes on your transcript and becomes part of your permanent record.

What is a “transcript” and how can you get a copy?

A transcript is a record of the grades you earn during your time in college. Each semester, Instructors submit grades to the Director of Admissions and Records at TOCC, and they are then put on your transcript. You can get a copy of your transcript from the Student Services division in the I-We:mta Ki: building (Working Together) on the S-cuk Du’ag Mascamakud (Main Campus).

What is a “semester”?

A semester refers to the cycle of time wherein classes are taught. The semester length at TOCC is 16 weeks. There are two semesters in a year: Fall and Spring. Summer sessions are much shorter, running around 5 to 8 weeks in length. When you take classes in summer sessions you still earn semester credits.

What is a “credit”?

A credit assigns a value to a course you take during a semester. Most courses are either 3 or 4 credits. You need at least 12 credits in a semester to be considered a full-time student at TOCC.

What is a “Grade Point Average” or GPA?

The grade point average or GPA is a combination of credits (also called credit hours) you earn and the grades you receive for those credits.

How is GPA calculated?

GPA equals the sum of the number of credits per class, multiplied by the points awarded for each class, divided by the number of credits. As an example:

- You took 4 classes this semester and each class was 3 credits, which is 12 credits total (4 x 3 = 12).
- You earned an A grade in two classes, and a B and a C in the other two classes.
- An A is worth 4.0 points, so you earned 24 points in those two classes (4 points x 6 credits = 24 points).
- The B is worth 3.0 points, so you earned 9 points in that class (3 points x 3 credits = 9 points).
- The C is worth 2.0 points, so you earned 6 points in that class (2 points x 3 credits = 6 points).
- The sum of points you earned is 39 (24+9+6).
- 39 points divided by 12 (sum of credits you took) = 3.25.
- Your GPA would be 3.25 for that semester.
These calculations are done each semester and they are summed up for all semesters enrolled at TOCC. The GPA for all of the courses taken while at TOCC is called the Cumulative GPA. (See the table below for information about how many points are earned for different grades. Some grades, like T for transfer, are not used in the calculation of your GPA).

Am I a full-time or part-time student?

You are classified as a full-time student if you are enrolled for 12 or more credit hours in the Fall or Spring semester or for 6 or more credit hours in a summer session. You are classified as a part-time student if you are enrolled for 6-11 credit hours in the Fall or Spring semester or for 15 credit hours during a summer session.

Am I a freshman or sophomore?

You are a freshman if you have earned fewer than 30 credit hours. You become a sophomore once you earn 30 or more credit hours.

Can I repeat a course for credit?

If you repeat a course, all records of the course, including the grades, will appear on your transcript. However, the highest grade earned will be used to compute your cumulative grade point average.

Can I transfer credits I earned at other colleges and universities?

If courses were taken at another college or university, submit an official transcript to determine if its credits will transfer to TOCC. TOCC will evaluate it to determine which course credits will be accepted for transfer. Courses with a 100 or higher prefix for which a C or higher grade was earned may transfer. If transferred they are entered on the TOCC transcript with a grade of “T.” The Transfer Policy is included in this Catalog in Chapter 1.

TOCC’s Grading System

<table>
<thead>
<tr>
<th>Grades</th>
<th>Explanation</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Above Average</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Below Average</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
<td>0</td>
</tr>
<tr>
<td>AU (Audit)*</td>
<td>AU indicates the student is enrolled in a class in order to attend, but not to earn credit.</td>
<td>NA</td>
</tr>
<tr>
<td>WIP (Work in Progress)</td>
<td>WIP shows on the transcript indicating a student is in a current class, but that grades have not yet been assigned.</td>
<td>NA</td>
</tr>
<tr>
<td>I (Incomplete)**</td>
<td>I on the transcript indicates the Instructor has agreed not to award a grade until work assignments agreed upon by both Instructor and student are turned in.</td>
<td>NA</td>
</tr>
</tbody>
</table>
FW
FW indicates the Instructor withdrew the student from the class. NA but some colleges may compute as failing

W
W indicates the student initiated withdrawal prior to official withdrawal date for the course. NA but some colleges may compute as failing

Y
Y indicates a special withdrawal done by the Instructor at the end of the semester, and when no other grade is appropriate. NA

T
T indicates that a course the student took at another college has been transferred in to TOCC. NA

X
X indicates credit earned by the student through a proficiency examination. NA

*Students wishing to audit a class must receive the written permission of the Instructor and must complete AU paperwork by the end of the official deadline for registration

**Once assignments are turned in, the Instructor submits a change of grade form to the Dean of Academics who approves and then forwards the request to the Registrar who makes the official change in the student's record. Any "I" grade not changed by the end of the ninth week of the following semester will automatically be changed to an F. Note: This Incomplete Policy supersedes Incomplete Policy statements in the TOCC Catalog for 2018-2020, page 30.

Good Academic Standing

In order for a student to be in good academic standing, they must maintain an overall GPA of 2.0 or higher. Maintaining good academic standing status may allow students to be eligible for scholarships, travel opportunities and participation in other extracurricular activities. Students receiving Federal Financial Aid must also meet the Satisfactory Academic Progress (SAP).

Please refer to chapter 3 for more information on SAP.

EARS – Early Alert Reporting System

Every semester your Instructor will complete a form at weeks 4, 8, and 12 indicating whether you are making satisfactory progress toward completion of the class. If there is an apparent issue or issues that suggest you are not doing as well as you should be, you will be notified. That notification is being made to assist you and to help ensure that you complete the course with a passing grade.

Midterm Status Report

Each semester, you will receive a Midterm Status Report that indicates, for each course in which you are enrolled, whether you are making Satisfactory or Unsatisfactory progress as determined by your Instructor. Your report will also include specific suggestions to help you successfully complete the semester.

Academic Alert

A student may be placed in an Academic Alert status if they are not in Good Academic Standing and their overall GPA falls below a 2.0. After the end of each Fall, Spring, or Summer semester, TOCC will
identify students whose grades cause them to be placed on Academic Alert and will notify them by mail and e-mail.

If you receive information stating that you have been placed on Academic Alert, that letter will indicate what College resources can assist you in improving your academic performance, and what specific steps you must take during your next semester to return to good academic standing.

**Academic Disqualification**

A student on Academic Alert will be academically disqualified if after the academic alert semester, the student has not returned to good academic standing. If the student earns a 2.0 GPA or higher for the current semester, the student will be permitted to continue on academic alert status.

A student who is academically disqualified has the option to follow an established college appeal procedure for reinstatement. See the TOCC Student Handbook for details. If the appeal process is successful and the student is reinstated, he/she will revert to an Academic Alert status for one semester.

**Catalog of Record**

The official TOCC Catalog that is in effect when you originally enroll is your “catalog of record.” This catalog determines the specific requirements you must meet to successfully complete your program of study. If you maintain continuous enrollment (meaning that you continue to take classes and continue to make satisfactory academic progress without a break of one year or more), you may use the requirements in the catalog of record for your program. If you do maintain continuous enrollment you may also choose to meet the requirements of any other catalog in effect after you originally enroll. If you have a break in enrollment of one year or more, your catalog of record will be the one in effect when you re-enroll. If you re-enroll during a summer term, your catalog of record is the one in effect for the following Fall semester.

**Himdag Requirement**

TOCC encourages the growth of students’ cultural knowledge by seeking to transmit learning in ways that respect the Tohono O’odham Himdag (cultural ways and practices of the Tohono O’odham). TOCC requires that all students, staff, and faculty complete HIS 122 Tohono O’odham History and Culture, and THO 101 Elementary Tohono O’odham or THO 106 Tohono O’odham Conversational I. All of TOCC’s degrees and certificates include this requirement. The required courses may also apply to one or more General Education requirements (see Chapter 5).

**About General Education**

General education course requirements introduce students to subjects ranging from the arts to the sciences. TOCC’s general education requirements are embedded in its degree and certificate offerings. The Himdag (culture and language) requirement introduces students to the richness of the language, culture and history of the Tohono O’odham. The science requirements teach students the basics of the scientific method and introduce them to the systematic study of the natural world. The social and behavioral science requirements challenge students to consider the social arrangements that human beings have created over time and to explore the nature of consciousness and being. The communication requirements are aimed at helping students to develop clarity and precision in their writing, while at the same time stimulating their creativity.
The overall goal of general education at TOCC is to prepare students to think critically, communicate effectively, appreciate culture and diversity, and to have a sufficient background in higher education to succeed in future courses of study at colleges and universities, and to succeed in employment.

Arizona community colleges and public universities share much of their general education requirements with the State’s university system. The Arizona General Education Curriculum (AGEC) specifies general education course requirements that students must take to complete requirements for transfer to Arizona’s public universities. Students who wish to attend The University of Arizona, Arizona State University or Northern Arizona University are guaranteed admission to a bachelor’s degree program if they complete AGEC general education requirements or a TOCC Associate degree (TOCC’s Associate degrees include completing AGEC requirements). (See Chapter 5 for TOCC’s degrees, certificates and AGEC requirements).

Arizona University System: Transfer Requirements and AGEC

TOCC participates in the Arizona Statewide Articulation and Transfer System (AZTransfer). Students are encouraged to visit the transfer system website at www.aztransfer.com for information and resources for planning their current and future education.

To transfer to an Arizona university after completing an Associate degree for transfer, a student must have an overall GPA of 2.0 or higher, or they will not be guaranteed entry, or guaranteed that all courses will transfer (Out-of-state students need a 2.5 overall GPA in their Associate degrees in order to transfer.). The GPA for the AGEC component of an Associate degree for transfer must be 2.5 or higher, with no courses for the certificate with a grade below a 2.0.

Pre-Program Developmental Courses and Placement Testing

Pre-program courses (generally called “developmental courses”) are designed to increase skill levels so that students will be able to succeed in college level courses. Developmental courses begin with a zero (IRW 070, IRW 090, MAT 082, MAT 089 etc.). College level courses are numbered 100 or above (WRT 101, MAT 151, GEO 103, etc.).

Students entering TOCC are assessed through a computer-based test called ACUPLACER. The results are used to determine skill levels in reading, writing, and math, and to determine whether developmental courses need to be taken. The purpose is to help students succeed in college. There is no “failing” score on the placement test. The results are simply an indicator of a person’s skill levels in basic subject areas of math, reading and writing.

The test is used to determine whether you will be placed in a developmental course and at what level. The guidelines below may help you to get a higher score.

Reading and Writing Tests: Who Needs to Take These and Are There Exceptions?

Students entering TOCC for the first time, and students who are returning after an absence of more than two years, are required to take the reading and writing portions of the placement test unless one of the following applies:

- The student has completed 24 semester hours of college level (100 or above) credits with a GPA of 2.0 or higher within the past two years; or,
- The student has taken WRT 101 Writing I, or an equivalent course, and has earned a grade of C or better; or,
- The student has graduated with a high school diploma within the last two years, the student was a full-time high school student in his or her senior year, and earned a GPA of 3.25 or higher during that senior year; or,
• The student completed assessment testing at another institution and submits those scores to TOCC (TOCC accepts ACT, and ACUPLACER scores).

Students who do not need to take the reading and writing placement test based on one of the above bulleted items will have a statement entered into their file by the Student Service Specialist and are eligible to take WRT 101 Writing I, if they have not already done so

**Math Test: Who Needs to Take It and Are There Exceptions?**

Students entering TOCC for the first time and students who are returning after an absence of more than two years are required to take the math portion(s) of the exam unless one of the following applies:

• The student has earned 3 semester hour credits for MAT 122 College Mathematics (or higher) with a grade of 2.0 (C) or higher within the last 3 years; or,
• The student has a high school diploma and earned a grade of 3.0 or higher in a course equivalent or higher than MAT 151 College Algebra within the past one year; or,
• The student earned a GED within the past year and passed the math portion with a score of 150 or higher as evidenced by the GED certificate.

Students who do not need to take the math placement test because they have met one or more of the criteria on the bulleted list above are eligible to take MAT 151 College Algebra.

**Changes in Developmental Mathematics Curriculum**

TOCC is moving to Carnegie Math Pathways. The change in the math curriculum is to help TOCC students to move through their developmental math requirements faster, and use less Pell Grant money. There are two new mathematics courses; MAT 089 Elementary Algebra and 142H College Mathematics, which are four credit hours each, with six clock hours per week of class time, in addition to the traditional math classes. Students will be placed in a math course based on ACCUPLACER scores and advising. If you have questions, please contact the Academic Advisor at 520-383-0089.

**ACCUPLACER Placement Tests and Cut Scores**

Colleges and universities across the country use assessment testing in order to help place students into the class or classes that will help them develop the college-level skills they need to succeed. Cut scores are the test scores that colleges adopt in order to determine whether students would benefit from developmental level courses before moving into college level courses in math, writing, and reading. If a student believes that he or she could do better on the placement tests results, arrangements can be made to re-take all or part of them.

**ACCUPLACER TEST – Cut Scores**

<table>
<thead>
<tr>
<th>Reading Comprehension - Cut Scores</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>69 and below</td>
<td>Writing 101 with 1 credit lab</td>
</tr>
<tr>
<td>70 - 99</td>
<td>Writing 101</td>
</tr>
<tr>
<td>100 - 120</td>
<td>Writing 102</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Writing – Sentence Skills Cut-Scores</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 69</td>
<td>Writing 101 with 1 credit lab</td>
</tr>
</tbody>
</table>
Tips for Students Taking the Placement Test

- Be rested, be sure to have plenty of time, and practice in advance.
- Try out some practice questions. The Student Support Specialist can provide information on the practice test site.
- You cannot pass or fail the placement test. It is an assessment to help place you in courses that match your skill level, so there is no pressure to make a certain grade.
- The Reading section tests comprehension. Take your time and think the answers through.
- Remember, there is no time limit and it’s not about how fast you can read.
- The Writing Section asks you to write an essay – you have as much time as you need.
- The Math test has several levels. It starts with pre-algebra and the difficulty level increases as you progress through the test. As soon as the program assesses your math ability, it stops testing.
- You can use a calculator during the math portion of the exam. The test proctor will provide scratch paper.
- Personal items and cell phones, tablets, computers, and other electronic devices are not allowed in the testing room.

Summary of Pre-Program and Developmental Requirements at TOCC

- Placement in developmental courses is done according to student scores on the placement tests as described earlier in this chapter.
- Student access to “gateway” courses (that is, WRT 101 Writing I, MAT 142H College Mathematics, or MAT 151 College Algebra) is dependent on either testing into those courses or taking and passing the needed developmental level courses in Reading, Writing, and Math.

Taking the gateway courses early helps ensure that a student will have the prerequisites needed for courses that are required for TOCC certificates and degrees and to meet AGEC requirements for transfer.

Graduation Requirements

If nearing graduation (within a semester away from earning a certificate or degree) students must submit a graduation application by the due date listed in the Academic Calendar. The application may be obtained from Student Services or online. If the form is not submitted by the due date, graduation may be delayed.

The TOCC residency requirement must be met: If working on a Certificate or Associate of Applied Science degree, at least 6 credit hours must be earned at TOCC in order to graduate from TOCC. If
working on an Associate degree at least 15 credit hours must be earned at TOCC. This residency requirement must be met through courses numbered 100 or higher.

All of the courses listed on the degree or certificate checklist that students are working toward must be completed. Courses must be completed within a specified time limit. Courses taken more than eight years prior to graduation cannot be counted toward graduation. For areas of study that change rapidly, such as Information Technology, TOCC reserves the right to review, accept or reject, or require upgraded coursework.

The GPA and Grade requirements must be met. A grade of “C” or higher in all of the General Education classes is required for the degree or certificate and in all transferrable coursework. An overall GPA of 2.0 or higher is required.

**Graduation with Honors**

If a student has completed 30 credit hours at TOCC, a cumulative GPA of 3.5 or higher will earn graduation with honors. Students earning a GPA of 3.5 to 3.799 graduate “with honors.” Students earning a GPA of 3.8 to 4.0 graduate with “high honors.” The honors designation will appear on diplomas and official transcripts.
Chapter 5 – Degrees and Certificates

Why College Is a Good Choice

College is a mind expander. It is a window onto the wonders of existence on this earth. It is an experience that arms you with skills and knowledge that you can use to navigate this life. It deepens your appreciation for culture, history, and language. It is an opportunity to meet people, have fun, think deeply, and to earn a college degree or certificate.

Degrees and certificates represent your educational accomplishments in college. Because they signify that you have gained expertise in a particular field, they are a pathway to increased economic success and often to finding a satisfying profession. In most cases, when you sign up to pursue a degree or certificate at TOCC, you will be eligible for federal financial aid (See Chapter 3).

Financial Benefits You Can Realize by Attending College

Benefits of Starting Your College Career at Tohono O’odham Community College

Students gain a variety of benefits by attending TOCC, which is a fully accredited two-year college. The credits you earn at TOCC are recognized nationally, and other colleges will give them full consideration for transfer purposes if you decide to transfer either before or after you earn a degree or certificate at TOCC.

TOCC’s mission includes preparing students for careers and community life, just as other colleges do, but it also includes an emphasis on Himdag (the cultural ways of the O’odham). TOCC is small and you will have personal attention. Classes are small and you can get to know your instructors and fellow students as you study and learn together.

TOCC is inexpensive compared to other colleges. You can earn a two-year Associate degree at TOCC and be debt-free on graduation if you maintain satisfactory academic progress (Defined in Chapter 4).
Read about the degrees and certificates available at TOCC on the next few pages. Then look through this chapter to see which one(s) may interest you. Finally, see the Academic Advisor and talk to faculty members for more information.

**Introducing TOCC Degrees and Certificates**

Each program and certificate in this chapter includes a short description and a list of the classes you need to take to earn it. The lists are the “roadmap” for you to follow from the time you sign up at TOCC until you are ready to graduate. This section introduces you to the kind of degrees and certificates that TOCC offers.

TOCC offers Associate and Associate of Applied Science degrees. Both are two-year degrees but there is an important difference.

**Associate Degrees**

Associate degrees are designed for students who plan to transfer to four-year colleges and universities to earn Bachelor degrees after they graduate. TOCC offers a number of Associate degrees:

- **Associate of Fine Arts in Art, studio emphasis**
- **Associate of Business in Business Administration**
- **Associate of Arts Computer Information Systems**
- **Associate of Arts in Early Childhood Education**
- **Associate of Arts in Elementary Education**
- **Associate of Arts in Liberal Arts**
- **Associate of Arts in Life Science**
- **Associate of Science in Life Science**
- **Associate of Science in Physical Science**
- **Associate of Arts in Social Work**
- **Associate of Arts in Tohono O’odham Studies**

**Associate of Applied Science (AAS) degrees**

AAS degrees are designed to provide career-specific skills that lead directly to employment. Students earning these degrees may also transfer to 4-year colleges and universities, though that is not the purpose of the Associate of Applied Science track. TOCC offers a number of Associate of Applied Science (AAS) degrees:

- **AAS in Building Construction Technologies**
- **AAS in Business Management**
- **AAS in Computer Information Systems**
- **AAS in Early Childhood Education**

**Certificate Programs**

Certificate programs may focus on developing specific skills as a pathway to completing a degree or to prepare students for employment in a variety of occupations. TOCC offers a number of certificates in a variety of areas. Choose from among the following:
• Certificate in Building Construction Technologies
• Basic Certificate in Building Construction Technologies
• Advanced Certificate in Building Construction Technologies
• Certificate in Casino Gaming
• Culinary Art Certificate I
• Culinary Art Certificate II
• Certificate in Digital Media
• Certificate in Substance Abuse and Addiction Studies
• Certificate in Social Services

Degree Requirements

All degrees at TOCC have three areas of study (1) general education, (2) Core requirements, and (3) electives/Concentration area.

1. General Education Requirements

All degree programs at TOCC require students to take a group of General Education Curriculum courses in order to complete their degrees. Completion of all of the Arizona General Education Curriculum (AGEC) block of classes will give TOCC students a group of courses that will transfer to all Arizona’s public universities. These AGEC course blocks generally also transfer to other universities.

Each TOCC degree program lists recommended AGEC course blocks. If for some reason another AGEC course needs to be substituted for the recommended AGEC course in a program, then the Academic Dean may approve a substitute AGEC course.

If a TOCC student completes the AGEC block of classes with a 2.5 GPA or better than the TOCC student is guaranteed admission to ASU, NAU, and UA.

The AGEC block of courses is the base of the community college education. The AGEC consists of 35-37 credits in the following subject areas at TOCC:

**Tohono O’odham Himdag requirements:** THO 101 (offered in the Fall, Spring, and Summer Semester) or THO 106 (offered in Spring semester), and HIS 122 (offered in Fall, Spring, and Summer semesters)

**Freshman Composition:** WRT 101 and WRT 102 (offered in Fall, Spring, and Summer semesters)

**Mathematics:** See specific program of study

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
</tr>
<tr>
<td>MAT 089 Elementary Algebra</td>
<td>X</td>
</tr>
<tr>
<td>MAT 142H College Mathematics</td>
<td>X</td>
</tr>
<tr>
<td>MAT 151 College Algebra</td>
<td>X</td>
</tr>
<tr>
<td>MAT 187 Pre-Calculus</td>
<td>X</td>
</tr>
<tr>
<td>MAT 212 Topics in Calculus</td>
<td>X</td>
</tr>
<tr>
<td>MAT 220 Calculus I</td>
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</table>
### Arts

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Offered</th>
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</thead>
<tbody>
<tr>
<td>ARH 101 History of Art I: Prehistory through Gothic</td>
<td>Fall: X</td>
</tr>
<tr>
<td>ARH 102 History of Art II: Renaissance through Modern</td>
<td>Spring: X</td>
</tr>
<tr>
<td>ART 100 Basic Design</td>
<td>Summer: X</td>
</tr>
<tr>
<td>ART 104 Digital Media and Photography I</td>
<td></td>
</tr>
<tr>
<td>ART 105 Art Appreciation</td>
<td></td>
</tr>
<tr>
<td>ART 110 Drawing I</td>
<td></td>
</tr>
<tr>
<td>ART 115 3-D Design</td>
<td></td>
</tr>
<tr>
<td>ART 151 Video I</td>
<td></td>
</tr>
<tr>
<td>ART 180 Visual Communication Design I</td>
<td></td>
</tr>
<tr>
<td>ART 204 Digital Media &amp; Photography II</td>
<td></td>
</tr>
<tr>
<td>ART 205 Painting I</td>
<td></td>
</tr>
<tr>
<td>ART 210 Drawing II</td>
<td></td>
</tr>
<tr>
<td>ART 230 Sewing I</td>
<td></td>
</tr>
<tr>
<td>ART 240 Sewing II</td>
<td></td>
</tr>
<tr>
<td>TOS 120/ART 120 Traditional Basketry</td>
<td></td>
</tr>
</tbody>
</table>

The courses listed here are not all inclusive, there may be other courses TOCC offers on occasion or courses that may be used in this category that can be transferred in from other College(s) or University(s).

### Humanities

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Offered</th>
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<tbody>
<tr>
<td>LIT 174 Introduction to Native American Writings</td>
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</tr>
<tr>
<td>LIT 274 Native American Literature</td>
<td></td>
</tr>
<tr>
<td>LIT 290 World Literature and Global Film</td>
<td></td>
</tr>
<tr>
<td>PHI 101 Introduction to Philosophy</td>
<td></td>
</tr>
<tr>
<td>THO 101 Elementary Tohono O’odham I</td>
<td></td>
</tr>
<tr>
<td>THO 102 Elementary Tohono O’odham II</td>
<td></td>
</tr>
<tr>
<td>THO 106 Conversational Tohono O’odham</td>
<td></td>
</tr>
<tr>
<td>THO 202 Advanced Tohono O’odham</td>
<td></td>
</tr>
<tr>
<td>THO 201 Intermediate Tohono O’odham</td>
<td></td>
</tr>
<tr>
<td>WRT 287 Beginning Creative Writing in Fiction</td>
<td>Delivered occasionally</td>
</tr>
<tr>
<td>WRT 288 Beginning Creative Writing in Poetry</td>
<td>Delivered occasionally</td>
</tr>
</tbody>
</table>

### Social & Behavioral Sciences

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 201 Microeconomic Principles</td>
<td>Fall: X</td>
</tr>
<tr>
<td>ECN 202 Macroeconomic Principles</td>
<td></td>
</tr>
<tr>
<td>GEO 103 Cultural Geography</td>
<td></td>
</tr>
</tbody>
</table>
The courses listed here are not all inclusive, there may be other courses TOCC offers on occasion or courses that may be used in this category that can be transferred in from other College(s) or University(s).

### Physical and Biological Sciences

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANR 111N Agroecology &amp; Tohono O’odham Crop Production</td>
<td>X</td>
</tr>
<tr>
<td>ANR 128N Plant Ecology and the Sonoran Desert</td>
<td>Delivered occasionally</td>
</tr>
<tr>
<td>ANR 130N Plant Science</td>
<td>Delivered occasionally</td>
</tr>
<tr>
<td>ANR 190N Wildlife Conservation</td>
<td>Delivered occasionally</td>
</tr>
<tr>
<td>ANR 210N Rangeland Conservation</td>
<td>Delivered occasionally</td>
</tr>
<tr>
<td>ANR 221N Soil Science</td>
<td>X</td>
</tr>
<tr>
<td>ANR 225N Environmental Issues and Conservation</td>
<td>Delivered occasionally</td>
</tr>
<tr>
<td>ANR 286N Water Resources</td>
<td>X</td>
</tr>
<tr>
<td>AST 101N Solar System</td>
<td>X</td>
</tr>
<tr>
<td>AST 102N Stars, Galaxies, Universe</td>
<td>X</td>
</tr>
<tr>
<td>BIO 100N Biological Concepts</td>
<td>X</td>
</tr>
<tr>
<td>BIO 105N Environmental Biology</td>
<td>X</td>
</tr>
<tr>
<td>BIO 109N Natural History of the Southwest</td>
<td>X</td>
</tr>
<tr>
<td>BIO 127N Human Nutrition and Biology</td>
<td>X</td>
</tr>
<tr>
<td>BIO 160N Introduction to Human Anatomy &amp; Physiology</td>
<td>X</td>
</tr>
<tr>
<td>BIO 181N Unite of Life I: Life of the Cell</td>
<td>X</td>
</tr>
<tr>
<td>BIO 182N Unity of Life II: Multicellular</td>
<td>X</td>
</tr>
<tr>
<td>BIO 208N Tohono O’odham Ethnobotany</td>
<td>X</td>
</tr>
<tr>
<td>CHM 121N Chemistry and Society</td>
<td>X</td>
</tr>
<tr>
<td>CHM 140N Fundamentals Organic &amp; Bio-chemistry</td>
<td>X</td>
</tr>
<tr>
<td>CHM 151N General Chemistry I</td>
<td>X</td>
</tr>
<tr>
<td>CHM 152N General Chemistry II</td>
<td>X</td>
</tr>
<tr>
<td>PHY 121N Fundamentals of Physics I</td>
<td>X</td>
</tr>
</tbody>
</table>

The courses listed here are not all inclusive, there may be other courses TOCC offers on occasion or courses that may be used in this category that can be transferred in from other College(s) or University(s).
Special Requirements upon completion of your AGEC, you will have taken courses that meet the following requirements: Intensive Writing and Critical Inquiry (I), Cultural (C) and Global (G).

**AGEC-A**

The AGEC-A is for students who want to study liberal arts when they transfer to the university.

Examples: Writing, History, Tohono O'odham Studies, Philosophy, Education, Art

**TOCC AGEC-A Programs**

- Associate of Fine Arts in Art, (Studio Emphasis)
- Associate of Arts in Computer Information Systems
- Associate of Arts in Early Childhood Education
- Associate of Arts in Elementary Education
- Associate of Arts in Liberal Arts
- Associate of Arts in Life Science
- Associate of Arts in Social Work
- Associate of Arts in Tohono O'odham Studies

**AGEC-S**

The AGEC-S is for students who want to study programs that require more rigorous math and science when they transfer to the university.

Examples: Biology, Chemistry, Agriculture, Health Science, Public Health, Environmental Science

**TOCC AGEC-S Program**

- Associate of Science in Life Science
- Associate of Science in Physical Science

**AGEC-B**

The AGEC-B is for students who want to study business when they transfer to the university.

Examples: Accounting, Management, Organizational Leadership, Marketing

**TOCC AGEC-B Programs**

- Associate of Business in Business Administration

All AGECs also have special requirements that focus on writing, critical inquiry, and awareness of ethnic/race/gender issues and global and international awareness.

Students must complete at least one course in each category.

**Intensive Writing and Critical Inquiry**

At least one course beyond the First-Year Composition requirement shall involve the development of competence in written discourse and involve the gathering, interpretation, and evaluation of evidence. Course with an (I) next to them are considered to meet this requirement.
Awareness Areas

1. One course emphasizing ethnic/race/gender awareness is required. Courses with a (C) by them meet this requirement.

2. One course emphasizing contemporary global/international awareness or historical awareness is required. Courses with a (G) by them meet this requirement.

Associate Degrees of Applied Science AAS programs also have some Arizona General Education Curriculum (AGEC) requirements, which vary from program to program. These AAS program have some AGEC requirements, which are direct employment focused but include fewer (AGEC) units than an Associate of Arts (AA) degree. All of the AAS degrees include the Tohono O’odham Himdag course requirements: THO 101 and HIS 122.

- Associate of Applied Science in Building Construction Technologies
- Associate of Applied Science in Business Management
- Associate of Applied Science in Computer Information Systems
- Associate of Applied Science in Early Childhood Education

(2) Core Requirements

Core requirements are courses that focus on the degree that is be obtained.

(3) Elective Courses

Degrees at TOCC provide the opportunity to either take elective credits which are courses selected by the student that focus on a general educational interest the student may have outside their degree or courses selected by the student that provides more in-depth knowledge in degree area. Degrees at TOCC may also have areas of interest, which provide course work in a specialized area of study within the degree. The following is a list of degrees that use options along with the option areas.

Associate Degrees that have Options

Associate of Arts in Life Science
- Community and Public Health
- Pre-Professional Nursing
- Environmental

Associate of Science in Life Science
- Agriculture
- Health Science
- Natural Resources
- Environmental

Associates of Applied Science Degrees that have Concentrations

AAS in Building Construction Technologies
- Carpentry
- Construction Heating, Ventilation and Cooling
- Construction Painting
- Electrical
- Heavy Equipment Operations
- Masonry
- Plumbing

Certificate Programs that have Concentrations:

Building Construction Technologies

- Facilities Maintenance
- Construction Painting

Basic Certificate in Building Construction Technologies

- Carpentry
- Construction Heating, Ventilation and Cooling
- Electrical
- Heavy Equipment Operations
- Masonry
- Plumbing

Advanced Certificate in Building Construction Technologies

- Carpentry
- Construction Heating, Ventilation and Cooling
- Electrical
- Heavy Equipment Operations
- Masonry
- Plumbing

Tohono O'odham Language Transfer to ASU, NAU and UA

TOCC now offers four semesters of Tohono O'odham language that transfer to ASU, NAU and UA and ASU Currently the University of Arizona is the only public university in Arizona to offer Tohono O'odham language classes. However, now Northern Arizona University accept THO 101, THO 102, THO 201, and THO 202 classes for transfer.

In addition, TOCC students who transfer to ASU, NAU or UA and have taken and passed THO 101 and THO 102 with a C or better, would be able to meet a second semester language requirement for any university program. TOCC students who transfer to these universities and have taken and passed THO 201 and THO 202 with a C or better could also meet a fourth semester language requirement for any university program. (THO 106 or THO 107 do not meet the university second or fourth semester language proficiency requirements.)

Free Tuition for the Tohono O'odham Language Course
The Tohono O’odham Community College Board of Trustees recently approved free tuition for the O’odham Language Course. Beginning in the 2018 Summer and Fall sessions and thereafter, O’odham members from Tohono O’odham Nation can now enroll in the Tohono O’odham Language Course with free tuition. This offer is also extended to the Ak-Chin Indian Community, Gila River, and Salt River members.

Selecting a Degree Program

In addition to going over the templates for degrees and certificates, be sure to read the information about those certificates and degrees. Many programs have different options that allow a student to have a focus on an area within their chosen field. That information may help you determine which one you may want to select. If you have any questions about the degrees, or want to know more about them, be sure to talk with your advisor and instructors.

The degree and certificate templates in this Chapter can be chosen by any student, including those who started during a different catalog year. A student who enrolled in a previous year should compare the program or certificate templates from the catalog that was current, when first enrolled, to the templates in this catalog, and choose the catalog that will complete graduation requirements in the shortest amount of time (read the details on this topic in Chapter 4).
Associate Degrees

TOCC Associate degrees are designed to transfer to University for completion of a Bachelor’s degree, through providing the first two years (60-65 credits) of a four-year Bachelor’s degree. The general education component of each degree is meant to provide students with exposure to a wide variety of topics from art to science. The general education also has four general education goals.

General Education Goals (GEG)

Tohono O’odham Community College Board of Trustees approved four GEG in 2004, which were developed by Faculty Senate, the Himdag Committee, administration, and other invested stakeholders. The GEG convey what a graduate from TOCC should know from the time they begin their educational journey at TOCC to the time they graduate and set out fulfilling their academic dreams and/or beginning their new career. The General Education Goals are as follows:

Gewkdag – Gewkdag is the strength derived from learning and practicing one’s Himdag through T-$o:\$on (our core values). T-$o:\$on serves as foundational values that can be applied to academic and life experiences. These values serve to guide, build and empower students to succeed in an ever-changing society.

Interpersonal Skills involves the ability to guide, involve others, and work cooperatively to accomplish tasks. It also refers to respecting the unique character and history of the world’s peoples, maintaining personal courage and integrity, and having the capacity to understand critically, value and appreciate diverse perspectives, including how living things relate to one another, as well as spiritual, communal, traditional, and ceremonial dimensions.

Critical Thinking refers to skills in applying abstract, critical and creative thinking to practical situations. It also refers to the capacity to envision larger relationships, orders, or systems when solving problems. It involves comparing, contrasting and evaluating statements using logic, intuition, different points of view, identifying assumptions and implications, leading to a synthesis of one’s own views.

Communication includes effective reading, writing, speaking, listening, and using information technology to express ideas clearly and appropriately for different audiences. It includes artistic expression.
**Associate of Fine Arts in Art, studio emphasis**

TOCC’s Associate in Fine Art (AFA) program is designed to provide excellent preparation for students who wish to pursue a career in Art that involves transferring to another college or university. The AFA degree emphasizes both theory and practice and includes requirements for substantial hands-on creative work.

**Program learning outcomes**

1. Intentionally manifest ideas in visual form.
2. Synthesize personal artistic style and vision into indigenous, Native ideas and artifacts and into the Himdag.
3. Intentionally manipulate media to specific outcomes.
4. Manifest a personal vision across a range of media.
5. Consciously integrate visual art and design theory and practice into Himdag.
## Associate of Arts in Fine Art, Studio Emphasis
### Program of Study

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
<th>Recommended courses for this degree*</th>
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<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture</td>
<td>3</td>
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<tr>
<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WRT 102 Writing II (I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 142H College Mathematics or higher</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: Art General Education Selection</td>
<td>3</td>
<td>ARH 101 (C) (G)</td>
</tr>
<tr>
<td></td>
<td>Choose any course from: Humanities General Education Selection</td>
<td>3</td>
<td>ARH 102 (C) (G)</td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: Social and Behavioral Science General Education Selection</td>
<td>6</td>
<td>ARH 203 (C) and ARH 204 (C)</td>
</tr>
<tr>
<td>Two Lab-loaded Science Course</td>
<td>Choose any course from: Science</td>
<td>8</td>
<td>BIO 208N (C) and BIO 109N (I)</td>
</tr>
</tbody>
</table>

### Total General Education Credits 37

* Recommended courses are courses that are recommended to take as part of the degree because the course is relevant to the area of study and/or the course will be a requirement by most Universities when the student transfers. Consult with your Academic/Faculty Adviser for further information.

### Core Courses

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>F = Fall</th>
<th>S = Spring</th>
<th>Su = Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100 Basic Design (Offered F, S, Su)</td>
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<td></td>
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</tr>
<tr>
<td>ART 104 Digital Photography I (Offered F, S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 110 Drawing (Offered F, S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 115 3D Design (Offered F)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 150 Color &amp; Composition (Offered S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 205 Painting I (Offered F)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 210 Drawing II (Offered S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 255 Printmaking I (Offered Su)</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>ART 290 Portfolio (Offered based on student graduation)</td>
<td>1</td>
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</tr>
</tbody>
</table>

### Total Core Credits 25

### Electives

Choose any two of the following classes ART 200, ART 204, ART 215, ART 220, ART 225, ART 230, ART 240, ART 251, ART 260 or ART 280.

### Total Credits for Elective 6

### Total Credits for Degree 68
Associate of Business in Business Administration

Business Degrees

If you are interested in college degrees and certificates that would allow you to work in a variety of jobs, you may want to explore TOCC’s business offerings. Graduates with a business degree may work in small or large companies, or work virtually from home, using their computer, telephone, and other technology. With a business degree, you could also be an entrepreneur and open your own company or create an online business via the Internet.

The Associate of Business in Business Administration is the AGEC-B transfer degree that incorporates the General Education requirements of the public universities in Arizona. The Associate of Applied Science in Business Management is a workforce degree intended for those students seeking entry-level employment upon completion.

TOCC graduates with a business degree can also work for the Tohono O’odham Nation in one of the many departments of the government. This degree can be useful in various fields, including the health industry, marketing, finance, and agriculture.

Program learning outcomes

1. Demonstrate the ability to use data to solve common issues that arise in business operations.
2. Demonstrate knowledge of basic organizational and procedural principles of business
3. Demonstrate the ability to apply economic and legal concepts to a business operation.
4. Provide an analysis of the degree of “fit” between a specific business plan and the Tohono O’odham Himdag.
## Associate of Business in Business Administration

### Program of Study

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
<th>Recommended courses for this degree*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture (C)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WRT 102 Writing II (I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 212 Topics in Calculus or higher</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: <strong>Art General Education Selection</strong> or <strong>Humanities General Education Selection</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: <strong>Social and Behavioral Science General Education Selection</strong></td>
<td>6</td>
<td>PSY 101 Introduction to Psychology, ECN 201 Introduction to Microeconomics</td>
</tr>
<tr>
<td>Computer Science</td>
<td>CIS 100 Introduction to Computers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Two Lab-loaded Science Course</td>
<td>Choose any course from: <strong>Science</strong></td>
<td>8</td>
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</tr>
<tr>
<td></td>
<td><strong>Total General Education Credits</strong></td>
<td>36</td>
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</tr>
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* Recommended courses are courses that are recommended to take as part of the degree because the course is relevant to area of study and/or the course will be a requirement by most Universities when the student transfers. Consult with your Academic/Faculty Adviser for further information.

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<th>Core Courses</th>
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<tbody>
<tr>
<td>ACC 101 Financial Accounting (Offered F)</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>ACC 102 Managerial Accounting (Offered S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 100 Introduction to Business (Offered F, S, Su)</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>BUS 220 Legal Environment of Business (Offered S)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>ECN 202 Macroeconomics Principles (Offered S, Su)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT 111 Principles of Marketing (Offered F)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Core Credits</strong></td>
<td>18</td>
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</tr>
</tbody>
</table>

**Highly recommended for this degree MAT 225 or BUS 205. And choose any course designated with the following prefixes: BUS, MKT, ACC, MGT.**

| Electives                     | 6       |            |             |
|                               | **Total Credits for Elective** | 6 | |
|                               | **Total Credits for Degree** | 60 | |
**Associate of Arts in Computer Information Systems**

The Computer Information Systems program covers developing and maintaining information systems that support organizations technical infrastructure. Students will learn about computer hardware and software, creating and supporting databases, building a network, configuring networks, cyber-security fundamentals, and project management which prepares students for entry-level positions as system administrators, network administrators, support technicians, and applications specialists in the computer information services industry. Graduates may enter a Baccalaureate Degree program and/or sit for the Certified Information Systems Security Professional (CISSP), Project Management Professional (PMP), and/or the Certified Cisco Network Associate (CCNA) network certification examinations.

**Program learning outcomes**

1. Demonstrate the ability to install, configure, and maintain end-user computer systems and software.
2. Research, interpret, and communicate technical information in written, graphic, diagrammatic, electronic and oral forms.
3. Demonstrate the ability to plan and implement both wired and wireless networks sufficient for small business use.
4. Apply project life-cycle concepts to assist in business operations.
5. Demonstrate the ability to work independently or in a group environment with sensitivity to the business and cultural needs (Himdag).
6. Create a comprehensive security plan to protect data (Synthesis Level)

**Areas of focus:**

**Coding** - Software development using programming language to accomplish tasks using a computer. Design and build executable programs and applications to solve problems.

**Networking** - A group of two or more computer systems linked together. Local area networks to wide area networks are configured and maintained using skills obtained in network courses.

**Security** - Understanding and applying layers of protection for computer systems. From firewalls to penetration testing learn how to protect your digital assets.

**GIS** - Geographic Information Systems (GIS), solving real world problems creating and using digital maps and layered satellite imagery to reveal patterns, trends, and relationships.
### Associate of Arts in Computer Information Systems

#### Program of Study

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</tr>
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<td>Computer Science</td>
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<tr>
<td>Two Lab-loaded Science Course</td>
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**Total General Education Credits**: 36

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<tbody>
<tr>
<td>CIS 127 Programming and Problem Solving I (Offered S)</td>
<td>3</td>
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<tr>
<td>CIS 130 Fundamentals of Computer Networking (Offered S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 140 Introduction to Risk Management (Offered F)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 210 Introduction to System Administration (Offered S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 280 IT Project Management (Offered F)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 297 Internship/Practicum</td>
<td>3</td>
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</tr>
</tbody>
</table>

**Total Core Credits**: 18

**Electives**: Choose any two of the following classes:

- CIS 230N networking Fundamentals - Nt., S (Offered F, starting 2021)
- CIS 234N Advanced Networking Routing & Switching – Nt., (Offered S, starting 2022)
- CIS 240N Network Security – Nt., S (Offered S, starting 2022)
- CIS 250N Coding Fundamentals – C (Offered F, starting 2021)
- GEO 267 Introduction to GIS – G (Offered F)

**Total Credits for Elective**: 7-8

**Total Credits for Degree**: 61-62
Associate of Arts in Early Childhood Education

An Associate of Arts degree in Early Childhood Education prepares students to become competent early childhood educators that are interested in working in a paraprofessional role with young children and families. Students gain specialized knowledge and implement best practices in early childhood education. ECE graduates are employed in many settings such as Head Start, day-care centers, in-home support services, and other entry level child-centered positions. Students choose the AA in Early Childhood Education if planning to go directly into an early childhood employment setting or transfer to a university to complete a 4-year degree program.

Program learning outcomes

1. Promoting Child Development and Learning: Describe and defend the principles and theories of child development and implement developmentally appropriate activities through mastery of child development for children ages birth to eight years.

2. Building Family and Community Relationships: Demonstrate knowledge of family and community dynamics that support and empower families through respectful and reciprocal relationships within diverse populations, contexts, and Tohono O’odham communities.

3. Observing, Documenting, and Assessing to Support Young Children and Families: Demonstrate proficiency in observation and documentation of children’s progress. Includes the use of observation, documentation, and assessment to establish learning goals and activities for the benefit of children’s developmental and educational needs.

4. Using Developmentally Effective Approaches to Connect with Children and Families: Demonstrate knowledge of family and community dynamics that support and empower families through a respectful and reciprocal relationship.

5. Using Content Knowledge to Build Meaningful Curriculum: Plan a culturally and linguistically responsive learning environment for young children that is responsive to each child’s physical health, intellectual and emotional well-being, and nutritional and safety needs.

6. Becoming a Professional: Demonstrate professional ethics and defend professional decisions based on the knowledge of early childhood theories and practices and the principles of the National Association for the Education of Young Children Code of Ethical Conduct.

Tohono O’odham Community College also offers an Associates of Applied Science in Early Childhood Education that is meant for direct employment on the Nation after completion of their associate degree.
# Associate of Arts in Early Childhood Education

## Program of Study

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
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<tr>
<td></td>
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<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
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<td></td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>Mathematics</td>
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<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: Art General Education Selection</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Choose any course from: Humanities General Education Selection</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: Social and Behavioral Science General Education Selection</td>
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<td></td>
</tr>
<tr>
<td>Two Lab-loaded Science Course</td>
<td>Choose any course from: Science</td>
<td>8</td>
<td>ANR 111N</td>
</tr>
</tbody>
</table>

**Total General Education Credits** 37 **

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**Students should select at least one course that is designated with a (G) to meet this special requirement.

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>F= Fall</th>
<th>S = Spring</th>
<th>Su = Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 105 Foundations of Early Childhood Education (offered F, S)</td>
<td>3</td>
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</tr>
<tr>
<td>ECE 110 Emergent Language and Literacy (offered F)</td>
<td>3</td>
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<td></td>
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<tr>
<td>ECE 125 Nutrition, Health, and Safety for the Young Child (offered F)</td>
<td>3</td>
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<tr>
<td>ECE 217 Child Development (Offered F, S)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>ECE 226 Effective Interactions and Guidance (Offered S)</td>
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<tr>
<td>ECE 228 Family, Culture, and Community (Offered S)</td>
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<tr>
<td>ECE 291 Internship for Students with Experience in Early Childhood Education (Offered F, S)</td>
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<td></td>
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</tbody>
</table>

**Total Core Credits** 22

**Electives**

Highly recommended for this degree: SWU 171 Introduction to Social Work.
Choose any course designated with the following prefixes: ECE, EDU, PSY, SOC, SSE, or SWU.

**Total Credits for Elective** 3

**Total Credits for Degree** 62
Associate of Arts in Elementary Education

If you enjoy working with elementary age children, Tohono O’odham Community College offers an Associate of Arts in Elementary Education, which covers beginning to upper division programs in elementary education, special education, bilingual education, and prepares para-educators. Choose this degree if you are also interested in transferring to a university to complete a 4-year degree in Elementary Education and receive a teaching certificate.

Program learning outcomes

1. Students will describe the role of a classroom teacher in developing and maintaining a safe, engaging, effective and efficient learning environment and the supportive relationships in that classroom.
2. Students will describe the ever-increasing diversity of contemporary classrooms and articulate a commitment to recognizing and affirming their pupils as unique individuals, whom they respect, value, and inspire.
3. Students will describe a commitment to meeting the educational needs of exceptional learners in the least restrictive environment by creating a learner-centered classroom that incorporates differentiated instruction and a flexible approach to meeting educational objectives.
4. Students will articulate a commitment to indigenizing the curriculum by identifying how they will privilege Tohono O’odham language, culture, and history in their educational practices.
### Associate of Arts in Elementary Education

**Program of Study**

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
<th>Recommended courses for this degree*</th>
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</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
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</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
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<tr>
<td></td>
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<td>Mathematics</td>
<td>MAT 142H College Mathematics or higher</td>
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<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: <a href="#">Art General Education Selection</a></td>
<td>3</td>
<td>TOS 111 or ART 100</td>
</tr>
<tr>
<td></td>
<td>Choose any course from: <a href="#">Humanities General Education Selection</a></td>
<td>3</td>
<td>THO 102</td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: <a href="#">Social and Behavioral Science General Education Selection</a></td>
<td>6</td>
<td>HIS 141 (G), POS 210</td>
</tr>
<tr>
<td>Two Lab-loaded Science Course</td>
<td>Choose any course from: <a href="#">Science</a></td>
<td>8</td>
<td>GEO 101N, BIO 109N, BIO 105N, BIO 208N</td>
</tr>
</tbody>
</table>

**Total General Education Credits** 37

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<th>Core Requirements</th>
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<tbody>
<tr>
<td></td>
<td>EDU 200 Introduction to Education</td>
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<tr>
<td></td>
<td>EDU 201 Diversity in Education</td>
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<tr>
<td></td>
<td>EDU 202 Introduction to Special Education and the Exceptional Learner</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>EDU 203 Classroom and Classroom Relationship Management, EDU 204 Psychology of Education, or EDU 217 Child Dev.</td>
<td>3</td>
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<tr>
<td></td>
<td>MAT 146 Mathematics for Elementary Teachers I</td>
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<tr>
<td></td>
<td>MAT 147 Mathematics for Elementary Teachers II</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Core Credits** 18

**Electives**

- Highly recommended for this degree: EDU 111, EDU 220, and EDU 240
- And choose any course designed with the following prefixes: EDU or ECE

**Total Credits for Elective** 5

**Total Credits for Degree** 60
Associate of Arts in Liberal Arts

TOCC offers the Associate of Arts in Liberal Arts for students who are interested in a broad-based college education that allows them the freedom to choose a variety of subjects during their first two years in college. The AALA degree concentrations are also designed for transfer and can help students transfer to four-year colleges and universities with a specialized block of courses. All Liberal Arts concentrations incorporate the AGEC-A (the Arizona public university system requirements for General Education).

Program learning outcomes

Outcome 1: Demonstrate effective reading, writing, and speaking skills.
Outcome 2: Demonstrate the ability to use research techniques to address a given topic.
Outcome 3: Be able to use critical-thinking skills to provide multiple perspectives on a specified issue of general concern.
Outcome 4: Be able to employ perspectives from the social sciences to assess a social problem.
Outcome 5: Demonstrate the ability to use concepts and methods of the physical and biological sciences to make informed judgments.
# Associate of Arts in Liberal Arts
## Program of Study

<table>
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<tr>
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</tr>
<tr>
<td></td>
<td>Choose any course from: Humanities General Education Selection</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: Social and Behavioral Science General Education Selection</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Two Lab-loaded Science Course</td>
<td>Choose any course from: Science</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total General Education Credits</strong></td>
<td></td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

* Recommended courses are courses that are recommended to take as part of the degree because the course is relevant to area of study and/or the course will be a requirement by most Universities when the student transfers. Consult with your Academic/Faculty Adviser for further information.

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Total Core Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 credits including 3 or more credits each from literature, History, Speech/communication. Nine (9) credits overall must be from courses numbered 200 and above. One course must be designated with a (G).</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total Core Credits</strong></td>
<td>24</td>
</tr>
<tr>
<td><strong>Total Credits for Degree</strong></td>
<td>61</td>
</tr>
</tbody>
</table>
Associate of Arts in Life Science

The Associate of Arts in Life Science is a degree for students planning to transfer to the university in Community and Public Health, Nursing, or Agriculture Technology degree program. It contains a strong core of life science courses. However, unlike the Associate of Science program, it only requires MAT 142H College Mathematics or MAT 225 Introduction to Statistics. The Associate of Arts degree program also allows students to take a broader range of classes to tailor their programs for transfer to the university in the areas listed above.

Program learning outcomes

1. Demonstrate knowledge of scientific concepts and vocabulary.
2. Design and conduct a research project.
3. Display a sense of place, by being able to identify health and environmental issues on the Tohono O’odham Nation and propose a culturally-appropriate solution.
4. Apply critical and creative thinking skills to solve problems.

Community and Public Health—This area is designed for transfer to a Bachelor’s degree in Public Health. Public Health professionals work to protect and improve the health of people and their communities by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing, and responding to infectious diseases. Some examples of careers in this area are health and wellness educator, public health administrator, infection control officer, and healthcare consultant.

Pre-professional Nursing—This area is designed for students who intend to transfer to a Bachelor of Science in Nursing (BSN) degree program. Students should contact the university that they intend to transfer to for specific requirements for their Nursing degree program.

Environmental —This area is designed for transfer into an environmentally-related four-year program which does not require Calculus such as environmental studies, agricultural technology, or agricultural education.
# Associate of Arts in Life Science
## Program of Study

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
<th>Recommended courses for this degree*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture (C)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WRT 102 Writing II (I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 151 College Algebra</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: Art General Education Selection</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choose any course from: Humanities General Education Selection</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: Social and Behavioral Science General Education Selection</td>
<td>6</td>
<td>PSY 101 Introduction to Psychology.</td>
</tr>
<tr>
<td>Two Lab-loaded Science Course</td>
<td>Choose any course from: Science</td>
<td>8</td>
<td>Student should select courses based on area of study.</td>
</tr>
</tbody>
</table>

**Total General Education Credits** 37

*Recommended courses are courses that are recommended to take as part of the degree because the course is relevant to area of study and/or the course will be a requirement by most Universities when the student transfers. Consult with your Academic/Faculty Adviser for further information.*

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Core Courses</th>
<th>Course Offered:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIO 298 Service-Learning Practicum (Offered S)</td>
<td>F =Fall semester</td>
</tr>
<tr>
<td></td>
<td>BIO 299 Research Practicum (Offered S)</td>
<td>S = Spring semester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Su = Summer session</td>
</tr>
</tbody>
</table>

**Total Core Credits** 2

| Electives | Student should select elective courses based on area of interest. | 21 |

**Total Credits for Elective** 21

**Total Credits for Degree** 60
### Recommended Life Science Elective courses* based on student interest in Life Sciences

*(See Faculty Advisor for more information)*

<table>
<thead>
<tr>
<th>Community and Public Health</th>
<th>Pre-Professional Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• BIO 127N Human Nutrition &amp; Biology (GE 4 credits)</td>
<td>• BIO 127N Human Nutrition &amp; Biology (4 credits)</td>
</tr>
<tr>
<td>• BIO 160N Intro to Human Anatomy &amp; Physiology I (4 credits)</td>
<td>• BIO 160N Intro to Human Anatomy &amp; Physiology (4 credits)</td>
</tr>
<tr>
<td>• BIO 181N Unity of Life I (GE 4 credits)</td>
<td>• BIO 181N Unity of Life I (GE 4 credits)</td>
</tr>
<tr>
<td>• CHM 130N Fundamental Chemistry or CHM 151N General Chemistry I (5 credits)</td>
<td>• CHM 130N Fundamental Chemistry (5 credits) or CHM 151N General Chemistry I (5 credits)</td>
</tr>
<tr>
<td>• CPH 101 Exploring Careers in Health Profession (2 credits)</td>
<td>• CHM 140N Fundamental Organic and Biochemistry or CHM 152N General Chemistry II (5 credits)</td>
</tr>
<tr>
<td>• CPH 178 Personal Health and Wellness (3 credits)</td>
<td>• CPH 101 Exploring Careers in Health Professions (2 credits)</td>
</tr>
<tr>
<td>• CPH 200 Community and Public Health (3 credits)</td>
<td>• MAT 225 Basic Statistics (3 credits)</td>
</tr>
<tr>
<td>• Open elective (MAT 225 Basic Statistics Recommended) (3 credits)</td>
<td>• PSY 240 Human Growth and Development (3 credits)</td>
</tr>
</tbody>
</table>

### Environmental

- BIO 105N Environmental Biology (GE 4 credits)
- BIO 181N Unity of Life I (GE 4 credits)
- BIO 182N Unity of Life II (4 credits)
- BIO 208N Tohono O’odham Ethnobotany or ANR 130N Plant Science (4 credits)
- CHM 130N Fundamental Chemistry or CHM 151N General Chemistry I (5 credits)
- Open elective (MAT 225 Basic Statistics recommended) (3 credits)
Associate of Science in Life Science

TOCC’s Science and Health programs include an Associate of Science in Life Science degree for transfer with the following concentrations: Agriculture, Health Science, and Natural Resources. All options in the AS Life Science degree emphasize thorough preparation of students who plan to transfer to four-year colleges and universities after they graduate from TOCC. The AS Life Science degree can help a student attain admission to one of Arizona’s public universities as a junior and prepares students for transfer to fields such as allied health, public health, medicine, veterinary studies, agriculture, natural resources, and science education.

Program learning outcomes

1. Demonstrate knowledge of scientific concepts and vocabulary.
2. Design and conduct a research project.
3. Display a sense of place, by being able to identify health and environmental issues on the Tohono O’odham Nation and propose a culturally-appropriate solution.
4. Apply critical and creative thinking skills to solve problems.

Health Sciences: This area is designed for transfer to four-year programs in health-related fields such as allied health, medicine, or veterinary science. Allied health careers include all non-nurse and non-physician health care fields and some examples include audiologists, speech language pathologists, physical therapists, occupational therapists, diagnostic medical personnel (medical laboratory scientists, nutritionists, and dietitians).

Natural Resources: This area is designed for transfer to four-year programs in natural resources. Natural resources professionals are involved in the protection and management of environmental resources from a local to global level. Some examples of careers in this area include extension agent, forester, GIS Expert, land use planner, natural resource scientist, environmental educator, wildlife habitat specialist, range manager, and conservation biologist.

Environmental Sciences: This area is designed for transfer to four-year programs in environmental science and, in particular, the area of environmental science that involved in identifying, controlling, or eliminating sources of pollutants or hazards affecting the environment or public health. Some professions include soil conservationist, hydrologist, water quality specialist, environmental toxicologist, and air pollution analyst.

Agriculture Sciences: This area is designed for transfer to four-year programs in the agricultural sciences which includes the study of the technologies of soil cultivation, crop cultivation and harvesting, animal production, and the processing of plant and animal products for human consumption and use. Careers include agronomist, animal scientist, crop production manager, agricultural education, agricultural extension agent, and horticulturist.
# Associate of Science in Life Science
## Program of Study

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
<th>Recommended courses for this degree*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture (C)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WRT 102 Writing II (I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 220 Calculus I or higher</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: <a href="#">Art General Education Selection</a> or <a href="#">Humanities General Education Selection</a></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: <a href="#">Social and Behavioral Science General Education Selection</a></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Two Lab-loaded Science Course</td>
<td>BIO 105N Environmental Biology or BIO 181N Unity of Life I or BIO 182N Unity of Life II</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td><strong>Total General Education Credits</strong></td>
<td></td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

* Recommended courses are courses that are recommended to take as part of the degree because the course is relevant to area of study and/or the course will be a requirement by most Universities when the student transfers. Consult with your Academic/Faculty Adviser for further information.

## Core Courses

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Course Offered:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 232 Principles of Research in the Natural Sciences (Offered F)</td>
<td>F = Fall semester</td>
</tr>
<tr>
<td>BIO 298 Service-Learning Practicum (Offered S)</td>
<td>S = Spring semester</td>
</tr>
<tr>
<td>BIO 299 Research Practicum (Offered S)</td>
<td>Su = Summer session</td>
</tr>
<tr>
<td><strong>Total Core Credits</strong></td>
<td>5</td>
</tr>
</tbody>
</table>

## Electives

| Total Credits for Elective | 19-21 |
| Total Credits for Degree   | 60-62 |
Recommended Life Science Elective courses* based on student interest in Life Sciences  
(See Faculty Advisor for more information)

<table>
<thead>
<tr>
<th>Agricultural Sciences</th>
<th>Natural Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ANR 111N Agroecology and Tohono O’odham Crop Production (4 credits)</td>
<td>• CHM 151N General Chemistry I (5 credits)</td>
</tr>
<tr>
<td>• ANR 130N Plant Science (4 credits)</td>
<td>• CHM 152N General Chemistry II (5 credits)</td>
</tr>
<tr>
<td>• ANR 286N Water Resources (4 credits)</td>
<td>CHOICE TWO COURSES FROM THE FOLLOWING LIST (7-8 credits):</td>
</tr>
<tr>
<td>• ANR 221N Soil Science (4 credits)</td>
<td>• ANR 221N Soil Science (4 credits)</td>
</tr>
<tr>
<td>• BIO 208N Tohono O’odham Ethnobotany (4 credits)</td>
<td>• ANR 286N Water Resources (4 credits)</td>
</tr>
<tr>
<td></td>
<td>• ANR 290N Wildlife Conservation (4 credits)</td>
</tr>
<tr>
<td></td>
<td>• ANR 128N Plant Ecology and the Sonoran Desert (4 credits)</td>
</tr>
<tr>
<td></td>
<td>• GEO 267 Introduction to Geographic Info Systems (3 credits)</td>
</tr>
<tr>
<td></td>
<td>• BIO 254N Global Change Biology (4 credits)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CHM 151N General Chemistry I (5 credits)</td>
</tr>
<tr>
<td>• CHM 152N General Chemistry II (5 credits)</td>
</tr>
<tr>
<td>• PHY 121N Fundamentals of Physics I (5 credits)</td>
</tr>
<tr>
<td>• ANR 221N Soil Science (4 credits)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CHM 151N General Chemistry I (5 credits)</td>
</tr>
<tr>
<td>• CHM 152N General Chemistry II (5 credits)</td>
</tr>
<tr>
<td>• PHY 121N Fundamentals of Physics I (5 credits)</td>
</tr>
<tr>
<td>• BIO 160N Intro to Human Anatomy &amp; Physiology or BIO 127N Human Nutrition &amp; Biology (4 credits)</td>
</tr>
</tbody>
</table>
Associate of Science in Physical Science

TOCC’s Science programs include an Associate of Science in Physical Science degree for transfer with the following concentrations: Astronomy, Physics, Computer Science and Engineering. All options in the AS Physical Science degree emphasize thorough preparation of students who plan to transfer to four-year colleges and universities after they graduate from TOCC. The AS Physical Science degree can help a student attain admission to one of Arizona’s public universities as a junior and prepares students for transfer to fields such as engineering, computer science or physical sciences like astronomy, physics or geology.

Program learning outcomes

1. Describe concepts as they apply to physical sciences or computer science.
2. Design and conduct a research project in physical science or computer science.
3. Display a sense of place, by being able to identify engineering, science or technical issues on the Tohono O’odham Nation and propose a culturally-appropriate solution.
4. Apply critical and creative thinking skills to solve problems.
### Associate of Science in Physical Science

**Program of Study**

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
<th>Recommended courses for this degree*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture (C)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WRT 102 Writing II (I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 220 Calculus I</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: <strong>Art General Education Selection</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choose any course from: <strong>Humanities General Education Selection</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: <strong>Social and Behavioral Science General Education Selection</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Three Lab-loaded Physical Science Courses</td>
<td>PHY 210N Intro to Mechanics</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHY 216N Intro to Electricity and Magnetism</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHM 151N General Chemistry I</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total General Education Credits</strong></td>
<td></td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

#### Core Requirements

<table>
<thead>
<tr>
<th>Course Offered:</th>
</tr>
</thead>
<tbody>
<tr>
<td>F = Fall semester</td>
</tr>
<tr>
<td>S = Spring semester</td>
</tr>
<tr>
<td>Su = Summer session</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 231 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHY 232 Principles of Research in the Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PHY 298 Service Learning Practicum</td>
<td>1</td>
</tr>
<tr>
<td>PHY 299 Research Practicum</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Core Credits</strong></td>
<td>9</td>
</tr>
</tbody>
</table>

**Electives**

Choose any of the following courses: AST 101N, AST 102N, CIS 127, CHM 152N, EGR 102N, MAT 241.

**Total Credits for Elective**

9

**Total Credits for Degree**

60
Associate of Arts in Social Work

Social Work is a professional field that aims to help individuals, groups, and communities alleviate social welfare issues such as mental health issues, poverty, homelessness, drug/alcohol addiction, family and community violence, and psychological and social aspects of physical illness. With an associate degree individuals can enter the field of social services as an entry level paraprofessional. To become a professional social worker, students must continue their education and complete a bachelor’s degree in Social Work. TOCC prepares students to transfer to a University to complete their professional education.

Program learning outcomes

1. The Social Work Profession
   a. Students will explain the tenets of generalist social work practice and the social work profession.
   b. Students will identify common careers, roles and responsibilities in social work practice.
   c. Students will demonstrate professional interpersonal skills in order to assist someone seeking social services at the individual and group level.
   d. Students will demonstrate the ability to professionally communicate through scholarly documentation and the use of technology.

2. Social Problems and Social Change
   a. Students will describe and discuss major human conditions that can result in the need for social services and the delivery of social welfare programs.
   b. Students will explain the role of human rights, social welfare policy and the impact of such policies on individuals and society.

3. Professional Values and Ethics
   a. Students will demonstrate an understanding of the importance of professional values and ethics and define ethical dilemma situations, and how to appropriately mitigate them.

4. Engage Diversity and Difference in Practice
   a. Students will demonstrate cultural awareness and describe the sensitivity required to respectfully serve the Tohono O’odham and other diverse populations.
   b. Students will identify cultural considerations in responding to the needs of marginalized populations.

5. Assessment, Planning, and Evaluation.
   a. Students will demonstrate the ability to assess and interpret the needs of client systems at the micro, mezzo, and macro levels in order to address social problems and create positive social change.
   b. Students will demonstrate the ability to develop a plan of action based on a person-in-environment perspective.
   c. Students will demonstrate the ability to evaluate outcomes of client system interventions and describe the role of research and evidence-based practice.

Students interested in working with individuals who have substance abuse and addictions issues should also consider the Certificate in Substance Abuse and Addiction Studies.
# Associate of Arts in Social Work

## Program of Study

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
<th>Recommended courses for this degree*</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WRT 102 Writing II (I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 142H College Mathematics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: Art General Education Selection</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choose any course from: Humanities General Education Selection</td>
<td>3</td>
<td>PHI 101 Introduction to Philosophy (G)</td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: Social and Behavioral Science General Education Selection</td>
<td>6</td>
<td>PSY 101 Introduction to Psychology or SOC 101 Introduction to Sociology</td>
</tr>
<tr>
<td>Two Lab-loaded Science Course</td>
<td>Choose any course from: Science</td>
<td>8</td>
<td>BIO 160N Intro to Human Anatomy/Physiology</td>
</tr>
<tr>
<td><strong>Total General Education Credits</strong></td>
<td></td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

*Recommended courses are courses that are recommended to take as part of the degree because the course is relevant to area of study and/or the course will be a requirement by most Universities when the student transfers. Consult with your Academic/Faculty Adviser for further information.*

## Core Courses

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>F = Fall</th>
<th>S = Spring</th>
<th>Su = Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWU 171 Introduction to Social Work (Offered F, S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWU 291 Social Service Delivery Systems (Offered F, S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWU 295 Foundations of Social Work Practice: Effective Helping in a Diverse World (Offered F, S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 110 American National Government (Offered F)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Core Credits</strong></td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Electives

Highly recommended for this degree: ECN 202 Macro Economics or MAT 225 Basic Statistics. And choose any course designated with the following prefixes: ECE, PSY, SOC, SSE, SWU, TOC, or TOS.

| **Total Credits for Elective** | 12      |           |             |
| **Total Credits for Degree**   | 61      |           |             |
Associate of Arts in Tohono O’odham Studies

The Tohono O’odham Studies program will enable students and the broader community to achieve an inclusive education in the traditional and contemporary O’odham way of life. The program will build a strong foundation for students to either transfer to Arizona’s public universities or to enter the workforce in the O’odham community or in an entity that serves the O’odham community.

Program learning outcomes

1. Differentiate between traditional and non-traditional O’odham customs.
2. Describe the relationship of Culture and Identity to Empowerment.
3. Analyze Present, Past and Future issues that affect the O’odham community.
4. Display communicative competency at an intermediate level in written and oral Tohono O’odham.
# Associate of Arts in Tohono O'odham Studies
## Program of Study

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
<th>Recommended courses for this degree*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture (C)</td>
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<tr>
<td></td>
<td>THO 101 Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
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<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
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<td></td>
<td>WRT 102 Writing II (I)</td>
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<tr>
<td>Mathematics</td>
<td>MAT 142H College Mathematics or higher</td>
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<tr>
<td>Humanities and Fine Arts</td>
<td>Choose any course from: Art General Education Selection</td>
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<tr>
<td></td>
<td>Choose any course from: Humanities General Education Selection</td>
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<tr>
<td>Social and Behavioral Sciences</td>
<td>Choose any course from: Social and Behavioral Science General Education Selection</td>
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<tr>
<td>Two Lab-loaded Science Course</td>
<td>Choose any course from: Science</td>
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<td>ANR 111N, BIO 208N</td>
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**Total General Education Credits**: 37

*Recommended courses are courses that are recommended to take as part of the degree because the course is relevant to area of study and/or the course will be a requirement by most Universities when the student transfers. Consult with your Academic/Faculty Adviser for further information.

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Core Courses</th>
<th>F = Fall</th>
<th>S = Spring</th>
<th>Su = Summer</th>
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<tr>
<td></td>
<td>TOS 115 Foundations of O’odham Philosophy and Culture</td>
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<td></td>
<td>TOC 150 Tohono O’odham Food Systems</td>
<td>3</td>
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<td></td>
<td>TOC 226/POS 226 Tohono O’odham Nation Government</td>
<td>3</td>
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<td></td>
<td>TOS 230 Contemporary O’odham and Native American Issues</td>
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<td></td>
<td>TOS 240 Academic Writing about the Tohono O’odham</td>
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<td></td>
<td>THO 201 Intermediate Tohono O’odham</td>
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<td>THO 202 Advanced Tohono O’odham</td>
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**Total Credits for Core**: 23

**Total Credits for Degree**: 60
Building Construction Technologies (BCT) Program

Building and Construction Technologies (BCT) degree program is headquartered at the Wisag Kos Mascamakud (West Campus) about two miles west of Sells, the most populous community on the Tohono O’odham Nation. Students choosing to pursue occupational goals in the fields of carpentry, construction, heating, ventilation and cooling, construction, painting, heavy equipment operations, masonry plumbing, or electrical should consider the Associate of Applied Science in Building Construction Technologies degree, or one of the Certificates that are offered. The BCT curricula are based on the requirements of the National Center for Construction Education and Research (NCCER).

Students enrolling in the BCT classes are not required to register for the Apprenticeship program sponsored by the Department of Labor, but they will not be eligible to be sent out for the Apprenticeship required On the Job Learning (OJL) hours. Students who register and are accepted into the Apprenticeship program (Carpentry, Electrical, HEO, HVAC, Masonry Painting, and Plumbing), sponsored by the Department of Labor, must have a high school diploma or GED and meet other requirements to be accepted as an Apprentice, including being enrolled in the BCT courses. (For more information, see the Apprenticeship Standards available at the Occupational Programs Office at Wisag Kos Mascamakud (West Campus).

Carpentry Certificates and Degree

Students learn and apply knowledge in the four phases of carpentry; forms and framing, outside and inside finishing, trim carpentry, and interior detailing. The core topics of the carpentry program include introduction to the carpentry profession, care and use of tools and machinery, job safety, science and mathematics related to the carpentry trade, and basic blueprint reading. In addition, other topics include form building, rough framing, outside finishing, site layout, inside finishing, acoustics and drywall. TOCC offers the Basic Certificate in Carpentry and the Advanced Certificate in Carpentry as well as the Associate of Applied Science in Carpentry.
Basic Certificate in Building Construction Technologies, Carpentry

This certificate provides basic skills and foundations that permit an applicant to enter the work force as an entry-level helper in carpentry. The coursework is based on Levels 1 and 2 of the National Center for Construction Education and Research (NCCER) curriculum in carpentry. Students who complete the Basic Certificate can progress to the Advanced Certificate and then to the Associate of Applied Science degree.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
</tr>
<tr>
<td>Tohono O'odham Himdag</td>
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<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDITS - GENERAL EDUCATION</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Core Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course</td>
</tr>
<tr>
<td>BCT 120H Introductory Craft Skills</td>
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<tr>
<td>BCT 101H Computer Literacy for Construction</td>
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<tr>
<td><strong>TOTAL CREDITS - CORE REQUIREMENTS</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Carpentry Concentration</th>
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</thead>
<tbody>
<tr>
<td>Course</td>
</tr>
<tr>
<td>BCT 141H Introduction to the Carpentry Profession</td>
</tr>
<tr>
<td>BCT 142H Carpentry I</td>
</tr>
<tr>
<td>BCT 143H Carpentry II</td>
</tr>
<tr>
<td>BCT 144H Carpentry III</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS - CONCENTRATION</strong></td>
</tr>
<tr>
<td><strong>TOTAL CREDIT HOURS</strong></td>
</tr>
</tbody>
</table>

Advanced Certificate in Building Construction Technologies, Carpentry

This certificate provides advanced skill levels found in the entry-level technician/journey worker levels of the carpentry trade. Applicants with this level of skill can expect to enter the work force at an intermediate pay scale with rapid advancement, based on demonstrated skills required in carpentry. This level of employment requires good basic reading, writing, math and carpentry skills. In addition, it requires good work habits and the ability to follow instructions from supervisors to be successful in the workplace. Students who complete the Advanced Certificate can progress to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at the Arizona public universities.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
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<tbody>
<tr>
<td>Area</td>
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<tr>
<td>Tohono O’odham Himdag</td>
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<tr>
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<table>
<thead>
<tr>
<th>Core Requirements</th>
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</thead>
<tbody>
<tr>
<td>Course</td>
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<tr>
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</table>
BCT 120H Introductory Craft Skills 6
BCT 101H Computer Literacy for Construction 1

**TOTAL CREDITS - CORE REQUIREMENTS** 7

**Carpentry Concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BCT 141H Introduction to the Carpentry Profession</td>
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<td>BCT 142H Carpentry I</td>
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<td>BCT 143H Carpentry II</td>
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</tr>
<tr>
<td>BCT 241H Carpentry IV</td>
<td>6</td>
</tr>
<tr>
<td>BCT 242H Carpentry V</td>
<td>6</td>
</tr>
<tr>
<td>BCT 243H Carpentry VI</td>
<td>6</td>
</tr>
<tr>
<td>BCT 244H Carpentry VII</td>
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**TOTAL CREDITS - CONCENTRATION** 48

**TOTAL CREDIT HOURS** 62

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**Associate of Applied Science in Building Construction Technologies, Carpentry**

This degree provides additional general education coursework to support the student’s advancement to supervisory positions or to pursue further education. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

**Program learning outcomes**

1. Identify the career and entrepreneurial opportunities within the construction industry.
   a. Identify the training opportunities within the construction industry.
2. Identify the skills, responsibilities, and characteristics needed to be successful in the construction industry.
3. Explain the importance of safety in the construction industry, and describe the obligations of the contractor, subcontractors, and you to ensure a safe work environment.
   a. Describe the OSHA Outreach Training Program.
   b. Explain hazard recognition and define your role in it.
4. Cultural Sensitivity: Students will demonstrate cultural awareness and sensitivity needed to respectfully serve the Tohono O’odham and others in a diverse service population.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Area</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture</td>
<td>3</td>
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<tr>
<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
</tr>
<tr>
<td>Communication</td>
<td>WRT 101 Basic Writing I</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 142H College Mathematics or higher</td>
<td>4</td>
</tr>
<tr>
<td>Computer &amp; Information Literacy</td>
<td>BCT 100H Professionalism in Service for Building Construction Technologies I</td>
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</tr>
<tr>
<td></td>
<td>BCT 101H Computer Literacy for Construction</td>
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**TOTAL CREDITS - GENERAL EDUCATION** 14

**Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BCT 120H Introductory Craft Skills</td>
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### Carpentry Concentration

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BCT 141H Introduction to the Carpentry Profession</td>
<td>6</td>
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<tr>
<td>BCT 142H Carpentry I</td>
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<tr>
<td>BCT 143H Carpentry II</td>
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<tr>
<td>BCT 144H Carpentry III</td>
<td>6</td>
</tr>
<tr>
<td>BCT 241H Carpentry IV</td>
<td>6</td>
</tr>
<tr>
<td>BCT 242H Carpentry V</td>
<td>6</td>
</tr>
<tr>
<td>BCT 243H Carpentry VI</td>
<td>6</td>
</tr>
<tr>
<td>BCT 244H Carpentry VII</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS - CONCENTRATION**: 48

**TOTAL CREDIT HOURS**: 69

### Electrical Certificates and Degree

Students learn and apply knowledge in the three phases of electrician work; rough in, trim out, and troubleshooting. The core topics of the electrical program include introduction to the electrical profession, care and use of tools and machinery, job safety, science and mathematics related to the electrical trade, and basic blueprint reading. In addition, other topics include an introduction to electricity, identification of tools and materials, Romex and cable rough-in, DC and AC circuits, low voltage wiring, and underground, intermediate, and finish wiring. TOCC offers the Basic Certificate in Electrical and the Advanced Certificate in Electrical as well as the Associate of Applied Science in Electrical.

### Basic Certificate in Building Construction Technologies, Electrical

This certificate provides basic skills and foundations that permit an applicant to enter the work force as an entry-level helper in electrical work. The coursework is based on the National Center for Construction Education and Research (NCCER) curriculum in electrical. Students who complete the Basic Certificate can progress to the Advanced Certificate and then to the Associate of Applied Science degree.

### General Education Requirements

<table>
<thead>
<tr>
<th>Area</th>
<th>Course</th>
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<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture</td>
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<tr>
<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
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</table>

**TOTAL CREDITS - GENERAL EDUCATION**: 7

### Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BCT 120H Introductory Craft Skills</td>
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<tr>
<td>BCT 101H Computer Literacy for Construction</td>
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</tr>
</tbody>
</table>

**TOTAL CREDITS - CORE REQUIREMENTS**: 7
Advanced Certificate in Building Construction Technologies, Electrical

This certificate provides advanced skill levels found in the entry-level technician/journey worker levels of the electrical trade. Applicants with this level of skill can expect to enter the work force at an intermediate pay scale with rapid advancement, based on demonstrated skills required in electrical. This level of employment requires good basic reading, writing, math, and electrical skills. In addition, it requires good work habits and the ability to follow instructions from supervisors to be successful in the workplace. The coursework is based on the NCCER curriculum in electrical. Students who complete the Advanced Certificate can progress to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
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</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
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<td>HIS 122 Tohono O’odham History and Culture</td>
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<tr>
<td><strong>TOTAL CREDITS - GENERAL EDUCATION</strong></td>
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<table>
<thead>
<tr>
<th>Core Requirements</th>
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</tr>
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<tbody>
<tr>
<td>BCT 120H Introductory Craft Skills</td>
<td>6</td>
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<tr>
<td>BCT 101H Computer Literacy for Construction</td>
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<tr>
<td><strong>TOTAL CREDITS - CORE REQUIREMENTS</strong></td>
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<table>
<thead>
<tr>
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<tbody>
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<td>BCT 172H Electrical I</td>
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<td>BCT 173H Electrical II</td>
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<tr>
<td>BCT 174H Electrical III</td>
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<td>BCT 271H Electrical IV</td>
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<td>BCT 272H Electrical V</td>
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<tr>
<td>BCT 273H Electrical VI</td>
<td>6</td>
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<tr>
<td>BCT 274H Electrical VII</td>
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</tr>
<tr>
<td><strong>TOTAL CREDITS - CONCENTRATION</strong></td>
<td><strong>48</strong></td>
</tr>
<tr>
<td><strong>TOTAL CREDIT HOURS</strong></td>
<td><strong>62</strong></td>
</tr>
</tbody>
</table>
This degree provides additional general education coursework to support a student’s advancement to supervisory positions or to pursue further education. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at public Arizona universities.

Program learning outcomes

1. Identify the career and entrepreneurial opportunities within the construction industry.
   a. Identify the training opportunities within the construction industry.

2. Identify the skills, responsibilities, and characteristics needed to be successful in the construction industry.

3. Explain the importance of safety in the construction industry, and describe the obligations of the contractor, subcontractors, and you to ensure a safe work environment.
   a. Describe the OSHA Outreach Training Program.
   b. Explain hazard recognition and define your role in it.

4. Cultural Sensitivity: Students will demonstrate cultural awareness and sensitivity needed to respectfully serve the Tohono O’odham and others in a diverse service population.

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<tr>
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</tr>
<tr>
<td>Computer &amp; Information Literacy</td>
<td>BCT 100H Professionalism in Service for Building Construction Technologies I</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>BCT 101H Computer Literacy for Construction</td>
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<tr>
<td></td>
<td>BCT 120H Introductory Craft Skills</td>
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<td>BCT 101H Computer Literacy for Construction</td>
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<td><strong>TOTAL CREDITS - CORE REQUIREMENTS</strong></td>
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<table>
<thead>
<tr>
<th>Electrical Concentration</th>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>BCT 171H Introduction to the Electrical Profession</td>
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<tr>
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<td>BCT 172H Electrical I</td>
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<td>BCT 272H Electrical V</td>
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<tr>
<td></td>
<td>BCT 273H Electrical VI</td>
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</tr>
<tr>
<td></td>
<td>BCT 274H Electrical VII</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS - CONCENTRATION</strong></td>
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<td>48</td>
</tr>
<tr>
<td><strong>TOTAL CREDIT HOURS</strong></td>
<td></td>
<td>69</td>
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</table>
Certificate in Building Construction Technologies, Facilities Maintenance
This certificate provides the basic skills and foundations that allows a student to enter the work force in facilities maintenance. The core topics include introduction to facilities maintenance profession, care and use of tools and machinery, job safety and science.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
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</thead>
<tbody>
<tr>
<td>Area</td>
<td>Course</td>
</tr>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture</td>
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<td></td>
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TOTAL CREDITS - GENERAL EDUCATION 7

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Course</td>
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<tr>
<td>BCT 120H Introductory Craft Skills</td>
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<td>BCT 101H Computer Literacy for Construction</td>
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TOTAL CREDITS - CORE REQUIREMENTS 7

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<thead>
<tr>
<th>Facilities Maintenance Concentration</th>
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<tr>
<td>Course</td>
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<td>BCT 141 Introduction to Carpentry</td>
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<tr>
<td>BCT 171 Introduction to Electrical</td>
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<tr>
<td>BCT 180 Introduction to Plumbing</td>
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<td>BCT 181 Plumbing I</td>
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</tbody>
</table>

TOTAL CREDITS - CONCENTRATION 24

TOTAL CREDIT HOURS 38

Heavy Equipment Operation (HEO) Certificates and Degree
Students learn and apply knowledge in the basic principles of Heavy Equipment Operation. Students will be able to use the eleven most used pieces of heavy equipment as well as explain the process of planning and executing earthmoving activities on various types of construction projects. Students will also learn about the preparation of graded surfaces using heavy equipment. Additional topics include knowledge and demonstration of uses of the types, uses, and components of six types of heavy equipment, as well as the safety requirements on job sites. TOCC offers the Basic Certificate in HEO and the Advanced Certificate in HEO as well as the Associate of Applied Science in HEO.

Basic Certificate in Building Construction Technologies, Heavy Equipment Operations
This certificate provides basic skills and foundations that permit an applicant to enter the work force as an entry-level helper in HEO work. The coursework is based on the National Center for Construction Education and Research (NCCER) curriculum in HEO. Students who complete the Basic Certificate can progress to the Advanced Certificate and then to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
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<tbody>
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</table>
### Area

<table>
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<tr>
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<tbody>
<tr>
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**TOTAL CREDITS - GENERAL EDUCATION** 7

### Core Requirements

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<tr>
<th>Course</th>
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</tr>
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<tbody>
<tr>
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<tr>
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**TOTAL CREDITS - CORE REQUIREMENTS** 7

### Section III. HEO Concentration

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>BCT 151H Introduction to Heavy Equipment Operations Profession</td>
<td>6</td>
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<tr>
<td>BCT 152H HEO II</td>
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<tr>
<td>BCT 153H HEO III</td>
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**TOTAL CREDITS - CONCENTRATION** 18

**TOTAL CREDIT HOURS** 32

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**Advanced Certificate in Building Construction Technologies, Heavy Equipment Operations**

This certificate provides advanced skill levels found in the entry-level technician/journey worker levels of the HEO trade. Applicants with this level of skill can expect to enter the work force at an intermediate pay scale with rapid advancement, based on demonstrated skills required in HEO. This level of employment requires good basic reading, writing, math, and plumbing skills. In addition, it requires good work habits and the ability to follow instructions from supervisors to be successful in the workplace.

The coursework is based the NCCER curriculum in HEO. Students who complete the Advanced Certificate can progress to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

---

### General Education Requirements

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**TOTAL CREDITS - GENERAL EDUCATION** 7

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**TOTAL CREDITS - CORE REQUIREMENTS** 7

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</tr>
<tr>
<td>BCT 152H HEO II</td>
<td>6</td>
</tr>
</tbody>
</table>
BCT 153H HEO III 6
BCT 251H HEO IV 6
BCT 252H HEO V 6

TOTAL CREDITS - CONCENTRATION 30
TOTAL CREDIT HOURS 44

Associate of Applied Science in Building Construction Technologies, Heavy Equipment Operations

This degree provides additional general education coursework to support a student’s advancement to supervisory positions or to pursue further education. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

Program learning outcomes

1. Identify the career and entrepreneurial opportunities within the construction industry.
   a. Identify the training opportunities within the construction industry.
2. Identify the skills, responsibilities, and characteristics needed to be successful in the construction industry.
3. Explain the importance of safety in the construction industry, and describe the obligations of the contractor, subcontractors, and you to ensure a safe work environment.
   a. Describe the OSHA Outreach Training Program.
   b. Explain hazard recognition and define your role in it.
4. Cultural Sensitivity: Students will demonstrate cultural awareness and sensitivity needed to respectfully serve the Tohono O’odham and others in a diverse service population.

General Education Requirements

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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>BCT 101H Computer Literacy for Construction</td>
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<td>Earth Science</td>
<td>ANR221N Soil Science</td>
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<td>ANR 186N Water Resources</td>
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</tbody>
</table>

TOTAL CREDITS - GENERAL EDUCATION 22

Core Requirements

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<tr>
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TOTAL CREDITS - CORE REQUIREMENTS 7

HEO Concentration
Course | Credits
---|---
BCT 151H Introduction to Heavy Equipment Operations Profession | 6
BCT 152H HEO II | 6
BCT 153H HEO III | 6
BCT 251H HEO IV | 6
BCT 252H HEO V | 6

**TOTAL CREDITS - CONCENTRATION** | **30**

**TOTAL CREDIT HOURS** | **63**

**Heating, Ventilation & Air Conditioning (HVAC) Certificates and Degree**

Students learn and apply knowledge in the maintenance-oriented materials and guidelines for the inspection and periodic maintenance of various HVAC systems and accessories. Students learn how to troubleshoot control circuits and electric motors found in heating and cooling equipment as well as understand the issues associated with indoor air quality and its effect on the health and comfort of building occupants. Additional topics include the procedures for the startup and shutdown of hot water, natural gas and electric air handling systems and alternative energy systems. TOCC offers the Basic Certificate in HVAC and the Advanced Certificate in HVAC as well as the Associate of Applied Science in HVAC.

**Basic Certificate in Building Construction Technologies, HVAC**

This certificate provides basic skills and foundations that permit an applicant to enter the work force as an entry-level helper in HVAC work. The coursework is based on the National Center for Construction Education and Research (NCCER) curriculum in HVAC. Students who complete the Basic Certificate can progress to the Advanced Certificate and then to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

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**TOTAL CREDITS - GENERAL EDUCATION** | **7**

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**TOTAL CREDITS - CORE REQUIREMENTS** | **7**

<table>
<thead>
<tr>
<th>HVAC I Concentration</th>
<th>Course</th>
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<tbody>
<tr>
<td>BCT 191H Introduction to HVAC Profession</td>
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<tr>
<td>BCT 192H HVAC II</td>
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<td></td>
</tr>
<tr>
<td>BCT 193H HVAC III</td>
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Advanced Certificate in Building Construction Technologies, HVAC
This certificate provides advanced skill levels found in the entry-level technician/journey worker levels of the HVAC trade. Applicants with this level of skill can expect to enter the work force at an intermediate pay scale with rapid advancement, based on demonstrated skills required in HVAC. This level of employment requires good basic reading, writing, math, and plumbing skills. In addition, it requires good work habits and the ability to follow instructions from supervisors to be successful in the workplace. The coursework is based the NCCER curriculum in HVAC. Students who complete the Advanced Certificate can progress to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

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**TOTAL CREDITS - GENERAL EDUCATION** 7

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**TOTAL CREDITS - CORE REQUIREMENTS** 7

HVAC Concentration

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<td>BCT 292H HVAC VI</td>
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<tr>
<td>BCT 293H HVAC VII</td>
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<tr>
<td>BCT 294H HVAC VIII</td>
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**TOTAL CREDITS - CONCENTRATION** 48

**TOTAL CREDIT HOURS** 62

Associate of Applied Science in Building Construction Technologies, HVAC
This degree provides additional general education coursework to support a student’s advancement to supervisory positions or to pursue further education. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.
Program learning outcomes

1. Identify the career and entrepreneurial opportunities within the construction industry.
   a. Identify the training opportunities within the construction industry.
2. Identify the skills, responsibilities, and characteristics needed to be successful in the construction industry.
3. Explain the importance of safety in the construction industry, and describe the obligations of the contractor, subcontractors, and you to ensure a safe work environment.
   a. Describe the OSHA Outreach Training Program.
   b. Explain hazard recognition and define your role in it.
4. Cultural Sensitivity: Students will demonstrate cultural awareness and sensitivity needed to respectfully serve the Tohono O'odham and others in a diverse service population.

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</tr>
<tr>
<td>TOTAL CREDITS - CONCENTRATION</td>
</tr>
<tr>
<td>TOTAL CREDIT HOURS</td>
</tr>
</tbody>
</table>
Masonry Certificates and Degree
Students learn and apply knowledge in the basic principles of Masonry, brick laying, and building with block. Students learning how to identify the format and content of commercial drawings and their use in conveying specific construction requirements, including the standard format for specifications. Students will also describe the principles, equipment, and methods used to perform the site layout tasks of distance measurement and differential leveling; the layout responsibilities of surveyors, field engineers, and masons; the use of site plan drawings; and methods used for on-site communication. Students also describe the activities and techniques involved in organizing and implementing masonry construction in high-rise construction. TOCC offers the Basic Certificate in Masonry and the Advanced Certificate in Masonry as well as the Associate of Applied Science in Masonry.

Basic Certificate in Building Construction Technologies, Masonry
This certificate provides basic skills and foundations that permit an applicant to enter the work force as an entry-level helper in Masonry work. The coursework is based on the National Center for Construction Education and Research (NCCER) curriculum in Masonry. Students who complete the Basic Certificate can progress to the Advanced Certificate and then to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

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Advanced Certificate in Building Construction Technologies, Masonry
This certificate provides advanced skill levels found in the entry-level technician/journey worker levels of the HVAC trade. Applicants with this level of skill can expect to enter the work force at an intermediate pay scale with rapid advancement, based on demonstrated skills required in HVAC. This level of employment requires good basic reading, writing, math, and plumbing skills. In addition, it requires good work habits and the ability to follow instructions from supervisors to be successful in the workplace.
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<td>BCT 222H Masonry V</td>
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**Associate of Applied Science in Building Construction Technologies, Masonry**

This degree provides additional general education coursework to support a student’s advancement to supervisory positions or to pursue further education. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

**Program learning outcomes**

1. Identify the career and entrepreneurial opportunities within the construction industry.
   a. Identify the training opportunities within the construction industry.
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3. Explain the importance of safety in the construction industry, and describe the obligations of the contractor, subcontractors, and you to ensure a safe work environment.
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94
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<tr>
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**TOTAL CREDITS - GENERAL EDUCATION** 23

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**TOTAL CREDITS - CORE REQUIREMENTS** 7

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</tr>
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<td>BCT 222H Masonry V</td>
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</tr>
</tbody>
</table>

**TOTAL CREDITS - CONCENTRATION** 30

**TOTAL CREDIT HOURS** 61

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**Construction Painting Certificate and Degree**

Students learn and apply knowledge in various phases of painting work, including interior and exterior wall and finish applications, and drywall taping and finishing. The core topics of the construction painting program include introduction to the painting profession, care and use of tools and machinery, job safety, science and mathematics related to the painting trade, and basic blueprint reading. Additional topics include water and oil-based paints, cleaners and finishes, brush, roller, and spray applications, texture coating, and acoustics and drywall. TOCC offers the Certificate in Construction Painting and an Associate of Applied Science in Construction Painting.

**Certificate in Building Construction Technologies, Construction Painting**

This certificate provides advanced skill levels found in the entry-level technician and journey worker levels of the painting trade. Applicants with this level of skill can expect to enter the work force at an intermediate pay scale with rapid advancement, based on demonstrated skills required in painting. This level of employment requires good basic reading, writing, math and painting skills.
General Education Requirements

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<td></td>
<td>THO 101 Elementary Tohono O'odham or THO 106 Conversational Tohono O'odham I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL CREDITS - GENERAL EDUCATION</strong></td>
<td>7</td>
</tr>
</tbody>
</table>

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCT 120H Introductory Craft Skills</td>
<td>6</td>
</tr>
<tr>
<td>BCT 101H Computer Literacy for Construction</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS - CORE REQUIREMENTS</strong></td>
<td>7</td>
</tr>
</tbody>
</table>

Construction Painting Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCT 161H Introduction to the Construction Painting Profession</td>
<td>6</td>
</tr>
<tr>
<td>BCT 162H Construction Painting I</td>
<td>6</td>
</tr>
<tr>
<td>BCT 163H Construction Painting II</td>
<td>6</td>
</tr>
<tr>
<td>BCT 164H Construction Painting III</td>
<td>6</td>
</tr>
<tr>
<td>BCT 261H Construction Painting IV</td>
<td>6</td>
</tr>
<tr>
<td>BCT 262H Construction Painting V</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS - CONCENTRATION</strong></td>
<td>36</td>
</tr>
</tbody>
</table>

**TOTAL CREDIT HOURS** 50

**Associate of Applied Science in Building Construction Technologies, Construction Painting**

This degree provides additional general education coursework to support the student’s advancement to supervisory positions or to pursue further education. Graduates of this program may also establish their own small business in the field.

**Program learning outcomes**

1. Identify the career and entrepreneurial opportunities within the construction industry.
   a. Identify the training opportunities within the construction industry.
2. Identify the skills, responsibilities, and characteristics needed to be successful in the construction industry.
3. Explain the importance of safety in the construction industry, and describe the obligations of the contractor, subcontractors, and you to ensure a safe work environment.
   a. Describe the OSHA Outreach Training Program.
   b. Explain hazard recognition and define your role in it.
4. Cultural Sensitivity: Students will demonstrate cultural awareness and sensitivity needed to respectfully serve the Tohono O’odham and others in a diverse service population.

General Education Requirements

<table>
<thead>
<tr>
<th>Area</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIS 122 Tohono O’odham History and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

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**Tohono O'odham Community College**  
**2020 - 2022 (v. 21.38-2)**

**Tohono O'odham Himdag**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
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</tbody>
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**Communication**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>WRT 101 Writing I</td>
<td>3</td>
</tr>
<tr>
<td>STU 100 College Success Skills</td>
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</table>

**Mathematics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 142H College Mathematics or higher</td>
<td>4</td>
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</tbody>
</table>

**Computer & Information Literacy**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 100 Introduction to Computers</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS - GENERAL EDUCATION** 18

**Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCT 120H Introductory Craft Skills</td>
<td>6</td>
</tr>
<tr>
<td>BCT 101H Computer Literacy for Construction</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS - CORE REQUIREMENTS** 7

**Construction Painting Concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCT 161H Introduction to the Construction Painting Profession</td>
<td>6</td>
</tr>
<tr>
<td>BCT 162H Construction Painting I</td>
<td>6</td>
</tr>
<tr>
<td>BCT 163H Construction Painting II</td>
<td>6</td>
</tr>
<tr>
<td>BCT 164H Construction Painting III</td>
<td>6</td>
</tr>
<tr>
<td>BCT 261H Construction Painting IV</td>
<td>6</td>
</tr>
<tr>
<td>BCT 262H Construction Painting V</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS - CONCENTRATION** 36

**TOTAL CREDIT HOURS** 64

**Plumbing Certificates and Degree**

Students learn and apply knowledge in the four phases of plumbing work: rough in, intermediate, finish, and service applications. The core topics of the plumbing program include introduction to the plumbing profession, care and use of tools and machinery, job safety, science and mathematics related to the plumbing trade, and basic blueprint reading. Additional topics include drain systems, waste and vent systems, domestic water supply, gas installations (LPG and Natural), and plumbing fixtures. TOCC offers the Basic Certificate in Plumbing and the Advanced Certificate in Plumbing as well as the Associate of Applied Science in Plumbing.

**Basic Certificate in Building Construction Technologies, Plumbing**

This certificate provides basic skills and foundations that permit an applicant to enter the work force as an entry-level helper in plumbing work. The coursework is based on the National Center for Construction Education and Research (NCCER) curriculum in plumbing. Students who complete the Basic Certificate can progress to the Advanced Certificate and then to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Areas</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIS 122 Tohono O’odham History and Culture</td>
<td>3</td>
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</tbody>
</table>
Tohono O'odham Himdag

<table>
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<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>THO 101 Elementary Tohono O'odham or THO 106 Conversational Tohono O'odham I</td>
<td>4</td>
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</tbody>
</table>

**TOTAL CREDITS - GENERAL EDUCATION**  7

### Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BCT 120H Introductory Craft Skills</td>
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<tr>
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<td>1</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS - CORE REQUIREMENTS**  7

### Plumbing Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCT 180H Introduction to the Plumbing Profession</td>
<td>6</td>
</tr>
<tr>
<td>BCT 181H Plumbing I</td>
<td>6</td>
</tr>
<tr>
<td>BCT 182H Plumbing II</td>
<td>6</td>
</tr>
<tr>
<td>BCT 183H Plumbing III</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS - CONCENTRATION**  24

**TOTAL CREDIT HOURS**  38

---

**Advanced Certificate in Building Construction Technologies, Plumbing**

This certificate provides advanced skill levels found in the entry-level technician/journey worker levels of the plumbing trade. Applicants with this level of skill can expect to enter the work force at an intermediate pay scale with rapid advancement, based on demonstrated skills required in plumbing. This level of employment requires good basic reading, writing, math, and plumbing skills. In addition, it requires good work habits and the ability to follow instructions from supervisors to be successful in the workplace.

The coursework is based on the NCCER curriculum in plumbing. Students who complete the Advanced Certificate can progress to the Associate of Applied Science degree. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona public universities.

#### General Education Requirements

<table>
<thead>
<tr>
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<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
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**TOTAL CREDITS - GENERAL EDUCATION**  7

### Core Requirements

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<th>Course</th>
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<tr>
<td>BCT 120H Introductory Craft Skills</td>
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<tr>
<td>BCT 101H Computer Literacy for Construction</td>
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</table>

**TOTAL CREDITS - CORE REQUIREMENTS**  7

### Plumbing Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCT 180H Introduction to the Plumbing Profession</td>
<td>6</td>
</tr>
<tr>
<td>BCT 181H Plumbing I</td>
<td>6</td>
</tr>
</tbody>
</table>
BCT 182H Plumbing II  
BCT 183H Plumbing III  
BCT 236H Plumbing IV  
BCT 237H Plumbing V  
BCT 238H Plumbing VI  
BCT 239H Plumbing VII  

TOTAL CREDITS - CONCENTRATION 48  
TOTAL CREDIT HOURS 62  

Associate of Applied Science in Building Construction Technologies, Plumbing  
This degree provides additional general education coursework to support a student’s advancement to supervisory positions or to pursue further education. A portion of these courses will transfer toward a Bachelor of Applied Science (BAS) degree program at Arizona universities.  

Program learning outcomes  
1. Identify the career and entrepreneurial opportunities within the construction industry.  
   a. Identify the training opportunities within the construction industry.  
2. Identify the skills, responsibilities, and characteristics needed to be successful in the construction industry.  
3. Explain the importance of safety in the construction industry, and describe the obligations of the contractor, subcontractors, and you to ensure a safe work environment.  
   a. Describe the OSHA Outreach Training Program.  
   b. Explain hazard recognition and define your role in it.  
4. Cultural Sensitivity: Students will demonstrate cultural awareness and sensitivity needed to respectfully serve the Tohono O’odham and others in a diverse service population.  

General Education Requirements

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<td>HIS 122 Tohono O’odham History and Culture</td>
<td>3</td>
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<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
</tr>
<tr>
<td>Communication</td>
<td>WRT 101 Writing I</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 142H College Mathematics or higher</td>
<td>4</td>
</tr>
<tr>
<td>Computer &amp; Information Literacy</td>
<td>BCT 100H Professionalism in Service for Building Construction Technologies I</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>BCT 101H Computer Literacy for Construction</td>
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</table>

TOTAL CREDITS - GENERAL EDUCATION 14  

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>BCT 120H Introductory Craft Skills</td>
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TOTAL CREDITS - CORE REQUIREMENTS 7  

Plumbing Concentration

<table>
<thead>
<tr>
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99
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BCT 180H Introduction to the Plumbing Profession</td>
<td>6</td>
</tr>
<tr>
<td>BCT 181H Plumbing I</td>
<td>6</td>
</tr>
<tr>
<td>BCT 182H Plumbing II</td>
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<td>6</td>
</tr>
<tr>
<td>BCT 236H Plumbing IV</td>
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<tr>
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<tr>
<td>BCT 238H Plumbing VI</td>
<td>6</td>
</tr>
<tr>
<td>BCT 239H Plumbing VII</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL CREDITS - CONCENTRATION</strong></td>
<td><strong>48</strong></td>
</tr>
<tr>
<td><strong>TOTAL CREDIT HOURS</strong></td>
<td><strong>69</strong></td>
</tr>
</tbody>
</table>
Associate of Applied Science degrees

Associates of Applied Science are designed for direct employment after the completion of the program. This type of associates degree is also good for individuals who are looking to expand their current career field and for advancement opportunities. While most all the credits in an applied science degree do transfer to other colleges and universities, unlike the Associates degree (Arts or Science), Associates of Applied Sciences usually focus more on career related courses and courses that help in direct employment. This means that this degree may not meet all the general education requirements if a student wants to transfer to a four-year university for a bachelor’s degree. For more information, consult with one of the TOCC advisers to help determine if an Associates of Applied Science or Associates of Arts or Science is better for you and your career and life goals. Associates of Applied Science offered include:

- Associate of Applied Science in Business Management
- Associate of Applied Science in Computer Information Systems
- Associate of Applied Science in Early Childhood Education
AAS in Business Management
The Associate of Applied Science in Business Management is a workforce degree intended for those students seeking entry-level employment upon completion.

Students who are considering continuing their education after their Associates Degree should consider the Associate of Business in Business Administration.

Program learning outcomes
1. Demonstrate the ability to use data to solve common issues that arise in business operations.
2. Demonstrate knowledge of basic organizational and procedural principles of business.
3. Demonstrate a basic level of understanding of the economic and legal contexts for business operations.
4. Provide an analysis of the degree of “fit” between a specific business plan and the O’odham Himdag.

AAS in Business Program of Study

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>WRT 102 Writing II or SPE 110 Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT 142H College Mathematics or higher</td>
<td>4</td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>Any course with prefix ART, ARH, or TOS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Any course with prefix LIT, PHI, SPE, or WRT</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>Any course with prefix ECN, GEO, HIS, PHI, POS, PSY, or SSE</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science</td>
<td>CIS 100 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>One Lab-loaded Science Courses</td>
<td>Any course with prefix ANR, AST, BIO, CHM, PHY</td>
<td>4</td>
</tr>
<tr>
<td>Total General Education Credits</td>
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<td>33</td>
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<table>
<thead>
<tr>
<th>Core Courses</th>
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</thead>
<tbody>
<tr>
<td>ACC 101 Financial Accounting</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ACC 102 Managerial Accounting</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BUS 100 Introduction to Business</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BUS 220 Legal Environment of Business</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CSA 110 Spreadsheets: Microsoft Excel</td>
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<tr>
<td>MGT 124 Small Business Management</td>
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<tr>
<td>MKT 111 Principles of Marketing</td>
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<tr>
<td>Total Core Credits</td>
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</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Choose any course designated with the following prefixes: ACC, BUS, CIS, CSA, MGT, MKT, POS, or PSY</td>
<td></td>
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<tr>
<td>Total Credits for Elective</td>
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<td>6</td>
</tr>
<tr>
<td>Total Credits for Degree</td>
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<td>60</td>
</tr>
</tbody>
</table>
AAS in Computer Information Systems
The Associate of Applied Science in Computer Information Systems is a workforce degree intended for those students seeking entry-level employment upon completion.

Students who are considering continuing their education after their Associates Degree should consider the Associate of Arts in Computer Information Systems.

Program learning outcomes
1. Demonstrate the ability to install, configure, and maintain end-user computer systems and software.
2. Research, interpret, and communicate technical information in written, graphic, diagrammatic, electronic and oral forms.
3. Demonstrate the ability to plan and implement both wired and wireless networks sufficient for small business use.
4. Apply project life-cycle concepts to assist in business operations.
5. Demonstrate the ability to work independently or in a group environment with sensitivity to the business and cultural needs (Himdag).
6. Demonstrate the ability to apply Cyber-Security techniques to keep data and systems secure.

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
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</tr>
<tr>
<td></td>
<td>WRT 102 Writing II or SPE 110 Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Test into MAT 142H or completion of MAT 089</td>
<td>0</td>
</tr>
<tr>
<td>One Lab-loaded Science Courses</td>
<td>BIO 100N Environmental Biology</td>
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</table>

**Total General Education Credits** 17

<table>
<thead>
<tr>
<th>Core Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 100 Introduction to Computer (F, S, Su)</td>
</tr>
<tr>
<td>CIS 127 Programming and Problem Solving I (Offered S)</td>
</tr>
<tr>
<td>CIS 130 Fundamentals of Computer Networking (Offered S)</td>
</tr>
<tr>
<td>CIS 140 Introduction to Risk Management (Offered F)</td>
</tr>
<tr>
<td>CIS 200 System Analysis and Design (Offered F, starting 2021)</td>
</tr>
<tr>
<td>CIS 210 Introduction to System Administration (Offered S)</td>
</tr>
<tr>
<td>CIS 280 IT Project Management (Offered F)</td>
</tr>
<tr>
<td>CIS 297 Internship/Practicum (based on student need)</td>
</tr>
</tbody>
</table>

**Total Core Credits** 24

<table>
<thead>
<tr>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 230N Networking Fundamentals – Nt, S – (Offered F, starting 2021)</td>
</tr>
<tr>
<td>CIS 234N Advanced Networking Routing and Switching – Nt – (Offered S, in 2022)</td>
</tr>
<tr>
<td>CIS 240N Network Security – Nt, S – (Offered S, in 2022)</td>
</tr>
<tr>
<td>CIS 250N Coding Fundamentals – C – (Offered F, starting 2021)</td>
</tr>
<tr>
<td>GEO 267 Introduction to GIS – G – (Offered F)</td>
</tr>
</tbody>
</table>

**Total Credits for Elective** 19

**Total Credits for Degree** 60
AAS in Early Childhood Education

The Associate of Applied Science in Early Childhood Education is meant for individuals who are interested in direct employment after their associate’s degree, while some universities offer a Bachelor of Applied Science in Early Childhood Education it is recommended that students who want to transfer complete the Associate of Arts in Early Childhood Education.

Program learning outcomes
1. Assess children’s levels of development.
2. Ensure a safe and healthy learning environment.
3. Provide nutritious snacks and meals.
4. Increase family involvement in their children’s education.
5. Create and implement lesson plans in an early childhood environment.

### AAS in ECE Program of Study

<table>
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<th>Course Requirement</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture (C)</td>
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<td>Computer Science</td>
<td>CIS 100 Introduction to Computers</td>
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</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td>SWU 171 Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>One Lab-loaded Science Course</td>
<td>ANR 111N Agroecology and Tohono O’odham Crop Production</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ECE 105 Foundations to Early Childhood Education</td>
</tr>
<tr>
<td>ECE 110 Emergent Language and Literacy</td>
</tr>
<tr>
<td>ECE 125 Nutrition, Health, and Safety for the Young Child</td>
</tr>
<tr>
<td>ECE 217 Child Development</td>
</tr>
<tr>
<td>ECE 226 Effective Interactions and Guidance</td>
</tr>
<tr>
<td>ECE 228 Family, Culture, and Community</td>
</tr>
<tr>
<td>ECE 291 Internship for Students with Experience in Early Childhood Education</td>
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<td><strong>Total Core Credits</strong></td>
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<table>
<thead>
<tr>
<th>Electives</th>
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<tbody>
<tr>
<td>Choose any course designated with the following prefixes ECE, EDU, PSY, SOC, or SWU</td>
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<td><strong>Total Credits for Elective</strong></td>
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<td><strong>Total Credits for Degree</strong></td>
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Certificate Programs

The Certificate programs at TOCC are meant to provide foundational education in a given field for direct employment. They are a great option for those who want to start in a field or who are looking for advancement in their career. Certificates offered include:

- Certificate in Casino Gaming
- Culinary Art Certificate I and Certificate II
- Certificate in Digital Media
- Certificate in Substance Abuse and Addictions Studies
- Certificate in Social Services
Certificate in Casino Gaming

The Casino Gaming Certificate (CAG) focuses on the business side of the gaming industry. The CAG Certificate will increase your knowledge of the business field in general and the tribal casino gaming business in particular.

Program learning outcomes

1. Students will be able to provide a reasonable rationale showing how O’odham cultural values can inform good casino gaming practices.
2. Students will demonstrate that they have a basic general understanding of the casino gaming industry in the US and among tribal nations.
3. Students will demonstrate basic proficiency in the business skills that are needed to be successful in entry-level casino gaming.

Casino Gaming Certificate

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
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<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture (C)</td>
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<td></td>
<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
<td>4</td>
</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science</td>
<td>CIS 100 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>Business</td>
<td>BUS 100 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC 101 Financial Accounting</td>
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<tr>
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<tbody>
<tr>
<td>CAG 100 Casino Gaming Industry Basics</td>
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<tr>
<td>CAG 111 Casino Gaming Finance and Accounting</td>
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<td>3</td>
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<tr>
<td>CAG 122 Casino Gaming Theory and Practice</td>
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<tr>
<td>CAG 133 Customer Service, Management, and Marketing</td>
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<tr>
<td>CAG 144 The Tribal Casino: Challenges and Opportunities</td>
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<td><strong>Total Core Credits</strong></td>
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<tr>
<td><strong>Total Credits for Certificate</strong></td>
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</table>
Culinary Art Certificate I and Culinary Art Certificate II

The Culinary Arts Certificate Program is designed to provide graduates with the necessary skills and knowledge to become gainfully employed in the Culinary Arts field at the entry level. Graduates of the program will have fundamental culinary knowledge, the national food handler’s certification ServSafe, and technical skills necessary to succeed in the field.

Program learning outcomes
1. Identify Safety & Sanitation culinary principles.
2. Recognize the appropriate terminology and equipment used in the culinary arts field.
3. Summarize professional cooking knowledge, concepts, and methods.
4. Describe effective communication skills using teamwork in the feed service industry.

Culinary Art Certificate I

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
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<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
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<td>3</td>
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<td></td>
<td>THO 101 Elementary Tohono O’odham</td>
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</tr>
<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
</tr>
<tr>
<td>One Lab-loaded Science Courses</td>
<td>BIO 127N Human Nutrition and Biology</td>
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<tr>
<td></td>
<td>CUA 110 Food Safety and Sanitation</td>
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<tr>
<td></td>
<td>CUA 120 Culinary Math</td>
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<td></td>
<td>CUA 125 Professional Cooking Basics I</td>
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Culinary Art Certificate II (Prerequisite: Completion of Culinary Art Certificate I)

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<th>Course Requirement</th>
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<td>English Composition</td>
<td>WRT 102 Writing II</td>
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<table>
<thead>
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<tbody>
<tr>
<td></td>
<td>CUA 210 ServSafe</td>
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<tr>
<td></td>
<td>CUA 220 Professional Cooking II</td>
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<td></td>
<td>CUA 230 Indigenous and Sustainable Foods</td>
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<tr>
<td></td>
<td>CUA 235 Baking &amp; Pastry I</td>
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<tr>
<td></td>
<td>CUA 240 Culinary Arts Nutrition</td>
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<tr>
<td></td>
<td><strong>Total Credits for Certificate</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>
Certificate in Digital Media

The Certificate in Digital Media is meant for students who are interested in video production and professional digital photography.

Program learning outcomes

1. Learn the practice and application of video technologies.
2. Learn the practice and application of visual communication technologies.
3. Learn the practice and application of digital photography technologies.
4. Understand and apply the universal and unified theoretical formal and aesthetic constructs that advise the practice of digital media.

Digital Media Certificate

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
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<tbody>
<tr>
<td>Tohono O’odham Himdag</td>
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<td>THO 101 Elementary Tohono O’odham or THO 106 Conversational Tohono O’odham I</td>
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<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
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<td>Computer Science</td>
<td>CIS 100 Introduction to Computers</td>
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<thead>
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<tbody>
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<td>ART 100 Basic Design</td>
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<tr>
<td>ART 104 Digital Photography I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ART 105 Art Appreciation</td>
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<td>3</td>
</tr>
<tr>
<td>ART 110 Drawing</td>
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<tr>
<td>ART 151 Video I</td>
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<tr>
<td>ART 180 Visual Communication Design I</td>
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<td><strong>Total Core Credits</strong></td>
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</table>

Electives

Choose from the following courses: ART 204 Digital Photography II, ART 251 Video II, ART 280 Visual Communication II

<table>
<thead>
<tr>
<th>Total Credits for Elective</th>
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</table>

| Total Credits for Certificate | 37 |
Certificate in Substance Abuse and Addiction Studies

The Certificate in Substance Abuse and Addiction Studies is meant to provide students with the core academic work to work as a substance abuse professional and Certified Addition Counselor. The Certificate is also designed to work towards an Associate of Arts in Social Work.

Program learning outcomes
1. Social Problems and Social Change: Students will be able to articulate and discuss various human conditions that lead to the need for human services and the delivery of human service programs.
2. Professional interpersonal skills: Students will demonstrate the ability to use professional interpersonal skills in order to assist someone seeking social services on the individual and group level.
3. Evaluation and Planning. Evaluation: Students will demonstrate the ability to assess the needs of individuals on the micro (client level), mezzo (organization and community level), and macro (policies, cultural, and legal levels) in order to address individual or social problem and create positive social change. Planning: Students will demonstrate the ability to develop a plan of action based on a needs assessment.
4. Cultural Sensitivity: Students will demonstrate cultural awareness and sensitivity needed to respectfully serve the Tohono O’odham Nation and others in a diverse service population.
5. Professional Ethics: Students will demonstrate an understanding of the importance of professional ethics and the ability to identify situations in which there can be ethical dilemmas and how to appropriately mitigate them.
6. Knowledge of substance abuse and addiction. Students will be able to articulate and discuss the dynamics of substance abuse addiction along with the prevention and treatment of the substance abuser.

Substance Abuse and Addiction Studies Certificate

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
<th>Credits Required</th>
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<tr>
<td>Tohono O’odham Himdag</td>
<td>HIS 122 Tohono O’odham History and Culture</td>
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<td>THO 101 Elementary Tohono O’odham</td>
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<tr>
<td>English Composition</td>
<td>WRT 101 Writing I</td>
<td>3</td>
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<tr>
<td>Social and Behavioral Science</td>
<td>PSY 101 Introduction to Psychology or SOC 101 Introduction to Sociology</td>
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<tr>
<td>SSE 121 Introduction to Substance Abuse</td>
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<tr>
<td>SSE 123 Substance Abuse Prevention</td>
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<tr>
<td>SSE 211 Group Technique Applications</td>
<td>3</td>
</tr>
<tr>
<td>SSE 220 Treatment of the Substance Abuser</td>
<td>3</td>
</tr>
<tr>
<td>SWU 171 Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>PSY 214 Abnormal Psychology</td>
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Total Core Credits: 18

Total Credits for Certificate: 31
Certificate in Social Services
The Certificate in Social Services is meant to provide entry level skills to start a career in Social Services. The Certificate is also designed to work towards an Associate of Arts in Social Work.

Program learning outcomes
1. Social Problems and Social Change: Students will be able to articulate and discuss various human conditions that lead to the need for human services and the delivery of human service programs.
2. Professional Interpersonal Skills: Students will demonstrate the ability to use professional interpersonal skills in order to assist someone seeking social services on the individual and group level.
3. Evaluation and Planning. Evaluation: Students will demonstrate the ability to assess the needs of individuals on the micro (client level), mezzo (organization and community level), and macro (policies, cultural, and legal levels) in order to address individual or social problem and create positive social change. Planning: Students will demonstrate the ability to develop a plan of action based on a needs assessment.
4. Cultural Sensitivity: Students will demonstrate cultural awareness and sensitivity needed to respectfully serve the Tohono O’odham Nation and others in a diverse service population.
5. Professional Ethics: Students will demonstrate an understanding of the importance of professional ethics and the ability to identify situations in which there can be ethical dilemmas and how to appropriately mitigate them.

Social Services Certificate

<table>
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<tr>
<th>General Education Category</th>
<th>Course Requirement</th>
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<td>THO 101 Elementary Tohono O’odham I</td>
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<td>Humanities</td>
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<tr>
<td>Social and Behavioral Science</td>
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Total General Education Credits: 17

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<td></td>
<td>SSE 121 Introduction to Substance Abuse</td>
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<tr>
<td></td>
<td>SSE 211 Group Technique Applications</td>
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<td></td>
<td>SWU 171 Introduction to Social Work</td>
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<td>SWU 291 Social Service Delivery Systems</td>
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<td>SWU 295 Foundations of Social Work Practice: Effective Helping in a Diverse World</td>
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Total Core Credits: 15

Total Credits for Certificate: 32
Chapter 6 – Course Descriptions

This chapter provides a description of all the courses that are currently being offered by TOCC. The following is terminology used to describe the courses.

- **Prefix** – short way to identify the area of study or discipline: ART for Art; GEO for Geography, BIO for Biology, and so on.
- **Course numbers** - used to identify specific classes: ART 100 is Basic Design, GEO 103 is Cultural Geography, and so on. Classes numbered 200 or above are more advanced than 100 level classes.
- **Titles**: Name of the course: Basic Design, Understanding Terrorism, Global Change Biology, and so on.
- **Credits**: Shows semester hour credits for a course. HIS 122 Tohono O’odham History and Culture is 3 cr. hrs. (3 credits) while BIO 100N Biology Concepts is 4 cr. hrs. (4 credits). Most classes are 3 credits.
- **Lecture and lab hours**: Lecture hours are shown as, for example, 3 lec (3 lecture) or 5 lec (5 lecture); lab hours are shown as, for example, 3 lab (3 laboratory). Some classes are lecture only; some have a combination of lecture and lab hours. Periods (pds) are the sum of lecture plus lab hours: (6 pds: 3 lec, 3 lab) for example.
- **Prerequisites**: Prerequisites are courses or other preparation required for enrollment in a course. Some courses have no prerequisites while others may have one or more. WRT 102 has WRT 101 as a prerequisite, for example.
- **Descriptions**: The text or narrative that is designed to highlight the main course contents.
Accounting (ACC)

ACC 100: Practical Accounting Procedures  
Prerequisites: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Introduction to accounting systems for small businesses. Includes the basic accounting cycle, use of special journals, procedures for controlling cash, and payroll accounting.

ACC 101: Financial Accounting  
Prerequisites: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Introduces accounting as a service activity, analytical discipline, and information system. Includes quantitative information to make decisions, identification of events that characterize economic activity, and the collection and communication of economic activity. Also includes recording accounting data, internal control of assets, measurement and reporting of liabilities and owner’s equity.

ACC 102: Managerial Accounting  
Prerequisites: ACC 101 & MAT 089 or higher  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Accounting training for managers. Includes concepts for those who are inside an organization and responsible for planning, directing, and controlling its operation. Also includes process costing, profit planning, overhead analysis, and capital budgeting decisions.

American Indian Studies (AIS)

AIS 101: Introduction to American Indian Studies I  
Prerequisite: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Examination of the diversity of American Indian tribes. Includes successive colonization waves and conflict between Native Americans and colonizing nations. Also includes the development of Native American cultures, and policies toward Native Americans.

AIS 200: Culture and History of Indigenous Peoples  
Prerequisites: WRT 101  
Credits: 3 cr. hr. (3 pds: 3 lec.)  
Course Description: This course introduces students to the foundation of American Indian Studies. Students will examine historical and contemporary issues, including Federal Indian policy and law. This course is a collaborative educational exchange between Tohono O’odham Community College (TOCC) and the American Indian Higher Education Consortium (AIHEC).

AIS 260: Culture and History of American Indian Women  
Prerequisites: WRT 101  
Credits: 3 cr. hr. (3 pds: 3 lec.)
Course Description: This course examines and appraises the historical and contemporary place of American Indian women in Native communities and mainstream society. This is accomplished through written documents, storytelling, and other mediums with a focus on Native women’s roles, status, influence, and contributions as Nation builders before contact, during colonization and decolonization. Central to the course are current issues of importance to American Indian women living on and near reservations, in urban and rural areas.

Agriculture and Natural Resources (ANR)

ANR 102N: Animal Science
Prerequisites: MAT 089 or higher, BIO 100N, or 1 year high school biology, or signature of instructor
Credits: 4 cr. hrs. (5 pds: 2 lec, 3 lab)
Course Description: This class will cover fundamental principles of animal, dairy, equine, and poultry science, with a focus on production, marketing, and distribution. Livestock management practices, culture, and history unique to Indian Country will also be discussed.

ANR 111N: Agroecology and Tohono O’odham Crop Production
Prerequisites: None
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: This course combines classroom and fieldwork to learn about traditional and commercial vegetable and grain crop production. Topics include Tohono O’odham agricultural history, crop, soil, pest, nutrient, and weed management, cover cropping, composting, seeding, transplanting, irrigation, harvesting, and marketing. Organic production is emphasized since traditional Tohono O’odham agriculture has always been organic, and does not use synthetic fertilizers and pesticides. The lab portion of class is three hours of hands-on learning at the TOCC oidag (field) at TOCC’s Wisag Kos Mascamakud (West Campus).

ANR 128N: Plant Ecology of the Sonoran Desert
Prerequisites: BIO 105N or signature of instructor
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: This course will cover the fundamentals of ecology from the perspective of plants including population, community and ecosystem ecology. This course will also include identification and classification of plants and plant communities in the diverse Sonoran Desert region. This course incorporates practical field exercises designed to acquaint the student with plant community analysis, classification and description.

ANR 130N: Plant Science
Prerequisites: CHM 121N or 1-year high school chemistry recommended
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: Introduces the principles of plant growth, development, reproduction, and structure of vascular plants at the cellular, organism and ecosystem levels. Addresses plant growth in the context of climatic and environmental influences, with global and evolutionary patterns considered. Emphasis on traditional crops and woody plants of Southern Arizona.
ANR 210N: Range Conservation  
**Prerequisites:** BIO 105N or signature of instructor  
**Credits:** 3 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** This is an introductory course exploring the diversity of rangelands on a local, regional, and global scale. The course will cover principles of rangeland ecology and grazing management, and will take a critical look at management applicability under a variety of rangeland ecosystems, especially in the arid Southwestern United States. The importance of rangelands in Tohono O’odham life will also be covered. The class will include at least one field trip as identified by the instructor.

ANR 221N: Soil Science  
**Prerequisites:** None  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** Fundamental principles of soil science, including the origin, nature, and classification of soils, emphasizing the chemical, physical, and biological properties in relation to growth and nutrition of plants. Useful for anyone interested in water resources, agriculture, ecology, engineering, environmental restoration, and any number of other environmental sciences. Lecture and lab are integrated in this course.

ANR 225N: Environmental Issues and Conservation in the US-Mexico Borderlands  
**Prerequisites:** BIO 105N  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** This course will explore current environmental issues and challenges in the US-Mexico border region. Due to the importance for the Tohono O’odham community, the course will focus on environmental issues of the Southwest’s borderland that have implications in Tohono O’odham communities’ environment. This course includes a strong practicum component where students will visit study cases of representative environmental problems. In addition, binational faculty with expertise in these issues will be invited to give presentations at TOCC or webinars.

ANR 286N: Water Resources  
**Prerequisites:** Math 089 or higher  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** Provides a basic understanding of the hydrological cycle and an overview of the processes that control water supplies to natural ecosystems and humans, giving students the knowledge they need to participate in informed decisions about water resources. The course emphasizes information and activities that are useful in the practice of agriculture and water conservation, including an introduction to rainwater harvesting principles. When possible, these topics will be addressed using examples relevant to the Tohono O’odham Nation.

ANR 290N: Wildlife Conservation  
**Prerequisites:** BIO 105N or signature of instructor  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** An introduction to the ecology, conservation and management of wildlife populations. Students will learn a variety of tools to apply ecological knowledge balanced on the needs
Tohono O'odham Community College - 2020-2022 (v. 21.38-2)

of animals with those of people. Topics will cover history, philosophy, inventory, planning, management, and Tohono O'odham wildlife concepts.

Apache Language

**APA 101: Apache Language I**
**Prerequisites: None**
**Credits: 4 cr. hrs. (5 pds: 3 lec 2 lab)**
**Course Description:** This course emphasizes speaking, reading, and listening comprehension of the Apache language through a variety of approaches.

**APA 102: Apache Language II**
**Prerequisites: APA 101**
**Credits: 4 cr. hrs. (5 pds: 3 lec 2 lab)**
**Course Description:** A continuation of Apache Language I, Apache language II emphasizes an increased knowledge of the structure and grammar of the language with improved practice in listening, speaking, reading, writing, and usage of the language. This course utilizes a communicative approach and provides opportunities for students to use increasingly complex vocabulary and grammar.

Apache Studies

**APS 150: Introduction to Traditional Apache Healthcare**
**Prerequisites: None**
**Credits: 4 cr. hrs. (4 pds: 4 lec., 0 lab.)**
**Course Description:** This course will provide a traditional Apache perspective of the history of the health of the San Carlos Apache community, punctuated by highly-detailed information from the oral and written historical record; and an overview of traditional Apache health, wellness, and medical treatment and prevention concepts and practice.

Art History (ARH)

**ARH 101: History of Art I: Prehistory through Gothic**
**Prerequisites: None**
**Credits: 3 cr. hrs. (3 pds: 3 lec)**
**Course Description:** The course is a broad and inclusive survey of the art, architecture and material cultures of western civilization from humanities’ initial cultural efforts through the Renaissance, incorporating a global perspective. Topics including historically significant art, architecture and material culture, and the relationship between the social function of art and its form and content, are introduced and examined through an interdisciplinary lens.

**ARH 102: History of Art II: Renaissance through Modern**
**Prerequisites: ARH 101 or permission of instructor**
**Credits: 3 cr. hrs. (3 pds: 3 lec)**
**Course Description:** This course, covering the periods Renaissance through Modern, is a continuation of ARH101. It is a broad and inclusive survey of the art, architecture and material cultures of western civilization from the Renaissance through modern times, incorporating a global perspective. Topics including historically significant art, architecture and material culture, and the relationship between the
social function of art and its form and content, are introduced and examined through an interdisciplinary lens.

**ARH 203: History of Global Indigenous Visual Cultures**
**Prerequisites:** ARH 102 or ART 105 or permission of instructor
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** This course provides a survey of the history and material cultures of indigenous peoples world-wide, grouping them by the specific geographies (terrain types) that they inhabit: mountains; forests, tropical and temperate; grasslands, savannas and shrub lands; aquatic-oceans, rivers, lakes, marshes; tundra and deserts, and xeric shrub lands. Attention will be given to the effect of exogenous contact, explorations and occupations, colonialism, and globalization upon indigenous visual cultures.

**ARH 204: History of Native American Visual Cultures**
**Prerequisites:** ARH 203 or permission of instructor
**Credits:** 3 cr. hr. (3 pds: 3 lec)
**Course Description:** This course provides a selective overview of the arts, societies, and histories of First Nation/Native American descendants in South, Central, and North America to include Canada, with a final focus on the Southwest cultural area. The arts and material culture of the Tohono O’odham will be examined in relation to those produced by other Native American cultures.

**ART (ART)**

**ART 100: Basic Design**
**Prerequisite:** None
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)
**Course Description:** Introduces students to the elements and principles of visual design. Includes line, shape, space, value, texture, volume and color. Includes skill development in organizing these elements, and applying the visual principles of harmony, variety, balance, tension, rhythm, proportion, repetition, and contrast.

**ART 104: Digital Media and Photography**
**Prerequisite:** None
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)
**Course Description:** This course is designed for students with little or no digital imaging experience to provide a fundamental understanding of digital imaging, from both a technical and theoretical point of view. Students learn to operate digital cameras, to utilize them as precise tools for image capture, and to utilize digital media software (Adobe Photoshop) for graphic design media. The course is a combination of lecture, demonstration and hands-on practice.

**ART 105: Art Appreciation**
**Prerequisites:** None
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** This course introduces students to the history of European and American art, studio art production, art criticism, and aesthetic theory. It covers art from ancient history to the present with a specialized unit on Native North American Art and Tribal Museums. Course material will be presented through a combination of readings, lectures, videos, field trips, and through direct creative experience.

**ART 110:** Drawing  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)  
**Course Description:** Introduction to drawing. Includes use of graphic media: pencil, charcoal, and ink on paper. Also includes elements of design as applied to representational drawing.

**ART 111:** Jewelry Making & Beading  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)  
**Course Description:** Provides introductory skills for learning construction, color, and composition in jewelry making and beading. Students will learn the difference between stringing, fabricating claps to fasteners with wire wrap and crimps, followed by instruction in the basic bead stitching, such as Peyote, brick, Herringbone, flat, and loom-work. Students will be able to successfully create earrings, bracelets, pendants, and basic forms that can be applied to more advanced projects.

**ART 115:** 3-D Design  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)  
**Course Description:** Introduction to the sculptural elements and spatial principles as they relate to the visual arts. Lectures and projects will examine 3D design from a theoretical perspective, exploring the physical, psychological, and cultural aspects of sculpture and spatial design.

**ART 120:** Traditional Basketry  
**Prerequisite:** None  
**Cross Listed:** TOS 120  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course will serve to preserve and perpetuate students’ knowledge, creation, and use of Tohono O’odham Basketry, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the use and production of baskets. Students will use natural and contemporary materials to construct finished products.

**ART 121:** Traditional Pottery  
**Prerequisite:** None  
**Cross Listed:** TOS 121  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course will serve to preserve and perpetuate students’ knowledge, creation, and use of Tohono O’odham pottery, both historical and contemporary. Students will learn oral history,
songs and stories pertaining to the use and production of pottery. Students will use natural and contemporary materials to construct finished products.

**ART 150: Color and Composition**
**Prerequisite:** None
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)
**Course Description:** Introduction to the element of color and principles of color theory and composition as they relate to the visual arts. Lectures and projects will examine color from a theoretical perspective, exploring the physical, psychological, and cultural aspects of color.

**ART 151: Video I**
**Prerequisite:** None
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)
**Course Description:** Video I is an introductory course in video and audio production. Students will learn to use digital video recording equipment, construct film with audio, software editing, for the purpose of both expressive, and commercial purposes. Students will work both individually and collaboratively on projects. Student work will be featured in a film screening at the end of every semester that is open to the public.

**ART 180: Visual Communication Design I**
**Prerequisite:** None
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)
**Course Description:** Visual Communication Design I
Basic visual and cognitive organizational processes for the practice of visual communication are presented through lectures and demonstrated through studio exercises. Includes visual perception and organization, visual problem-solving and problem-finding techniques, and visual ideation and evolution.

**ART 200: Visual Art & Design Management**
**Prerequisite:** ART 100 Basic Design or permission of the instructor
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)
**Course Description:** This course is designed to assist those who produce visual art and design brand, advertise, market and distribute their products. Students learn to photograph and document products and work process, create brand identities, advertise products, market products, distribute products, and construct and maintain a business via web-presence.

**ART 204: Digital Media & Photography II**
**Prerequisite:** ART 104 or permission of the instructor
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)
**Course Description:** This course is a continuation of ART 104 Digital Photography I, expanding initial experience for digital imaging on a Macintosh operating system, from both a technical and theoretical point of view. Students learn to further utilize camera and software as tools for image capture through lecture, demonstration and hands-on practice.
ART 205: Painting I

**Prerequisites:** ART 110 or instructor permission

**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)

**Course Description:** This course emphasizes the development of basic painting techniques and skills using acrylic paint, other paint media, stretched canvas, and other varied supports. Course work is based on working from observation and resource materials through basic color theory, as related to plasticity of form and space. Students explore a variety of painting techniques and concepts to build a foundation for developing expressive and representation skills in painting.

ART 210: Drawing II

**Prerequisite:** ART 110 or permission of the instructor

**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)

**Course Description:** This course increases the student’s knowledge of drawing techniques and principles. Emphasis is placed on developing perceptual drawing, concepts related to pictorial space and composition, and the human form as subject. Students will work with thematic drawings and experimental techniques to communicate personal solutions to given assignments.

ART 215: 3D Design II

**Prerequisite:** ART 100 Basic Design, ART 115 3D or permission of the instructor

**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)

**Course Description:** This course offers a continuation of the basic sculptural materials and techniques offered in ART 115 3D Design I. Students experiment with additive and subtractive processes in clay, plaster, wood, stone, and other contemporary materials to learn a variety of construction techniques. The focus is on developing skills and fabrication solutions in three-dimensional form, with an emphasis on the safe use of materials.

ART 220: Painting II

**Prerequisite:** ART 110, or ART 150, or permission of the instructor

**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)

**Course Description:** This course is an introductory course that emphasizes the development of basic painting techniques and skills using acrylic paint, stretched canvas and other supports. Course work is based on working from observation and resource materials through basic color theory as it related to plasticity of form and space. Students explore a variety of painting techniques and concepts to build a foundation for developing expressive and representation skills in painting.

ART 225: Life Drawing III

**Prerequisite:** ART 210 or permission of the instructor

**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)

**Course Description:** An advanced level drawing course that is an exploration of the structure, anatomy, design and expression of the human figure. Students explore a variety of drawing materials, drawing supports and techniques that are traditional and experimental.
ART 230: Sewing I
Prerequisite: None
Credits: 3 cr. hrs. (5 pds: 2 lec, 3 lab)
Course Description: This course familiarizes students with the sewing machine while providing instruction in basic sewing skills, sewing kit equipment, needle position, stitch types, the impact of fabric types and qualities. Students practice basic procedures by initially creating small sewn items then advance to larger functional and decorative projects.

ART 240: Sewing II
Prerequisite: ART 230 or permission of the instructor
Credits: 3 cr. hrs. (5 pds: 2 lec, 3 lab)
Course Description: A continuation of basic sewing skills learned in ART 230 Sewing I, using more complicated sewing stitches and seams. Students keep a sample sewing notebook, sew several smaller but more complicated projects, then progress to constructing three medium-level garment and household projects.

ART 251: Video II
Prerequisites: ART 151 or permission of the instructor
Credits: 3 cr. hrs. (5 pds: 2 lec 3 lab)
Course Description: Video II is an intermediate course in video and audio production. Students expand their hands-on knowledge of digital video recording equipment, and audio and software editing for the purpose of both expressive and commercial purposes. In addition, examination and use of film theory and narrative construction will be integrated into the video projects. Students will work both individually and collaboratively on projects taking on various roles in the pre-production, production and post-production phases of filmmaking. Students will complete video projects and learn how to format these for use on various platforms.

ART 255: Printmaking I
Prerequisite: ART 110, and ART 150 Color & Composition, or permission of instructor
Credits: 3 cr. hrs. (5 pds: 2 lec, 3 lab)
Course Description: This course introduces students to the artist’s printmaking studio through a series of assignments in various basic printmaking techniques. This course emphasizes nontoxic printmaking processes, materials, low tech approach to multiples, and the proper use of tools and equipment. Instruction includes lectures, demonstrations and critiques.

ART 260: Printmaking II
Prerequisite: ART 255 or permission of the instructor
Credits: 3 cr. hrs. (5 pds: 2 lec, 3 lab)
Course Description: This course is a continuation of ART 250 Printmaking I that introduces additional printmaking techniques and further development in previous techniques. The course will emphasize the development of a portfolio of print editions.
ART 280: Visual Communication Design II  
**Prerequisite:** ART 180 or permission of the instructor  
**Credits:** 3 cr. hrs. (5 pds: 2 lec, 3 lab)  
**Course Description:** This course, an essential visual communication and design elective, further explores the relationship of form and communication in visual communication. Design is explored through theoretical and applied projects. The impact of typography and imagery and their syntactic relations upon audience and content is stressed using manual and digital media.

ART 290: Portfolio  
**Prerequisite:** Completion of general education courses.  
**Credits:** 1 cr. hr. (3 pds: 1.5 lec, 1.5 lab)  
**Course Description:** This course is the conceptualization, realization, and documentation of an AFA portfolio project. It is a necessary capstone experience integrating professional development of the portfolio, promotional materials, and resume or CV (curriculum vitae) within the field of visual arts and design.

**Astronomy (AST)**

AST 101N: Solar System  
**Prerequisite:** None  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** Introduction to the science of the nature and origin of the solar system, the sun and its family of planets, comets, and asteroids. Includes the history of astronomy and special topics regarding the space program. Scientific thinking as an application of critical thinking and science in contrast to pseudoscience is also covered. Lecture and lab are integrated.

AST 102N: Stars, Galaxies, Universe  
**Prerequisite:** None  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** Introduction to the universe beyond the solar system. Includes the nature of light, how astronomers and telescopes work, and the possibilities of alien life in the universe. Also includes the lifetime of stars, quasars, pulsars, and black holes. The origin, nature, and future of the universe are also discussed. In addition, scientific thinking as an application of critical and quantitative thinking and science in contrast to pseudoscience are included. Lecture and lab are integrated.

**Building Construction Technologies (BCT)**

BCT 100H: Professionalism in Service Building and Construction  
**Prerequisites:** None  
**Recommended co-requisites:** BCT 101, 111, 112, 113, 114, 115  
**Credits:** 1 cr. hr. (1 pd: 1 lec)  
**Course Description:** This course introduces procedures in business, customer service, and basic communication skills. It includes roles of individuals and companies in the construction industry, critical thinking and problem-solving skills, and techniques for communicating effectively.
BCT 101H: Computer Literacy for Construction  
**Prerequisite:** None  
**Recommended co-requisites:** BCT 100, 111, 112, 113, 114, 115  
**Credits:** 1 cr. hr. (1 pd: 1 lec)  
**Course Description:** This course provides an introduction to computer usage in construction. Logging in, internet research, emails with attachments, saving files in folders, and how to access the National Center for Construction Education and Research’s (NCCER) on-line curriculum support and on-line testing are included.

BCT 111H: Basic Safety  
**Prerequisite:** None  
**Recommended co-requisites:** BCT 100, 101, 112, 113, 114, 115  
**Credits:** 1 cr. hr. (1 pd: 1 lec)  
**Course Description:** This course explains safety obligations of workers, supervisors and managers to ensure a safe workplace. It introduces causes and results of accidents, roles of company policies and OSHA regulations, and common job-site hazards and protections.

BCT 112H: Basic Construction Mathematics  
**Prerequisite:** None  
**Recommended co-requisites:** BCT 100, 101, 111, 113, 114, 115  
**Credits:** 1 cr. hr. (1 pd: 1 lec)  
**Course Description:** This course reviews basic mathematical functions such as adding, subtracting, dividing, and multiplying whole numbers, fractions, and decimals. It also reviews basic geometry as applied to common shapes and forms.

BCT 113H: Hand & Power Tools  
**Prerequisite:** None  
**Recommended co-requisites:** BCT 100, 101, 111, 112, 114, 115  
**Credits:** 1 cr. hr. (1 pd: 1 lec)  
**Course Description:** This course introduces hand and power tools that are widely used in the construction industry. It includes selection, use, safety, and maintenance procedures.

BCT 114H: Blueprint Reading  
**Prerequisite:** None  
**Recommended co-requisites:** BCT 100, 101, 111, 112, 113, 115  
**Credits:** 1 cr. hr. (1 pd: 1 lec)  
**Course Description:** This course introduces basic blueprint terms, components, and symbols. It explains the different types of blueprint drawings (civil, architectural, structural, mechanical, plumbing/piping, and electrical).

BCT 115H: Basic Rigging & Materials Handling
Prerequisite: None
Recommended co-requisites: BCT 100, 101, 111, 112, 113, 114
Credits: 1 cr. hr. (1 pd: 1 lec)
Course Description: This course introduces basic rigging and materials handling techniques and procedures. It explains how ropes, chains, hoists, loaders, and cranes are used to move material and equipment. The course also identifies hazards associated with materials handling and introduces appropriate equipment for common job-site tasks.

BCT 120H: Core Curriculum: Introductory Craft Skills
Prerequisite: None
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course introduces the basics skills and knowledge of the construction industry including effective communication, employability skills, safety, construction math, hand tools, power tools, blueprints, rigging, and material handling.

BCT Carpentry

BCT 141H: Introduction to the Carpentry Profession
Prerequisites: BCT 100, 101, 111, 112, 113, 114, 115
Recommended co-requisites: None
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course introduces basic knowledge for those entering the carpentry profession. It includes orientation to the trade, building materials, fasteners and adhesives, as well as hand and power tools. Introduction to construction drawings, specifications, and layout, and floor systems are also covered.

BCT 142H: Carpentry I
Prerequisite: BCT 141
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course introduces floor systems, wall and ceiling framing, roof framing, windows and exterior doors, and basic stair layout.

BCT 143H: Carpentry II
Prerequisite: BCT 142
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course introduces the concept of the building envelope, types of stairs and common building code requirements, describes procedures for laying out and framing walls. Types of roofs, and instructions for laying out rafters for gable roofs, hip roofs, and valley intersections are included.

BCT 144H: Carpentry III
Prerequisite: BCT 143  
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)

Course Description: This course describes the installation of metal doors and related hardware in steel-framed, and wood-framed structures. Types of gypsum drywall, their uses, and the fastening devices and methods used to install them are included. Materials, tools, and methods used to finish and patch gypsum are also covered. Describes the materials, layout, and installation procedures for many types of suspended ceilings used in commercial construction. Describes the different types of trim used in finish work, and focuses on the proper methods for selecting, cutting, and fastening trim to achieve a professional finished appearance. Provides detailed instructions for the selection and installation of base and wall cabinets and countertops.

BCT 241H: Carpentry IV  
Prerequisite: BCT 144  
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)

Course Description: This course continues BCT 144. It includes properties of concrete, reinforcing concrete, handling and placing concrete, and trenching and excavating. Provides an introduction to working in and around excavations, particularly in preparing building foundations. Describes types and bearing capacities of soils; procedures used in shoring, shielding, and sloping trenches and excavations; trenching safety requirements, including recognition of unsafe conditions; and mitigation of groundwater and rock when excavating foundations. Explains the selection and uses of different types of reinforcing materials. Describes requirements for bending, cutting, splicing, and tying reinforcing steel and the placement of steel in footings and foundations, walls, columns, and beams and girders.

BCT 242H: Carpentry V  
Prerequisite: BCT 241  
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)

Course Description: This course continues BCT 241. It includes foundations, slab-on-grade, and horizontal formwork vertical formwork, handling and placing concrete and Tilt-up wall systems.

BCT 243H: Carpentry VI  
Prerequisite: BCT 242  
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)

Course Description: This course continues BCT 242. It includes site layout; advanced roof, wall, and stair systems; and introduction to light construction equipment.

BCT 244H: Carpentry VII  
Prerequisite: BCT 243  
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)

Course Description: This course continues BCT 242 & 243. Provides extensive coverage of the materials and techniques used in finishing wooden staircases. Also covers a variety of stair systems used in commercial construction. Introduces construction equipment, including the aerial lift, skid steer loader, electric power generator, compressor, compactor, and forklift. An overview of general safety, operation, and maintenance procedures is provided. Introduces the equipment, procedures, and safety practices
used in cutting steel with oxyfuel equipment, as well as shielded metal arc welding, gas-tungsten arc welding, and gas metal arc welding. Labs include practice in cutting and welding techniques. Covers the planning process that precedes the start of work on a construction site, including environmental considerations, personnel issues, access roads, traffic control, permits, site safety, utilities, and crane-related concerns

**BCT Electrical**

**BCT 171H**: Introduction to the Electrical Profession  
**Prerequisites**: BCT 100, 101, 111, 112, 113, 114, 115  
**Credits**: 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description**: This course provides an overview of the electrical trade and discusses the career paths available to electricians. Covers safety rules and regulations for electricians, including precautions for electrical hazards found on the job. Also covers the OSHA-mandated lockout/tagout procedure. Introduces electrical concepts used in Ohm’s law applied to DC series circuits. Covers atomic theory, electromotive force, resistance, and electric power equations. Introduces series, parallel, and series-parallel circuits. Covers resistive circuits, Kirchhoff’s voltage and current laws, and circuit analysis.

**BCT 172H**: Electrical I  
**Prerequisite**: BCT 171  
**Credits**: 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description**: This course introduces concepts and procedures for building and construction electrical training. It includes device boxes, hand bending, raceways and fittings, conductors and cables, basic electrical construction drawings, residential electrical services, and electrical test equipment.

**BCT 173H**: Electrical II  
**Prerequisite**: BCT 172  
**Credits**: 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description**: This course continues BCT 172. It includes alternating current, motor theory and application, electric lighting, conduit bending, and pull and junction boxes.

**BCT 174H**: Electrical III  
**Prerequisite**: BCT 173  
**Credits**: 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description**: This course continues BCT 173. It includes conductor installations, cable tray, conductor terminations and splices, grounding and bonding, circuit breakers and fuses, and control systems and fundamental concepts.

**BCT 271H**: Electrical IV  
**Prerequisite**: BCT 174  
**Credits**: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course continues BCT 174. It includes load calculations for branch and feeder circuits, conductor selection and calculations, practical applications of lighting, hazardous location requirements, over current protection, and distribution equipment.

BCT 272H: Electrical V
Prerequisite: BCT 271
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course continues BCT 271. It includes transformers; commercial electrical services; motor calculations; voice, data, and video; and motor controls.

BCT 273H: Electrical VI
Prerequisite: BCT 272
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course continues BCT 272. Includes load calculations for feeders and services, health care facilities, standby and emergency systems, basic electronic theory, fire alarm systems, and specialty transformers.

BCT 274H: Electrical VII
Prerequisite: BCT 273
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course continues BCT 273. Includes advanced controls, HVAC controls, heat tracing and freeze protection, motor operation and maintenance, medium-voltage terminations and splices, and special locations.

BCT Heavy Equipment Operation

BCT 151H: Heavy Equipment Operations Level 1
Prerequisite: BCT 120H
Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)
Course Description: This course introduces basic principles of heavy equipment operations, safety considerations, identification of heavy equipment, basic operational techniques, utility tractors, and introduction to earthmoving & grades.

BCT 152H: Heavy Equipment Operations Level 2a
Prerequisite: BCT 151H
Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)
Course Description: This course introduces basic principles of rough terrain forklifts, on-road dump trucks, excavation math and interpreting civil drawings.

BCT 153H: Heavy Equipment Operations Level 2b
Prerequisite: BCT 152H
Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)
Course Description: This course introduces principles of site work, soils, skid steers, loaders and scrapers.

BCT 251H: Heavy Equipment Operations Level 3a
Prerequisite: BCT 153H
Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)
Course Description: This course introduces principles of finishing and grading, compaction equipment, backhoes and off-road dump trucks.

BCT 252H: Heavy Equipment Operations Level 3b
Prerequisite: BCT 252H
Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)
Course Description: This course covers the principles and operation of dozers, excavators and motor graders.

BCT Heating Ventilation and Cooling

BCT 191H: Introduction to the HVAC Profession
Prerequisite: BCT 120
May be concurrent with BCT 101
Credits: 6cr. hrs. (6pds: 5 lec, 1 lab)
Course Description: This course introduces basic principles of heating, ventilating, and air conditioning, HVAC math problem solving, introduction to heating and cooling, and basic electricity.

BCT 192H: HVAC II
Prerequisite: BCT 120 May be concurrent with BCT 101
Credits: 6cr. hrs. (6pds: 5 lec, 1 lab)
Course Description: This course introduces basic principles of heating, ventilating, and air conditioning. It also includes HVAC math problem solving, introduction to heating and cooling and basic electricity.

BCT 193H: HVAC Level 2a
Prerequisite: BCT 192 May be concurrent with BCT 101
Credits: 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course covers transformers, single-phase and three-phase power distribution, capacitors, the theory and operation of induction motors, and the instruments and techniques used in testing AC circuits and components. Explains operating principles of compressors used in comfort air conditioning and refrigeration systems. Includes installation, service, and repair procedures. Covers characteristics and applications of pure and blended refrigerants, and provides extensive coverage of lubricating oils used in refrigeration systems. Covers refrigerant handling and equipment servicing procedures for HVAC systems in an environmentally safe manner. Covers the operating principles, applications, installation, and adjustment of fixed and adjustable expansion devices used in air conditioning equipment. Covers the principles of reverse cycle heating. Describes the operation of heat...
pumps and explains how to analyze heat pump control circuits. Includes heat pump installation and service procedures.

**BCT 194H: HVAC Level 2b**  
**Prerequisite:** BCT 193 May be concurrent with BCT 101  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course covers information related to maintenance-oriented materials, as well as guidelines for the inspection and periodic maintenance of various systems and accessories; information related to maintenance-oriented materials, as well as guidelines for the inspection and periodic maintenance of various systems and accessories; layout, fabrication, installation, and insulation of sheet metal ductwork. Also includes selection and installation of registers, diffusers, dampers, and other duct accessories. Covers the layout, fabrication, installation, and joining of fiberglass ductwork and fittings. Describes the proper methods for attaching and supporting flex duct. Describes the systems, equipment, and operating sequences commercial airside system configurations, such as constant volume single-zone and multi-zone, VVT, VAV, and dual-duct VAV. Covers principles, processes, and devices used to control humidity and air cleanliness, as well as devices used to conserve energy in HVAC systems. Introduces hot water heating systems, focusing on safe operation of the low-pressure boilers and piping systems in residential applications.

**BCT 291H: HVAC Level 3a**  
**Prerequisite:** BCT 194 May be concurrent with BCT 101  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course covers a variety of fasteners, hardware, and wiring terminations used in HVAC systems including the installation of these components. Provides information and skills to troubleshoot control circuits and electric motors found in heating and cooling equipment. Provides guidance related to troubleshooting cooling systems. Provides a thorough review of the heat pump operating cycle, and presents troubleshooting procedures for components. Covers information and skills needed to troubleshoot gas-fired furnaces and boilers. Describes the construction and operation of oil-fired heating systems and their components.

**BCT 292H: HVAC Level 3b**  
**Prerequisite:** BCT 291  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course includes servicing and testing of oil fumes, as well as procedures for isolating and correcting oil and furnaces malfunctions. Delivers information and skills needed to troubleshoot various air treatment accessories used with heating and cooling equipment. Introduces the information and skills needed to troubleshoot and repair zoned, ductless, and variable refrigerant flow systems. Review basic properties of water and describes how water pressure is related to the movement of water through piping systems.

**BCT 293H: HVAC Level 4a**  
**Prerequisite:** BCT 292 May be concurrent with BCT 101  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)
Course Description: This course explains water problems encountered in heating and cooling systems and identifies water treatment methods and equipment. Covers basic water testing procedures and chemistry. Defines the issues associated with indoor air quality and its effect on the health and comfort of building occupants. Covers heat recovery/reclaim devices, as well as other energy recovery equipment used to reduce energy consumption in HVAC systems.

Explains how computers and microprocessors are used to manage zoned HVAC systems. Provides coverage of various network protocols and systems controllers.

Covers air properties and gas laws, as well as the use of psychrometric charts. Describes the tools, instruments, and procedures used to balance an air distribution system. Presents the procedures for the startup and shutdown of hot water, steam heating, chilled water, and air handling systems.

BCT 294H: HVAC Level 4b

Prerequisite: BCT 293 May be concurrent with BCT 101

Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)

Course Description: This course explains how to interpret drawings used in commercial construction, including mechanical drawings, specifications, shop drawings, and as-builts. Identifies factors that affect heating and cooling loads. Explains the process by which heating and cooling loads are calculated, and how load calculations are used in the selection of heating and cooling equipment. Expands on the study of product and process refrigeration equipment by describing systems used in cold storage and food processing applications, as well as transportation refrigeration. Various types of defrost systems are covered in detail. Describes alternative devices used to reduce energy consumption, including wood, coal, and pellet-fired systems, waste-oil heaters, geothermal heat pumps, solar heating, in-floor radiant heating, and direct-fired makeup units.

BCT Masonry

BCT 121H: Introduction to the Masonry Profession

Prerequisite: BCT 120H

Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)

Course Description: This course introduces basic principles of masonry, safety, tools & equipment, measurements, drawings, and specifications, mortar, masonry units, and installation techniques.

BCT 122H: Masonry Level 2a

Prerequisite: BCT 121H

Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)

Course Description: This course introduces the information that trainees will need in order to work with residential plans and construction drawings and to convert that information into action on the job, dealing with the topics of residential masonry, reinforced masonry, masonry openings and metalwork.

BCT 123H: Masonry Level 2b

Prerequisite: BCT 122H

Credits: 6 cr. hrs. (6 pds: 5 lec. 1 lab)

Course Description: This course contains detailed information that directs the mason in accomplishing the construction of walls, arches, and other structures. The course explains construction techniques,
safety requirements, and interaction with structure components, advanced laying techniques, effect of climate on masonry and construction inspection and quality control.

**BCT 221H: Masonry Level 3a**

**Prerequisite:** BCT 123H  
**Credits:** 6 cr. hrs. (6 pds: 5 lec. 1 lab)  
**Course Description:** This course covers the activities and techniques involved in organizing and implementing masonry construction in high-rise construction, with an emphasis on safety and logistics, specialized materials and techniques, repair and restoration.

**BCT 222H: Masonry Level 3b**

**Prerequisite:** BCT 221H  
**Credits:** 6 cr. hrs. (6 pds: 5 lec. 1 lab)  
**Course Description:** This course covers the format and content of commercial drawings and their use in conveying specific construction requirements, including the standard format for specifications, the process of estimating, site layout – distance measurement, as well as leveling and stone masonry.

**BCT Painting**

**BCT 161H: Introduction to the Construction Painting Profession**

**Prerequisites:** BCT 100, 101, 111, 112, 113, 114, 115  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course introduces trainees to career options in the painting profession. Provides an overview of construction site hazards and safety precautions for those in the painting trade. Covers methods of rigging and care of ladders, scaffolds, swing devices, and other equipment. Covers methods of erecting, using and maintaining ladders, scaffolds, and lifts. Discusses fall protection equipment and safety practices used when working on ladders, scaffolds, and lifts. Explains how to identify types of surfaces used in construction including wood, metal, masonry/concrete, plaster/drywall and synthetic substrates.

**BCT 162H: Construction Painting I**

**Prerequisite:** BCT 161  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course introduces common tools, materials, methods, and procedures. It includes basic surface preparation, sealants and fillers, paints and coatings, as well as brushing and rolling paints and coatings.

**BCT 163H: Construction Painting II**

**Prerequisite:** BCT 162  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course continues BCT 162. It includes chemical cleaning and stripping, low-pressure water cleaning, painting failures and remedies, job planning and completion, abrasive blasting, and drywall finishing and patching.
BCT: 164H: Construction Painting III  
**Prerequisite:** BCT 163  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course continues BCT 163. It covers stains, clear finishes, wood finishing, high-performance coatings, and spray painting.

BCT 261H: Construction Painting IV  
**Prerequisite:** BCT 164  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course continues BCT 164. It covers advanced failures and remedies, leadership traits associated with the successful supervisor, describes unique properties of commercial or light industrial applications, and presents the theory and definition of color.

BCT 262H: Construction Painting V  
**Prerequisite:** BCT 261  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course continues BCT 261. It covers techniques for glazing, antiquing, stippling, the wallcovering process from start to finish, types of graphics and their uses, methods of transferring graphics, the characteristics of various texturing materials.

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**BCT Plumbing**

BCT 180H: Introduction to Plumbing Profession  
**Prerequisites:** BCT 100, 101, 111, 112, 113, 114, 115  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course introduces trainees to career options in the plumbing profession. Provides a history of plumbing and also discusses the current technology, industries, and associations of the plumbing profession. Discusses the causes of accidents and their consequences including delays, increased expenses, injury, and loss of life. Reviews the types and proper use of personal protective equipment (PPE). Explains the use of critical safety information including HazCom, safety signs, signals, lockout/ tagout, and emergency response, plumbing tools, plumbing math, plumbing drawings and plastic pipe fittings.

BCT 181H: Plumbing I  
**Prerequisite:** BCT 180  
**Credits:** 6 cr. hrs. (6 pds: 5 lec, 1 lab)  
**Course Description:** This course introduces common types of piping, and their proper fittings, fixtures, and distribution systems. It includes plastic, copper, cast-iron, carbon steel pipe, and corrugated stainless steel tubing. It also includes fixtures and faucets; drain, waste, and vent (DWV) systems; and water distribution systems.

BCT 182H: Plumbing II  
**Prerequisite:** BCT 181
Credits: 6 cr. hrs. (6 pd: 5 lec, 1 lab)
Course Description: This course continues BCT 181. It introduces concepts and practices for plumbing. Includes plumbing math calculations, reading commercial drawings, methods and procedures for installing and testing DWV piping, installing roof, floor, and area drains, and servicing various types of valves.

BCT 183H: Plumbing III
Prerequisite: BCT 182
Credits: 6 cr. hrs. (6 pd: 5 lec, 1 lab)
Course Description: This course continues BCT 182. It introduces concepts and installation procedures for water service, fixtures, and appliances. The course includes installing and testing water supply piping, fixtures, valves, and faucets. It also includes introductions to basic electricity, installing water heaters and fuel gas systems, and servicing fixtures, valves, and faucets.

BCT 236H: Plumbing IV
Prerequisite: BCT 183
Credits: 6 cr. hrs. (6 pd: 5 lec, 1 lab)
Course Description: This course continues BCT 183 It presents concepts that apply to plumbing installations. It includes applied math, sizing water supply piping, potable water treatment, and backflow preventers and types of venting.

BCT 237H: Plumbing V
Prerequisite: BCT 236
Credits: 6 cr. hrs. (6 pd: 5 lec, 1 lab)
Course Description: This course continues BCT 236. It includes types of venting, sizing DWV and storm systems, sewage pumps and sump pumps, corrosive resistant waste piping, compressed air systems and the troubleshooting and repair of fixtures, values and faucets in accordance with code and safety guidelines.

BCT 238H: Plumbing VI
Prerequisite: BCT 237
Credits: 6 cr. hrs. (6 pd: 5 lec, 1 lab)
Course Description: Continues BCT 238. Includes codes; servicing piping systems, fixtures, and appliances; private water supply well systems; private waste disposal systems; swimming pools and hot tubs; and plumbing for mobile homes and travel trailers: Introduces the various types of medical gas and vacuum systems used in health care facilities.

BCT 239H: Plumbing VII
Prerequisite: BCT 238
Credits: 6 cr. hrs. (6 pd: 5 lec, 1 lab)
Course Description: Continues BCT 238 or 237. Includes codes; servicing piping systems, fixtures, and appliances; private water supply well systems; private waste disposal systems; swimming pools and hot
tubs; and plumbing for mobile homes and travel trailers: Introduces the various types of medical gas and vacuum systems used in health care facilities.

### Biology (BIO)

**BIO 100N: Biology Concepts**
- **Prerequisite:** None
- **Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)
- **Course Description:** Basic principles and concepts of biology. Includes methods of scientific inquiry, cell structure, chemistry, metabolism, reproduction, genetics, molecular biology, evolution, ecology, and current issues in biology. Lecture and lab are taught simultaneously.

**BIO 105N: Environmental Biology**
- **Prerequisite:** None
- **Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)
- **Course Description:** Fundamentals of ecology and their relevance to human impact on natural ecosystems. Includes ecosystem structure and function, population dynamics, and human impacts on air, water, land, and biodiversity. Lecture and lab are taught simultaneously.

**BIO 108N: Plants, People, & Culture**
- **Prerequisite:** None
- **Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)
- **Course Description:** Study of human use of plants, integrating historical and cultural perspectives with present-day applications. Includes the importance of plants in the environment, and plant function as it relates to human society. Also includes patent medicines, herbal remedies, and origins of agriculture, food and fiber crops, and the production of alcoholic beverages. Lecture and lab are integrated in this class.

**BIO 109N: Natural History of the Southwest**
- **Prerequisite:** None
- **Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)
- **Course Description:** Study of the common plants and animals of the Southwest. Includes their identification, adaptations, behavior, and ecology. Also includes physical geography and geological principles of the region. In this course the lecture and lab are taught simultaneously.

**BIO 127N: Human Nutrition and Biology**
- **Prerequisite:** None
- **Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)
- **Course Description:** Principles of nutrition presented in the context of human biology. Includes chemistry, digestion, absorption, and metabolism of nutrients. Also includes biological and nutritional perspectives on various health issues such as cardiovascular disease, hypertension, cancer, diabetes, and osteoporosis. Lecture and lab are integrated in this class.
BIO 160N: Intro to Human Anatomy and Physiology I
Prerequisite: None
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: Structure and dynamics of the human body. Includes foundations such as chemical, cellular and tissue levels of organization. Also includes major structures and functions of integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Lecture and lab are integrated in this class.

BIO 181N: Unity of Life I: Life of the Cell
Prerequisite: 1 year of high school Biology or BIO 100N; 1 year of high school Chemistry or CHM 121 or higher. Assessment at or completion of WRT 101 or signature of instructor.
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: This is an introductory course for biology majors with an emphasis on the unifying molecular and cellular principles of all life on earth. It covers the principles of structure and function of living things at the molecular, cellular, and organismic levels of organization, including introduction to the scientific process, scientific measurements and laboratory techniques, chemistry and organization of cells, metabolism, patterns of cell division, patterns of inheritance, nucleic acids, and biotechnology. Lecture and lab are integrated in this class.

BIO 182N: Unity of Life II: Multicellular Organisms
Prerequisite: 1 year of high school Biology or BIO 100N; 1 year of high school Chemistry or CHM 121 or higher. Assessment at or completion of WRT 101 or instructor signature.
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: This course is a survey of the principles of structure and function of living things at cellular, organism, and higher levels of organization. Topics include the evolution, classification, diversity and ecology of organisms, structure and function of plants and animals, structure of ecosystems and the biosphere. This course will emphasize holistic perspectives of life emphasizing the unity within the diversity of life, the inter-relatedness of all living organisms and the greater context for biological science. Lecture and lab are integrated in this class.

BIO 184N: Plant Biology
Prerequisite: None
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: Study of principles and processes in plant biology with emphasis on vascular plants. Includes survey of plant kingdom. Lab and lecture are integrated in this class.

BIO 208N: Tohono O’odham Ethnobotany
Prerequisite: Completion of general education science courses
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: This course covers basic principles of botany, plant ecology, and the diversity of ways in which plants and the uses of plants have shaped cultural and historical developments of the Tohono O’odham. In this course, students will learn the fundamentals of plant classification and identification including the Tohono O’odham names of plants. Students will learn about the traditional
uses of plants and their role in health and nutrition. They will learn about traditional plant harvesting methods as well as traditional and modern practices in plant cultivation. Students will also learn about the critical roles that plants play in the modern world and into a sustainable future.

**BIO 232: Principles of Research in the Natural Sciences**

**Prerequisite:** WRT 101, MAT 151 and 2 science courses  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course provides students with the basics of conducting scientific research in the natural sciences. It also includes an introduction to Indigenous research methodologies, community-based participatory research, and action-research. Specific topics include the scientific method, ethical protocols in the research process, comparison of Western and Indigenous ways of knowing, use of scientific literature sources, experimental design, critical article review and analysis, presentation of experimental data, and case studies of research in Indigenous communities. It will include an exploration of Indigenous research protocols and paradigms and incorporation of cultural worldviews and values in the research process. Students will engage in a class research project to gain first-hand experience in research.

**BIO 254N: Global Change Biology**

**Prerequisite:** Assessment or completion of WRT 101; Completion of BIO 105N or signature of instructor  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** Global change biology is a new field of biology which explores the consequences of global environmental change on humans and ecosystems. This course focuses on climate change as a key driver of environmental change. Climate change is addressed by exploring causes of past and current climate change while providing a strong contextual setting for Native American students based on their own culture and traditional ecological knowledge. Lecture and lab are integrated in this class.

**BIO 298: Service-Learning Practicum**

**Prerequisites:** Declared major in A.S. Life Science and completion of general education requirements.  
**Credits:** 1 cr. hr. (3 pds: 1 lec, 2 lab)  
**Course Description:** This practicum course allows the student to gain experience by completing a service learning project related to the student’s science concentration. Coordinated and supervised by faculty and/or community or institutional partners, students are placed in a service-learning position where the student applies their knowledge and skills in real-world contexts.

**BIO 299: Research Practicum**

**Prerequisites:** Declared major in A.S. Life Science and completion of general education requirements.  
**Credit:** 1 cr. hr. (1 pd: 1 lab)  
**Course Description:** This practicum course allows science majors to examine a specific topic related to the student’s science concentration. The student will produce a thesis-style research paper or research proposal. Use of printed and electronic professional literature will be required during the research process. Completion of this project will incorporate communication skills, knowledge of the process of science and synthesis of scientific knowledge.
Business (BUS)

BUS 100: Introduction to Business
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Introduces key principles of business operations in the private enterprise system. Includes contemporary business and its environment, structure of American business, management principles of the organization, people, and production, marketing management, information systems and accounting and financing the enterprise.

BUS 125: Business on the Internet
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Includes digital commerce terminology, location connectivity, business applications, legal issues, security, marketing, website, and operating a successful e-business.

BUS 148: Business Ethics: Morals in the Workplace
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Students will analyze how ethical principles in decision-making can be applied to business and industry settings. Includes examination of moral issues, ethical frameworks, and personal values, workplace standards, social, religious, and cultural values, legal ramifications of action and inaction, and technology's role in shaping workplace culture.

BUS 151: Mathematics of Business
Prerequisite: MAT 089 or higher
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Introduces mathematical procedures designed for practical utility in the business environment. Includes payroll, bank records, purchasing, sales, consumer credit, insurance, taxes, interest, inventory, depreciation, stocks and bonds, financial statements, and introductory statistics.

BUS 200: Business Law
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Principles and sources of business law. Includes nature of American law, scope and complexity of tort law, nature and principles of contract law, sale of goods under the Uniform Commercial Code, nature and principles of agency law, and business organizations.

BUS 205: Statistical Methods in Economics and Business
Prerequisite: MAT 142H or higher
Credits: 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** Introduces statistical concepts and methods of business. Includes statistics, data, and statistical thinking, methods for describing sets of data, probability, discrete random variables, continuous random variables, sampling distributions, estimation with confidence intervals, tests of hypothesis, inferences based on two samples, correlation and regression, methods for quality improvement, time series, design of experiments and analysis of variance, nonparametric statistics, and categorical analysis.

**BUS 210:** International Business  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Introduction to international business, focusing on the importance of cultural, economic, legal, political, sociological, and strategic complexities that emerge when business activities transcend international borders. Includes the terminology of international business and the basic “do’s and don’ts” within the various foreign business societies.

**BUS 220:** Legal Environment of Business  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Introduces the legal, ethical, and international environment of business. Includes an introduction to law, ethics and corporate responsibility, judicial system and litigation, alternative dispute resolution, administrative agencies, crimes and torts, contract law, product liability, international business law, agency law, and legal forms of business enterprises.

**Casino Gaming (CAG)**

**CAG 100:** Casino Gaming Industry Basics  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Introduces the casino gaming industry’s development in the United States and Indian Country. Includes integration of casino operations with lodging, food, beverage, and entertainment. Includes challenges to casino operation, security and cheating, and strategies for game protection and insuring responsible gaming. Introduces intricacies of tribal, state, and federal regulatory regimes, including IGRA (Indian Gaming Regulatory Act). The economics of casino gaming is examined including the relationship between casino gaming and the local and regional economy, proven marketing strategies, and elements of consumer behavior.

**CAG 111:** Casino Gaming Finance and Accounting  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course focuses specifically on accounting and fiscal practices relevant to casino gaming in the context of federal, state, and tribal law. Emphasis areas include casino accounting and auditing, internal controls, internal audits, slot machine accounting and auditing, Title 31 (Bank Secrecy Act) compliance, budgeting, cage operations, as well as money handling and tracking skills.
CAG 122: Casino Gaming Theory and Practice
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: This course introduces casino games that prepare students to engage constructively and knowledgeably with staff and customers in the gaming environment. Subjects covered include the basic mechanics of gaming, technology of table games and slots, basics of dealing, consumer behavior, role of analysis in gaming, and security procedures related to major casino games. This course contains modules on casino math that provide a basic understanding of the basis for the profitability of gaming, i.e., the house advantage. The overall emphasis is not on training students to operate games, but rather to educate them about what happens in a casino, why it happens, and about how to deal with situations that fall outside the norms of responsible casino gaming.

CAG 133: Customer Service, Management and Marketing
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: This course examines customer service, management and marketing practices for delivering high quality casino gaming services. Students learn about selling, promoting and positioning services and to apply marketing concepts within the gaming industry. The course covers customer behavior and expectations, techniques for building customer loyalty, and the relation of those elements to creating a responsible and successful business environment. Students learn the importance of employee development and organizational culture, the basics of supervision, managing staff and players, in addition to counseling and employee relations.

CAG 144: The Tribal Casino: Challenges and Opportunities
Prerequisite: Earned Casino Management Certificate within the semester
Credits: 3 cr. hrs. (3pds: 3 lec)
Course Description: This capstone course provides an opportunity for students to use the knowledge and skills they have gained through the casino gaming certificate to real-world scenarios. The course challenges students to synthesize what they have learned and to engage in critical thinking as they work individually and in groups to address typical problems and opportunities that arise in casino gaming operations.

Chemistry (CHM)

CHM 121N: Chemistry and Society
Prerequisite: MAT 089 or higher
Credits: 4 cr. hrs. (6 pds: 3 lec. 3 lab)
Course Description: This course covers basic chemistry and its relationship to everyday experiences. Topics include classification and structure of matter; radioactivity; compound formation from elements; and electron transfer. It also includes nomenclature, chemical equations, stoichiometry, the periodic table, acids, bases, salts, the liquid state, the gas state, and special topics. Skills such as conversions, problem-solving techniques and study skills are also covered. Additionally, students will be introduced to modern laboratory techniques and participate in experimental activities that promote the development of basic and advanced science-process skills.
CHM 130N: Fundamental Chemistry  
**Prerequisite:** MAT 151 or higher  
**Credits:** 5 cr. hrs. (7 pds: 4 lec 3 lab)  
**Course Description:** Inorganic chemistry as a basis for the study of some life processes. Includes the classification, structure and general chemical behavior of inorganic matter.

CHM 140N: Fundamental Organic and Biochemistry  
**Prerequisite:** A grade of C or better in CHM 130N  
**Credits:** 4 cr. hrs. (6 pds: 3 lec 3 lab)  
**Program of Study:** Life Science  
**Course Description:** This course is the continuation of CHM 130N and covers organic chemistry as the basis for life processes. Topics covered include the classification, structure, and general chemical behavior of organic and biochemical systems. This course is adapted to the needs of students in the allied health programs.

CHM 151N: General Chemistry I  
**Prerequisite:** MAT 151 or higher  
**Credits:** 5 cr. hrs. (7 pds: 4 lec 3 lab)  
**Course Description:** This integrated lecture-lab course is designed to develop a basic understanding of the central principles of chemistry that are useful to explain and predict the properties of chemical substances based on their atomic and molecular structure. Topics covered include atomic structure, chemical bonding, reaction stoichiometry, behavior of gases, and reactions in solutions, and thermochemistry. Additionally, students will be introduced to modern laboratory techniques and participate in experimental activities that promote the development of basic and advanced science-process skills. The course is designed for students who require a strong foundation in general chemistry, such as science and engineering majors, pre-medical and pre-pharmacy students.

CHM 152N: General Chemistry II  
**Prerequisite:** With a grade of C or higher in CHM 151N  
**Credits:** 5 cr. hrs. (7 pds: 4 lec 3 lab)  
**Course Description:** CHM 152N General Chemistry II  
This integrated lecture-lab course is a continuation of CHM 151N Fundamentals of Chemistry I. This course includes topics such as chemical kinetics, spontaneity of chemical change, chemical equilibrium, precipitation reactions, acid and base equilibria, complex ions, oxidation-reduction reactions, and nuclear reactions.

Computer Information Science (CIS)

CIS 100: Introduction to Computers  
**Prerequisite:** MAT 089 or higher  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
Course Description: Introduces computer information systems: components, problem solving and program/system development concepts, application of information technology and computer ethics, and security. Includes applied problem solving using a spreadsheet tool.

CIS 127: Programming and Problem Solving
Prerequisite: MAT 142H or higher, CIS 100
Corequisite: MAT 142H
Credits: 3 cr. hrs. (3 pds: 3 lec.)
Course Description: Introduction to programming computer systems. Includes terminology, fundamental concepts of information systems, hardware, software, operating systems with emphasis on computer programming and problem solving. Also includes advantages/disadvantages of different language types, source code versus executable code, data structure and data representation, natural and artificial language statements, syntax, semantics, expressions, control structures and procedural abstraction. Also includes concepts of problem-solving techniques, creating test data, program debugging, and program termination, solving simple problems and the use of Visual Basic programming language, programming environment and hardware, and using computers and other methods to complete assignments.

CIS 130: Fundamentals of Computer Networking Technology
Prerequisite: MAT 142H or higher, or concurrent enrollment
Credits: 3 cr. Hrs. (3 pds: 3 lec)
Course Description: Introduction to the fundamentals of computer networking, history of networking, and network standards and protocols. Introduction to technologies, terminology, and skills used in the world of computer networking. This course will prepare students to take the Cisco Certified Network Associate Certification exam.

CIS 140: Introduction to Risk Management
Prerequisite: MAT 142H or higher, can be taken concurrently. CIS 100.
Credits: 3 cr hrs. (3 pds: 3 lec)
Course Description: This course introduces the essentials of computer and network security and covers all of the fundamental objectives for the Computer Information System Security Professional (CISSP) certification program. Best practices, as well as roles and responsibilities of security practitioners are covered. Defensive measures are also introduced to protect computer systems and networks from attacks. Preparation for the CISSP Certification exam.

CIS 200: Systems Analysis and Design
Prerequisite: MAT 142H or higher with C or Better
Credits: 3 cr hrs. (3pds: 3 lec)
Course Description Principles of information systems analysis and design using high-level development tools. Covers flow diagrams, PERT charts, and Gantt charts. Requires a case study (small-group) project.

CIS 210: Introduction to System Administration
Prerequisite: CIS 100 and MAT 142H or higher with C or better or concurrent
Credits: 3 cr hrs. (3 pds: 3 lec.)

Course Description: This course exposes students to the best practices of system and network administration, independent of specific platforms or technologies. Students will learn six key principles of site design and support practices: simplicity, clarity, generality, automation, the mutation, and basics. This course examines the major areas of responsibility for system administrators within the context of these principles. Students will also be introduced to change management and revision control, server upgrades, maintenance windows, databases, and service conversions.

CIS 230N: Network Fundamentals
Prerequisite: CIS 100, MAT 142H or higher with C or Better
Credits: 4 cr hrs. (4 pds: 3 lec 1 lab)
Course Description: This course provides an introduction to the fundamentals of computer networking including the history of networking, network standards and protocols, and the Open Systems Integration (OSI) and Transmission Control Protocol/Internet Protocol (TCP/IP) reference models. The course will also provide practical examples of Ethernet Local Area Network (LAN)s and Internet Protocol (IP) routing covering network monitoring and management and common network services. The basics of wireless networks will also be addressed.

CIS 234N: Advanced Network Routing and Switching
Prerequisite: CIS 100, MAT 142H or higher with a C or Better
Credits: 4 cr hrs. (4 pds: 3 lec 1 lab)
Course Description: This course examines advanced network routing and switching and provides practical knowledge on managing network projects, and maintaining network hardware. Topics include Local Area Network (LAN) switching; Virtual LAN (VLAN); LAN design; configuring advanced routing protocols; access lists; and Novell Internetwork Packet Exchange (IPX). Concepts are applied through team projects and tutorials using industry-standard network simulation software and network hardware. This course is preparation for the Cisco Certified Network Associate (CCNA) Exam.

CIS 240N: Network Security
Prerequisite: CIS 100, MAT 142H or higher with a C or Better
Credits: 4 cr hrs. (4 pds: 3 lec 1 lab)
Course Description: This course provides an introduction to the fundamentals of computer networking including the history of networking, network standards and protocols, and the Open Systems Integration (OSI) and Transmission Control Protocol/Internet Protocol (TCP/IP) reference models. The course will also provide practical examples of Ethernet Local Area Network (LAN)s and Internet Protocol (IP) routing covering network monitoring and management and common network services. The basics of wireless networks will also be addressed.

CIS 250N: Coding Fundamentals
Prerequisite: CIS 100, MAT 142H or higher with C or Better
Credits: 4 cr hrs. (4 pds: 3 lec 1 lab)
**Course Description:** This course provides a thorough and practical guide to creating structured documents and sharing them on a network. HTTP, HTML, XML, and CSS. Media on the web: images, sound, animation, and text encodings. Security and usability, integrating programs and databases with web documents. PHP, Python, Javascript, SQL, Visual Basic, and light app coding will also be introduced.

**CIS 280:** IT Project Management  
**Prerequisite:** CIS 100, MAT 142H or higher with C or Better  
**Credits:** 3 cr. hrs. (3pds: 3 lec)

**Course Description:** This course examines the organization, planning, and controlling of projects and provides practical knowledge on managing project scope, scheduling and managing resources. Topics include project life cycle, work breakdown structure and Gantt charts, network diagrams, scheduling techniques, and resource allocation decisions. Concepts are applied through team projects and tutorials using industry-standard project management software. (Microsoft Project)

**CIS 297:** Internship/Practicum  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3pds: 3 lec)

**Course Description:** The student will work with CIS Faculty to customize an internship or practicum that will tie together, and go beyond, what the student has learned in the rest of the courses. The student should have completed most of the required courses and be enrolled in their last semester.

**Communication (COM)**

**COM 263:** Intercultural Communication  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)

**Course Description:** This course introduces concepts and principles of intercultural communication, with a focus on regional, national and international settings. Students examine issues such as cultural value patterns, cultural identity, verbal and nonverbal communication styles, intergroup relationships, managing conflict, intercultural adjustment and adaptation, and intercultural group facilitation. The course is designed to develop skills as a “boundary rider” to shift comfortably within and between cultures, and yet maintain an intact cultural identity.

**COM 269:** Health Communication  
**Prerequisite:** WRT 101  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)

**Course Description:** Health Communication provides a focus on interpersonal, public, team and community health education in health-care settings, community and public health environments, or health organizations. This course will focus on health-related issues in tribal communities and is an opportunity to develop critical thinking, self-awareness and empowerment.

**Community and Public Health (CPH)**
CPH 101: Exploring Careers in Health Professions  
**Prerequisite:** None  
**Credits:** 2 cr. hrs. (2 pds: 2 lec.)  
**Course Description:** The course will serve as first year colloquium designed for students who are interested in pursuing careers in medicine, pharmacy, public health and other health related areas. This course will focus on student success and help students become familiar with educational pathways leading to a health career. This is a course in critical thinking, self-awareness, and empowerment and seeks to provide insight regarding health-related issues in tribal communities and serves as an opportunity to explore topics in career readiness.

CPH 178: Personal Health and Wellness  
**Prerequisite:** WRT 102 (or corequisite)  
**Credits:** 3 cr. hrs. (3 pds: 3 lec.)  
**Course Description:** This course will provide basic understanding of the processes of physical, mental/emotional and social health, and processes of community health illustrating the structure and function of healthcare in the U.S. and in Indian Country. This course will emphasize current science and public health theory, as well as cultural, societal and environmental factors that contribute to individual and population health.

CPH 200: Introduction to Community and Public Health  
**Prerequisite:** CPH 178 Personal Health and Wellness  
**Credits:** 3 cr. hrs. (3 pds: 3 lec.)  
**Course Description:** The course will provide an overview of the foundations of community and public health, including a summary of history, public health organizations, health disparities and social determinants, mental health and substance abuse, health care delivery and environmental health. An emphasis on Native American health care systems, including Indian Health Services, and local health context of Tohono O’odham Nation will be used throughout the course.

**Computer Software Applications (CSA)**

CSA 100: Computer Literacy  
**Prerequisite:** None  
**Credits:** 1 cr. hr. (1.5 pds: 0.5 lec, 1 lab)  
**Course Description:** Introduces computer applications and software. Includes historical significance of the computer, components of a computer system, and spreadsheet, database, and word processing use within a workplace. Also includes computer networks for communication and information.

CSA 107: Microcomputer Software/Hardware Topics  
**Prerequisites:** CSA 101, CSA 182  
**Credits:** 3 cr. hrs. (4 pds: 2 lec, 2 lab)  
**Course Description:** Overview of microcomputer operating procedures. Includes software, hardware, and communication networks.
CSA 110: Spreadsheets: Microsoft Excel

Prerequisite: MAT 089 or higher, or concurrent enrollment

Credits: 3 cr. hrs. (4 pds: 2 lec, 2 lab)

Course Description: Fundamentals of Microsoft Excel. Includes creating, saving, editing and printing spreadsheets, creating and using ranges, using date and time functions, viewing and editing worksheets, using multiple worksheets, protecting data and time functions, creating multiple views, using, creating, maintaining, sorting, and finding information in a list, creating, using and enhancing a chart. Includes creating complex formulas, customizing work area, creating pivot tables, linking files, consolidating data, and recording macros. May be offered in modules.

CSA 120: Word Processing

Prerequisites: None

Credits: 3 cr. hrs. (4 pds: 2 lec, 2 lab)

Course Description: Word processing concepts, and includes creating and editing documents, and using character and paragraph formatting, tables, styles, templates, and macros, merge, multiple-columnar formats, Internet basics, creating and using advanced styles, templates, and forms, working with graphics in documents, working with large documents, determining document layout, and sharing documents.

CSA 130: Microsoft PowerPoint

Prerequisite: None

Credits: 3 cr. hrs. (4 pds: 2 lec, 2 lab)

Course Description: Fundamentals of Microsoft PowerPoint. Includes beginning a presentation, templates and Wizards, color schemes, drawing tools, clip art, presentations in outline view, toolbars, organization charts, graphs, advanced text and graphics, templates and the slide master, slide shows, output and presentation options. Also includes animation, video, sound, action buttons, and running a slide show. May be offered in modules.

CSA 141: Integrated Office Suite

Prerequisite: CSA 101

Credits: 4 cr. hrs. (5 pds: 3 lec, 2 lab)

Course Description: Practical applications and concepts using integrated Microsoft Office software. Includes concepts, functions and features of Word, Excel, Access, PowerPoint, and integrated case studies.

CSA 170: Database: Access

Prerequisite: None

Credits: 3 cr. hrs. (4 pds: 2 lec, 2 lab)

Course Description: Techniques for using Microsoft Access. Includes an overview of Microsoft Access, creating tables, working with tables, creating and using select queries, creating and using forms, creating and using reports, creating a report that contains totals, principles of table design and relationships, table design techniques, designing select queries, customizing form designs, working with data access pages, customizing reports, parameter and action queries, query joins and crosstab queries, using
advanced form techniques, creating basic macros to automate forms, using macros to provide user interaction and automate tasks, using advanced report techniques, and Access and the Internet. May be offered in modules.

CSA 182: Microsoft Windows: Current Version
Prerequisite: None
Credits: 3 cr. hrs. (4 pds: 2 lec, 2 lab)
Course Description: Fundamentals of Windows. Includes an introduction to Windows, Explorer, the active Desktop, My Computer, files and folders, and installing and running applications, configuring memory for Windows, using keyboard alternatives vs. the mouse. Also includes running Windows applications, using file Manager, Printer Manager, and Windows accessories, customizing Windows, adding plug-and-play and multiple monitors, networking with Windows, using Mobile Windows, and accessing the Internet.

Culinary Arts (CUA)

CUA 110: Food Safety & Sanitation
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec.)
Course Description: In this course, students will learn about food borne illnesses, kitchen safety, fire hazards, and in-depth kitchen sanitation procedures based on current professional standards. Upon successful completion of the course, students will also receive their Food Handler’s Permit and State Food Handler’s certification.

CUA 120: Culinary Math
Prerequisite: None
Credits: 2 cr. hrs. (2 pds: 2 lec)
Course Description: Students learn and apply basic mathematics in a working situation using recipe conversions, costing standard recipes, following production sheets, using portion control, and limiting the percentage of food waste.

CUA 125: Professional Cooking Basics I
Corequisite: CUA 110 Food Safety & Sanitation
Credits: 4 cr. hr. (6 pds: 2 lec, 4 lab)
Course Description: The Professional Cooking Basics course provides students with the basic knowledge needed to understand the day-to-day operation of a commercial kitchen. The course will involve a strong emphasis on planning and organization of a food service operation which includes recipe breakdown, scheduling, ordering, and menu planning. Students will also learn about the basic cooking styles used in all professional kitchens.

CUA 210: ServSafe
Prerequisites: CUA 110 Food Safety and Sanitation
Credits: 3 cr hrs. (5pds: 2 lec, 3 lab)
Course Description: ServSafe is a food and beverage safety training and certificate program administered by the National Restaurant Association. The program is accredited by ANSI and the Conference for Food Protection. Sanitation certification is required by most restaurants as a basic credential for their management staff.

CUA 220: Professional Cooking II
Prerequisites: CUA 125 Professional Cooking I and CUA 110 Food Safety and Sanitation
Corequisite: CUA 210 ServSafe
Credits: 4 cr. hr. (6 pds: 2 lec, 4 labs)
Course Description: These courses will provide a basic knowledge of food preparation in a variety of settings from fast food to fine dining. Understanding recipe breakdown, food cost, equipment, ordering, receiving, proper food handling and a heavy emphasis on food safety and sanitation. This course will also have an overlay of management skills, nutrition with seminars and lectures from established professional in the food service industry.

CUA 230: Indigenous & Sustainable Foods
Prerequisites: BIO 127N Human Nutrition and Biology
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: This course is a Native American outlook on foods and culture and preservation of native sustainable foods, from all native cultures. Foods used in a variety of ways from medicinal purposes to farming and agriculture will be studied. The course has a strong emphasis on Tohono O'odham traditions and cultural beliefs and foods of the tribe.

CUA 235: Baking and Pastry I
Prerequisites: CUA 125 Professional Cooking I and CUA 110 Food Safety and Sanitation
Credits: 3 cr. hrs. (3 pds: 1 lec, 2 lab)
Course Description: The Professional Baking I course provides students with the basic skills and knowledge for entry levels in baking in a professional kitchen environment. Instruction focuses on a maximum hands-on experience as well as theory and kitchen safety. Students will be involved in all aspects of baking preparations including breads, sweet breads, assorted pastries, cakes and cake decorating.

CUA 240: Culinary Arts Nutrition
Prerequisites: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: This course will cover information regarding nutrition in the food service industry. Topic areas will include fats, carbohydrates, protein, vitamins, minerals, additives, and chemical pesticides. Students will use the food pyramid in relation to menu analysis. The digestive system for food intake will be examined through video presentations. Students will examine product labels, using information from the Food and Drug Administration.

Early Childhood Education (ECE)
ECE 105: Foundations of Early Childhood Education  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** The course is an entry level course for students pursuing and ECE certificate or degree. The course provides an introduction to the field of Early Childhood Education (ECE) and an overview of the profession. Content includes an introduction to different types of programs for young children, professional roles and opportunities within the field, legal considerations in ECE, and key philosophies and theories of Early Childhood Education.

ECE 110: Emergent Language and Literacy  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course is a study of oral and written language acquisition and emergent literacy. It includes assessing typical language development, strategies for promoting children’s language development, creating language-rich environments, exploring children’s literature, and strategies for involving families and community members.

ECE 111: Special Education for Children  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course includes the study of the history, philosophy, and current trends in special education. It explores different types of assessments for identifying and diagnosing special needs, characteristics associated with these diagnoses, and available referral services and resources. It also includes the role of the teachers, parents and family members in effecting appropriate instructional techniques and environmental modifications.

ECE 120: Supervision and Administration of Early Childhood  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course presents an analysis of the elements for planning, implementing, maintaining, and evaluating early childhood education programs. Includes regulations, health and safety issues, staff selection, training, supervision and evaluation. Includes management of facilities, budget, equipment, supplies, and arranging a classroom environment.

ECE 124: Math and Science for Children  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course includes exploring theories behind, and methodologies for, teaching math and science concepts to young children, from birth through age eight. Students will engage in hands-on activities that they can replicate with young students and will create culturally-relevant math and science activities that promote children’s cognitive development. The course also provides strategies for observing and documenting children’s progress in the content areas of math and science.
ECE 125: Nutrition, Health, and Safety for the Young Child  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course provides an in-depth study of the health, safety and nutritional needs of children based on current research and recommendations. It includes the study of: healthy exercise and attitudes, traditional nutritious foods, illness prevention, food safety, tribal regulations related to healthy and safe environments, and relevant community resources.

ECE 217: Child Development (Formerly ECE 117)  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course is an analysis of the elements which affect growth and development pre-birth to age eight. The content includes an introduction to major developmental theorists, the role of genetics, health and social influences, and domains of development.

ECE 226: Effective Interactions and Guidance  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course provides students with age and developmentally appropriate strategies for creating a positive, socially-competent classroom community. The content includes: tools to identify and document behavioral concerns; effective classroom management techniques that reduce behavior problems with typically developing children; positive guidance and behavior management strategies for teaching children self-regulation skills and socially acceptable interactions; and resources for assisting children with challenging behaviors.

ECE 228: Family, Culture and Community  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course examines the influences of family, culture and community on the development and learning of young children. It includes developing a personal framework for understanding cultural differences in attitudes about play, child rearing and diversity of teaching methodologies. Students explore cross-cultural communication techniques, ways to assess and utilize family strengths, and strategies for involving families in the school and classroom.

ECE 291: Internship for Students with Experience in Early Childhood Education  
**Prerequisite:** ECE 226 (or concurrent enrollment), or permission of instructor  
**Credits:** 4 cr. hrs. (16 pds: 1 lec, 15 lab)  
**Course Description:** Internship to support students, currently working in an educational setting, in increasing their professional knowledge by observing, doing, inquiring, and reflecting on teaching and learning. Includes developing a personal view of teaching, education history and philosophy, current trends in education, legal and ethical issues in education, status of contemporary children, exploring classroom learning theory, establishing a successful classroom environment, teaching and lesson planning, teacher as educational leader, and collaborating with families, businesses, and the community.
**Economics (ECN)**

ECN 200: Basic Economic Principles  
**Prerequisites:** MAT 089  
**Credits:** 3 cr. hrs. (3 pds: 3 lec.)  
**Course Description:** Economic theory as applied to individual decision-making units (microeconomics) and as applied to the operation of the economy as a whole (macroeconomics). Includes economic decision-making, economic systems, supply and demand model, price determination, elasticity, household income, business ownership, profit maximization, production functions and costs, and competition and market structures. Also, includes goals and problems of the macro economy, foundations of the macro economy, fiscal policy and budgets, money, the role of financial institutions and the Federal Reserve, money creation, and monetary theory and policy.

ECN 201: Microeconomic Principles  
**Prerequisites:** MAT 089 or Higher  
**Credits:** 3 cr. hrs. (3 pds: 3 lec.)  
**Course Description:** Economic theory as applied to individual units. Includes economic decision making, economic systems, consumer demand, producer supply, price determination, elasticity, cost-benefit analysis, and utility and profit maximization. Also includes production functions and costs, competition and market structures, government in the market economy, labor markets, and income distribution.

ECN 202: Macroeconomic Principles  
**Prerequisites:** MAT 089 or higher  
**Credits:** 3 cr. hrs. (3 pds: 3 lec.)  
**Course Description:** Economic theory as applied to the operation of the economy as a whole. Includes economic decision making, economic systems, supply and demand model, goals and problems of the macro economy, foundations of the macro economy, fiscal policy and budgets, money, the role of financial institutions and the Federal Reserve, money creation, monetary theory and policy, the assessment of goals, tools and policies of macroeconomics, and international trade.

**Education (EDU)**

EDU 111: Literacy Development in the Elementary Classroom  
**Prerequisites:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** The course provides an introduction to the concept of literacy and an overview of how literacy skills are developed in educational settings. The course includes the developmental progression of literacy stages through which children pass from pre-literacy to independent literacy skills and a review of written texts and the development of written passages in support of literacy development.

EDU 200: Introduction to Education  
**Prerequisite:** None
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Provides students with the initial perspective of education. Topics include: purpose of schools and schooling, characteristics of effective schools, diversity and its effects on schools, teachers, and students; social problems affecting schools; comparative education; curriculum issues and controversies; and technology’s impact on schools and schooling. This also includes philosophical, legal, and financial issues facing today’s schools; history of American education; and current trends in education reform.

EDU 201: Diversity in Education
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Examination of diversity: age, class, gender, race, disabilities, sexual orientation, and culture effect on the K-12 classroom. Exploration of diversity in education; demographic changes and effects on education; diversity and multicultural philosophies and perspectives and approaches for helping students communicate. Also, analysis of prejudice, single-group studies, multicultural education, human relations and capital. Explores children’s school achievement in light of learning and teaching styles, and reconstructionist approach to classroom diversity and curriculum planning.

EDU 202: Introduction to Special Education and Exceptional Learner
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Special education foundation topics including current educational practices and related educational theories: instructional, classroom management and assessment. Cultural considerations within K-12 special education; student transitioning within the school and between school and the community. Also, role and function of the special education teacher, preparing for instruction, lesson plans, assessment, instruction, technology, and compliance.

EDU 203: Classroom and Classroom Relationship Management
Prerequisites: None
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Introduction to basic classroom management and classroom relationship principles. Includes planning of curriculum development, delivery, and assessment, the management of the physical classroom environment and the development of a positive class climate, management of the psycho-social aspects of the classroom community, student motivation, management of instruction, management of student work, management of diverse student groups, management of student behavior, management of assessment, evaluation, and records, the development and management of professional relationships in the school environment. Also includes stress management and collaboration techniques.

EDU 204: Psychology of Education
Prerequisite: WRT 101, EDU 200, and EDU 201
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: The study of educational psychology involves both theory and practice. Focusing upon applying the principles of psychology and research to the practice of teaching, the ultimate goal is the understanding and improvement of instruction. Prospective teachers and other professionals in training who will interact with students need to understand how students learn and how that learning varies and is affected by each student’s context, culture, and development. This course focuses on the effective application of psychological concepts and principles in the learning and instructional processes; the development of teaching methods, knowledge and skills; and perspectives which enhance learning environments.

EDU 205: Reading for Elementary Teachers
Prerequisite: WRT 101, EDU 200, and EDU 201
Corequisite: WRT 102, EDU 210
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: A study of methods, materials, classroom procedures and evaluation techniques for facilitating reading in the content areas in elementary school.

EDU 211: Science Literacy in the Elementary Classroom - Physical Sciences Emphasis
Prerequisites: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: The course is an interdisciplinary, hands-on, inquiry-based general science class designed for Early Childhood and Elementary Education majors. The course includes the nature of science, historical perspectives, patterns and relationships, observation skill development, the structure of life, physical science, matter and energy, the universe, technology and society, and the integration of science across the curriculum in educational settings.

EDU 212: Science Literacy in the Elementary Classroom - Life Sciences Emphasis
Prerequisites: Completion of EDU 211 with a grade of “C” or higher or instructor permission.
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: The course is a continuation of EDU 212 and is presented as an interdisciplinary, hands-on, inquiry-based general science class designed for Early Childhood and Elementary Education majors. The course builds upon knowledge of patterns, relationships, and critical thinking processes to further explore life sciences, including the structure of life, organism in their environments, relationships between biotic and abiotic components of an ecosystem, and scientific classification systems. The course also includes human health, human society, the application of science principles and technology in scientific inquiry, and the integration of science across the curriculum in educational settings.

EDU 217: Child Development
Prerequisites: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: The course introduces the science of human development from conception through adolescence, with an emphasis on elementary school-aged children, and reviews the major theories of child development espoused by theorists influencing the field. The course examines the domains of human development, and provides an analysis of factors that affect human growth and development.
from conception through adolescence, including the role of genetics as well as health, family, environmental, experiential, and socio-cultural influences. The course also explores the role of parents and other adults in the lives of children. The course further provides an overview of public policy and contemporary issues impacting children, elementary education, and the field of child development.

**EDU 220:** Children’s Literature for Educators  
**Prerequisite:** EDU 204, EDU 210, EDU 205  
**Corequisite:** WRT 102  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course focuses on the study of literature for children. This course teaches the historical development of children's literature; examines literary elements such as characterization, plot, and style; focuses on a broad spectrum of literary genre in children’s literature, such as realistic fiction, picture books, poetry, and informational books; and acquaints students with major authors and illustrators of children’s literature, past and present, and diversity. Students will create a personal card file of all books and stories read, in addition to tests, quizzes, and papers on the textbook readings.

**EDU 240:** Indigenous Education  
**Prerequisites:** Completion of WRT 102 with a grade of “C” or higher, or a minimum ACCUPLACER reading comprehension score over 100, or instructor permission.  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** The course moves students beyond their understanding of education within a western or mainstream context by introducing the field of Indigenous Education through the perspectives of Indigenous scholars, researchers, knowledge keepers, practitioners, and community members who offer Indigenous ways of teaching and knowing inherent to Indigenous philosophy. The course further introduces Indigenous Education as a framework for holistic, life-long learning. The course examines components of Indigenous philosophy (ontology, axiology, and epistemology) within a context of a non-western participatory and experiential knowledge system and explores significant principles and processes in coming to know and in ways of knowing, engaging, and being (as practiced by Indigenous peoples). The course prepares students to analyze and critique the educational institutions for which they work and to explore possible avenues for indigenizing the curriculum, perspectives, practices, and values of those institutions.

**EDU 241:** Tribal Colleges and Universities  
**Prerequisites:** Completion of WRT 102 with a grade of “C” or higher, or a minimum ACCUPLACER reading comprehension score over 100, or instructor permission.  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** The course provides an introduction to the Tribal Colleges and Universities (TCUs) and includes the history, philosophy, mission, governance, organization, finance, and curriculum of the TCUs as well as the challenges facing these unique institutions of higher education. The course also includes student demographics and characteristics, student support services, faculty characteristics, internal and external support structures, the American Indian Higher Education Consortium, roles and responsibilities of tribal college constituents, and an overview of learning assessment in the tribal college.
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Engineering (EGR)

**EGR 102N: Introduction to Engineering**

**Prerequisites**: Completion of MAT 187 with a grade of “C” or better, or a co-requisite of MAT 187, or permission of instructor.

**Credits**: 3 cr. hrs. (5 pd: 2 lec, 3 lab)

**Course Description**: Design, effective team participation and career preparation in engineering. Includes the different engineering fields and careers, basic skills associated with engineering problem solving and communication, the design process, participation in hands-on design projects, and ethics and professional responsibility.

Forestry (FOR)

**FOR 101: Introduction to Forestry and Natural Resources Management**

**Prerequisite**: None

**Credits**: 3 cr. hrs. (3pds: 3 lec)

**Course Description**: *Introduction to Forestry and Natural Resources Management* provides a broad overview of forest, forestry, and natural resources management. The central theme is multiple-resource management, with a focus on timber and non-timber forest products, water, rangelands, and wildlife. The course has a strong emphasis on the Western United States and on sustainable management approaches that meet human needs, including how traditional ecological knowledge (TEK) can be used to inform and guide the management of natural resources.

Geography (GEO)

**GEO 101N: Physical Geography: Weather and Climate**

**Prerequisite**: None

**Credits**: 4 cr. hrs. (6 pds: 3 lec, 3 labs)

**Course Description**: Introduction to the physical elements. Includes earth-sun relationships, atmospheric processes, global heat balance, global pressure and temperature patterns, annual weather and climate patterns, weather and air pollution, urban influences on weather and climate, and climatic change. Also includes weather and people, wave cyclones of middle latitudes, weather maps and weather prediction, basic ecological principles, and energy.

**GEO 103: Cultural Geography**

**Prerequisite**: Assessment at or completion of WRT 101 or signature of instructor.

**Credits**: 3 cr. hrs. (3 pds: 3 lec)

**Course Description**: Examination of the human world from a geographic perspective. Includes an exploration of global issues such as population, food supply, geopolitics, and urbanization. Also includes industrialization as seen in the special combination of cultural, physical, historical, economic, and organizational qualities imprinted on the landscapes of the world.

**GEO 205N: Geography of the Borderlands**

**Prerequisite**: GEO 103 Cultural Geography
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: This course will use a geographical approach to study human environmental systems in the borderland regions, with special emphasis on the U.S.-Mexico border and comparative Indigenous case studies. We will look at the socio-political and economic systems that are produced by human communities and how different societies use the borderland landscape for a series of political conflicts over space and culture. Some of the theoretical concepts we will analyze are: the settler state, sovereignty, territory, borders, nation, international law and environment.

GEO 267: Introduction to Geographic Information Systems (GIS)
Prerequisite: CIS 100 (or equivalent) or instructor permission.
Credits: 3 cr. hrs. (5 pds: 2 lec, 3 lab)
Course Description: This course teaches students ways to capture, store, retrieve, analyze and display geographic data in different formats and outputs. Includes the evolution of GIS technology, system components, database concepts, system integration and its application across a wide range of science, business, government, and nonprofit agencies.

GEO 277: Advanced Geographic Information Systems
Prerequisites: Completion of CIS 100 (Intro to Computers), or basic computer proficiency and completion of GEO 267 (Intro to GIS), or equivalent course with a grade of B or higher, or permission of instructor.
Credits: 3 cr. hrs. (4 pds: 2 lec, 2 lab)
Course Description: The course builds on and expands on applications of Geographic Information Systems (GIS) and analyses commonly introduced in GIS 217. The course explores spatial analysis, raster processing, digital terrain modeling, map arithmetic, and data structures will be explored through hands-on projects, providing students with advanced skills and experience with GIS. The course further explores professionalism in the GIS industry and GIS careers. The course prepares students for the unique rigors of GIS technician and interpretive/analytical positions

Geology (GLG)

GLG 101N: Introductory Geology I: Physical
Prerequisite: None
Credits: 4 cr. hrs. (6 pds: 3 lec, 3 lab)
Course Description: Introduction to the physical aspects of the earth's crust. Includes rocks and minerals and their relationship to one another. Also includes surface and subsurface processes operating on and in the earth.

History (HIS)

HIS 101: Introduction to Western Civilization I
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** This course investigates key links between civilizations across the globe, dating from approximately 20,000 BC/BCE to the 18th century AD/CE. The course compares religious beliefs, cultural myths, political structures, economic changes, and military invasions in the Americas, Western Europe, the Mediterranean, and the Middle East. HIS 101 is required for Arizona teacher certification.

**HIS 102:** Introduction to Western Civilization II  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** History of the modern world dating from 1492 to contemporary times: Religious Wars; the Industrial Revolution; economies of scale; colonialism and post-colonialism; Enlightenment political theory, including that of the “Noble Savage;” the rise of republics and civil rights; paradigms of science and technology; ideologies of prejudice and genocide; and globalization. Special focus on the struggles of Indigenous peoples in the Age of Empire.

**HIS 122:** Tohono O’odham History and Culture  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** A survey of the culture and history of the Tohono O’odham from Prehistory up to the 1980’s. Includes an examination of the issues and events that have affected the lifestyle of the O’odham, and how Spanish, Mexican and American influence has impacted and shaped O’odham history and culture. Also includes an evaluation of the available sources on the cultural and historical development of the Tohono O’odham.

**HIS 125:** Tohono O’odham History and Culture II  
**Prerequisite:** HIS 122 Tohono O’odham History and Culture I  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course is a survey of Tohono O’odham historical, culture, and contemporary issues after 1980. Includes how European contact forever changed the land, lives, and culture of the Tohono O’odham. Sources of Tohono O’odham history will be analyzed in terms of social, political, and economic development of Northwestern Mexico and Southwestern United States.

**HIS 130:** Apache History I  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course is a survey of the history of Apache people, with an emphasis on the San Carlos Apache Tribe, from around 1830 to the present. It includes the development of the reservation and the political structure. It emphasizes the impact of historical events on the current social, economic, environmental, physical and cultural well-being of Apache people.

**HIS 141:** History of the United States I  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** Survey of the major developments in American history from the Columbian conquests to the Era of Reconstruction. Includes Colonial America, the Formative Years (1776-1815), the Early National Period (1815-1850), and the coming of the Civil War and its aftermath. Also includes the social, intellectual, and political aspects of early American life.

**HIS 142:** History of the United States II  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Survey of major developments in American history from Era of Reconstruction to the present. Includes the era of Reconstruction, emergence of modern America, Early 20th Century, and America as a world power. Includes the social, intellectual, and political aspects of contemporary American life.

**HIS 147:** History of Arizona  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Survey of the major developments in the history of Arizona. Includes the Pre-Columbian period through the Spanish era, the Mexican Republic, the years as a U.S. territory, and the time since statehood to the present. Also includes the contributions of the various peoples who have formed the unique cultural and ethnic fabric of this area.

**HIS 274:** The Holocaust  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Survey of the history, causes, and attempts to prevent holocausts. Includes causes and legacies of the Nazi assault on humanity, history of hate in Europe, historical antecedents and preconditions, Third Reich and creation of the racial state, from isolation to the to the "Final Solution", aftermath (1945-), and the Holocaust and relevant events. Also includes history of genocidal policies toward indigenous peoples.  

**Integrated Reading & Writing (IRW)**

**IRW 070:** IRW I, Integrated Reading and Writing: Introductory  
**Prerequisite:** Placement Exam  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** Students will learn to locate explicit textual information, draw inferences, describe and evaluate the information across multiple texts of varying lengths, how to use vocabulary effectively, describe and apply insights gained from reading and writing a variety of texts. Students will learn effective editing strategies, generate ideas from texts, and recognize and apply the conventions of Standard English. Students must participate in one-to-one tutoring with the Student Success Center on a biweekly basis to ensure the success of students.

**IRW 090:** IRW II, Integrated Reading and Writing: Intermediate
Prerequisite: IRW I or Placement Exam
Credits: 4 cr. hrs (6 pds: 3 lec, 3 lab)

Course Description: Prepares students for college-level reading and writing by combining the two skill sets. Students apply a variety of reading strategies to organize, analyze and retain material, and produce written work appropriate to audience, purpose, situation and length of the assignments. Students will build upon their basic skills of grammar and mechanics and develop further their organizational skills for building short essays.

Literature (LIT)

LIT 174: Introduction to Native American Writings
Prerequisite: WRT 101
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Study of Native American texts, including autobiographical writings, short stories, and nonfiction. Includes introduction to historical and cultural contexts, themes and issues addressed by Native American authors, Native American narratives, and reports and presentations. May convene with LIT 274.

LIT 274: Native American Literature
Prerequisite: WRT 101
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: A survey of Native American oral stories, autobiographical writings, fiction, poetry, and nonfiction. Includes historical and cultural contexts, major themes and issues in contemporary Native American literature, literary forms and techniques, and critical essays. May convene with LIT 174.

LIT 289: Literature and Film
Prerequisite: WRT 102 or concurrent enrollment
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Criticism of films’ dramatic forms, elements and genres. Includes development of film as an art form, comparative approaches to literature and film, performed drama, critical analysis, and film production personnel.

LIT 290: World Literature and Global Film
Prerequisite: WRT 102 or concurrent enrollment
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: This course provides a survey of Native American, Aboriginal, Maori, and Canadian First Nations oral stories, autobiographical writings, fiction, poetry, filmic representations, and nonfiction. It also includes a global, comparative approach to historical and cultural contexts, major themes and issues in contemporary world indigenous literature, literary forms and techniques, and critical essays.

Management (MGT)

MGT 110: Human Relations in Business and Industry
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Basic theories and concepts for understanding human relations’ needs of business employees and managers. Includes organizational behavior, diversity, motivation and performance management, job design, group work, organizational design, organizational power, and conflict and negotiation.

MGT 122: Supervision
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Principles of personnel supervision. Includes group dynamics, organizational work structures, source and nature of worker values, team communication skills, decision making, creativity within worker teams, controversy within worker teams, conflict of interest within worker teams, dealing with diversity, and team development and training for continuous improvement.

MGT 124: Small Business Management
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Analysis of the practical problems of organizing, managing and starting a small business. Includes introduction and overview, selecting employees, forms of ownership, managing the business, business plan, pricing, managing cash flow, creating sales forecast, income statements, breakeven analysis, and sources of funds, international operations, contracts, risk, and international opportunities.

MGT 230: Dynamics of Leadership
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Supervised practical training in leadership. Includes history, philosophy and vision of leadership, aspects of leadership, power of positive vision, goal setting, decision making, life planning, identifying a personal philosophy, team building, delegating, ethics in leadership, servant leadership, initiating change, managing conflict, and designing and completing leadership projects.

MGT 270: Computer Applications for Managers
Prerequisite: CIS 100 or proficiency with Microsoft Office software.
Credits: 3 cr. hrs. (3 pds: 3 lec)

Course Description: Development of management skills in computer applications for business. Includes state of computing technology, electronic commerce and the economy, international issues, work and the virtual workplace, interaction with the information systems department, project management, presentations, and spreadsheets for managerial decision making.

MGT 276: Human Resources
Prerequisite: BUS 100
**Credits:** 3 cr. hrs. (3 pds: 3 lec)

**Course Description:** Practical aspects of personnel management and support. Includes roles and concepts, acquiring human resources, administering the personnel program, developing employee potential, maintaining the workforce, and future outlook for personnel management.

**MGT 278:** Labor/Management Relations  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Examination of basic principles and current status of labor/management relations in the United States. Includes modern society and industrial relations, the American Labor Movement, the collective bargaining process, and government regulation. Also includes union-management patterns, and an overall assessment of the consequences of collective bargaining and the future of labor management relations.

**MGT 280:** Business Organization and Management  
**Prerequisites:** BUS 100 or permission of Instructor.  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Overview of the functions performed and issues faced by managers in business. Includes theory, general research findings, and knowledge from a managerial perspective. Also includes diverse philosophies for understanding management as a total system within the constraints imposed by society, government, technology, and ideology.

**Marketing (MKT)**

**MKT 111:** Principles of Marketing  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Introduction to marketing principles and strategies that are survival tools for not-for-profit and for-profit organizations in today's global and competitive market. Includes the marketing variables product, price, channels of distribution, physical distribution, and promotion. Also includes strategic planning, consumer characteristics and behavior, market environments and market research.

**Mathematics (MAT)**

**MAT 089:** Elementary Algebra  
**Prerequisite:** MAT 082, MAT 86 (completed prior to Fall 2018) or placement test equivalent  
**Credits:** 4 cr. hrs. (6 pds: 3 lec. 3 lab)  
**Course Description:** This course transitions from arithmetic to algebra, which includes signed numbers, order of operations, polynomials, fractions, linear equations, area and perimeter, decimals, percent, and ratio and proportion. It includes an introduction to algebra, including the real number system, algebraic expressions, linear equations and inequalities, integer exponents, simple rational expressions and square roots. The course includes an introduction to measurement and mathematical modelling of relationships among variables.
MAT 142H: College Mathematics
Prerequisite: MAT 089 or placement into MAT 142H
Credits: 4 cr. hrs. (6 pds: 3 lec. 3 lab)
Course Description: Basic algebraic functions, including the language of sets, lines in the plane, systems of linear equations, expressions and equations in rational, radical, quadratic, exponential and logarithmic form. This course will also include a survey of real-life topics in the social sciences and management, along with an introduction to probability and statistics.

MAT 146: Mathematics for Elementary Teachers I
Prerequisite: MAT 142H or higher
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Overview of mathematical concepts, principles, and applications specifically for elementary teachers. Includes real number properties and patterns, arithmetic operations and algorithms in subsets of real numbers, alternative number systems, set theory, and algebraic reasoning and problem solving. Also includes the technology to teach mathematics.

MAT 147: Mathematics for Elementary Teachers II
Prerequisite: MAT 146 within the last 3 years with a C or better
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Continuation of MAT 146. Includes measurement, basic geometry, probability, and statistics. Also includes the technology to teach mathematics.

MAT 151: College Algebra
Prerequisite: MAT 142H or MAT 142 (completed prior to Fall 2018) or placement into MAT 151
Credits: 4 cr. hrs. (4 pds: 4 lec. 0 lab)
Course Description: Introduction to college-level algebra. Includes equations, functions, systems of equations, exponential and logarithmic functions, graphing of higher order polynomial and rational functions, sequences and series, and calculator use.

MAT 172: Finite Mathematics
Prerequisite: MAT 151 or placement test equivalent
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Mathematics for students majoring in business. Includes set theory, partitions, permutations, combinations, probability, Bernoulli trials, Markov chains and the simplex method of linear programming.

MAT 173: Mathematics for Business I
Prerequisite: MAT 151 or placement test equivalent
Credits: 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** Introduction to business finite mathematics. Includes basic probability, summation, conditional probability and independence, Bayes' Theorem, compound interest, random variables, random sampling, and computer skills.

**MAT 174:** Mathematics for Business II  
**Prerequisite:** MAT 173  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Continuation of MAT 173. Includes distributions, normal distributions, basic statistics, integration, common business functions, differentiation, and computer skills.

**MAT 182:** Trigonometry  
**Prerequisite:** MAT 151 or placement test equivalent.  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Introduction to trigonometric functions. Includes graphs, identities, angle measure, vectors, polar coordinates, and conic sections.

**MAT 187:** Pre-Calculus  
**Prerequisite:** MAT 151 or placement test equivalent  
**Credits:** 5 cr. hrs. (5 pds: 5 lec)  
**Course Description:** College-level algebra and trigonometry. Includes equations, algebraic functions, inequalities, systems, conic sections, sequences and series, trigonometric functions, polar form, and partial fractions. Also includes intensive preparation for analytic geometry and calculus.

**MAT 212:** Topics in Calculus  
**Prerequisite:** MAT 151 or placement test equivalent  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Calculus for students majoring in business. Includes limits, continuity, differentiation and integration of algebraic functions.

**MAT 220:** Calculus I  
**Prerequisite:** MAT 151 and MAT 182; or MAT 187; or placement test equivalent.  
**Credits:** 5 cr. hrs. (5 pds: 5 lec)  
**Course Description:** Introduction to analytical geometry and calculus. Includes limits, continuity, differentiation and integration of algebraic and basic trigonometric functions and applications of differentiation and integration.

**MAT 225:** Basic Statistics  
**Prerequisite** MAT 151 College Algebra, or placement test equivalent and WRT 101 Writing I.  
**Credits:** 3 cr. hrs. (3 pds: 3 lec.)
Course Description: An introduction to basic concepts in descriptive and inferential statistics. This will include data collection methods, sampling techniques, graphing of data, and the statistical evaluation of data collected through experimentation.

MAT 231: Calculus II  
Prerequisite: MAT 220 or placement test equivalent.  
Credits: 4 cr. hrs. (4 pds: 4 lec)  
Course Description: Continuation of MAT 220. Includes differentiation and integration of logarithmic and exponential functions, techniques and applications of integration and infinite series.

MAT 241: Calculus III  
Prerequisite: MAT 231 or placement test equivalent.  
Credits: 4 cr. hrs. (4 pds: 4 lec)  
Course Description: Continuation of MAT 231. Includes conic sections, polar coordinates, solid geometry, two and three dimensional vectors, moments, partial derivatives and multiple integration.

Philosophy (PHI)  
PHI 101: Introduction to Philosophy  
Prerequisite: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Survey of the practices of philosophical analysis using contemporary debates to illustrate core issues. Philosophical issues may include: explanation/proof, analysis/critique, ethics/morality, aesthetics/equilibrium, identity/otherness, society/governance, religion/science, epistemology/ontology, thought/language, and consciousness/habit.

PHI 123: History and Philosophy of Science  
Prerequisite: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Comparison of scientific approaches in prehistoric, classical, preindustrial, industrial/pre-digital, and digital societies. Special focus on differences between epistemological approaches of indigenous peoples with the Western "scientific method." Special Topics may include astronomy, agriculture, medicine, and/or genetics.

Physical Education (PE)  
PED 101: Beginning Physical Fitness  
Prerequisite: None  
Credits: 1 cr. hrs. (2pds: 0 lec. 2 lab)  
Course Description: This course is designed to teach and engage students in basic fitness activities as a means to achieve overall body fitness. Accomplishment of this goal will be done by learning how to set up and use the free and machine weights, using cardio machines, participating in fitness assessment tests, participating in different types of fitness activities throughout the semester and proper nutrition necessary for active individuals. Stress management skills will be discussed.
PED 102: Intermediate Physical Fitness
Prerequisite: None
Credits: 1 cr. hrs. (2pds: 0 lec. 2 lab)
Course Description: This course is designed to teach and engage students in intermediate fitness activities to increase understanding and application of body fitness. Accomplishment of these goals will be achieved by completing fitness assessment test; designing a personal training plan at the intermediate level and participating in different types of intermediate level fitness activities. Students will learn how to use cardio machines and the set up & use of free and machine weights. The students will learn about the proper nutrition necessary for intermediate level active individuals and how to apply stress management skills.

PED 103: Advanced Physical Fitness
Prerequisite: None
Credits: 1 cr. hrs. (2pds: 0 lec. 2 lab)
Course Description: This course is designed to teach and engage students in advanced fitness activities to increase understanding and application of body fitness. Accomplishment of these goals will be achieved by completing a fitness assessment test; designing an advanced personal training plan, and participating in different types of fitness activities. Students will learn how to use cardio machines and the set up and use of free and machine weights. The students will learn about the proper nutrition necessary for advanced level active individuals and how to apply stress management skills.

Physics (PHY)

PHY 121N: Fundamentals of Physics I
Prerequisite: With a grade of C or better: MAT 151.
Credits: 5 cr. hrs. (7 pds: 4 lec 3 lab)
Course Description: Introduction to general physics for programs requiring a one-year, non-calculus based physics course. Includes the nature of physics; linear motion and kinematics; dynamics; work and energy; and linear momentum. Also includes rotational motion; heat; states of matter; and waves and sound.

PHY 210N: Introduction to Mechanics
Prerequisites: Completion of MAT 220 with a grade of “C” or higher or permission of the instructor.
Credits: 5 cr. hrs. (7 pds: 4 lec, 3 lab)
Course Description: Calculus-based introduction to classical mechanics for students pursuing the Associate of Science in Physical Science degree to prepare for university studies in physics, pre-engineering, computer science or astronomy. Topics included are forces, linear motion, work and energy, gravity, statics and dynamics, momentum, rotational motion, and fluid mechanics.

PHY 216N: Introduction to Electricity and Magnetism
Prerequisites: Completion of MAT 231, Calculus II, with a grade of “C” or higher or permission of the instructor.
Credits: 5 cr. hrs. (7 pds: 4 lec, 3 lab)
**Course Description:** Calculus-based introduction to electricity and magnetism for students pursuing the ASPS degree to prepare for university studies in physics, engineering, computer science or astronomy. Topics included are simple harmonic motion, wave motion, sound, charge, Coulomb’s Law, electric field, electric potential, current, voltage, direct and alternating current circuits, Biot-Savart Law, Ampere’s Law, magnetic properties of materials and electromagnetic waves.

**PHY 232: Principles of Research in the Physical Sciences**  
**Prerequisite:** WRT 101, MAT 151 and 2 science courses  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course provides students with the basics of conducting scientific research in the natural sciences. It also includes an introduction to Indigenous research methodologies, community-based participatory research, and action-research. Specific topics include the scientific method, ethical protocols in the research process, comparison of Western and Indigenous ways of knowing, use of scientific literature sources, experimental design, critical article review and analysis, presentation of experimental data, and case studies of research in Indigenous communities. It will include an exploration of Indigenous research protocols and paradigms and incorporation of cultural worldviews and values in the research process. Students will engage in a class research project to gain first-hand experience in research.

**PHY 298: Service-Learning Practicum**  
**Prerequisites:**Declared major in A.S. Physical Science and completion of general education requirements.  
**Credits:** 1 cr. hr. (3 pds: 1 lec, 2 lab)  
**Course Description:** This practicum course allows the student to gain experience by completing a service-learning project related to the student’s science concentration. Coordinated and supervised by faculty and/or community or institutional partners, students are placed in a service-learning position where the student applies their knowledge and skills in real-world contexts.

**PHY 299: Research Practicum**  
**Prerequisites:**Declared major in A.S. Physical Science and completion of general education requirements.  
**Credit:** 1 cr. hr. (1 pd: 1 lab)  
**Course Description:** This practicum course allows science majors to examine a specific topic related to the student’s science concentration. The student will produce a thesis-style research paper or research proposal. Use of printed and electronic professional literature will be required during the research process. Completion of this project will incorporate communication skills, knowledge of the process of science and synthesis of scientific knowledge.

**Political Science (POS)**

**POS 110: American National Government**  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** Basic concepts and substance of American politics. Includes methods of political analysis, cultural environment of American politics, impact of class, gender, and immigration, Constitution, civil liberties, and civil rights, public opinion and fundamental values, political institutions, and institutions of government, economic and social policymaking, and American foreign policy and interdependence.

**POS 210: National and State Constitutions**
**Prerequisite:** None
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** Principles and procedures of national and state constitutions. Includes major principles of American and Arizona constitutionalism, historical and legal environments of the United States and Arizona constitutions, structures, powers, and responsibilities of United States government, structures of Arizona government, civil liberties and civil rights in the United States, and constitutional change. POS 210 satisfies the requirement for teacher certification.

**POS 226: Tohono O'odham Nation Government**
**Prerequisites:** Completion of WRT 101 or permission of instructor. WRT 102 if course is to be used for AGEC I requirement.
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
**Additional Information:** Cross-listed as TOC 226
**Course Description:** This course examines the development of Tohono O'odham government, both pre- and post-1934. It includes the cultural, legal and political basis of Tohono O'odham government, the structures and functions of the Tohono O'odham Nation powers, and its services, fiscal changes, and administrative growth. It also addresses political relations, developments, and transitions related to state and federal governments, and highlights major contributions of Tohono O'odham leaders.

**POS 240: Understanding Terrorism**
**Prerequisite:** None
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** Analysis of terrorism as an international phenomenon. Includes classifications of terrorism, political ideologies, cultural perspectives and geographical issues, responses by governments to terrorism, terrorism’s future impact and current government policies related to terrorism.

**Psychology (PSY)**

**PSY 101: Introduction to Psychology**
**Prerequisite:** None
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
**Course Description:** Survey of general psychology. Includes a definition of psychology, history of psychology, research methods and critical thinking, biological basis of behavior, sensory process, receiving the world, states of consciousness, conditioning and learning, memory process, motivation and emotions, role of health psychologists, role of stress in our lives, major stages in child and life span development, gender identity and sexuality, intelligence, personality theories, psychological disorders, therapeutic approaches, and social psychology research.
PSY 132: Psychology and Culture  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Human diversity in behavior and culture using examples from a variety of contexts and nations. Includes cross-cultural approach, understanding culture, self and personality, cross-cultural research methods, enculturation, socialization, and development, cultural influences on organization and the world of work, culture and intergroup relations, culture and social behavior, culture and basic psychological processes, culture and gender, culture and health, diversity of human emotion, culture and language, culture and communication, and cultural diversity.

PSY 214: Abnormal Psychology  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** This course is an undergraduate level introduction to the concepts of abnormality, mental health and mental illness. It serves as an introduction to the concepts of normality and abnormality in a cultural context. It also covers current diagnostic categorizations of abnormality and treatment of mental illness along with historical perspectives on these diagnoses and treatments. Abnormal psychology examines the causes, diagnosis, assessment, treatment, and possible prevention of mental disorders, including historical and current theoretical perspectives, classification systems, cultural perspectives and ethical issues.

PSY 240: Human Growth and Development  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Human growth and development explores how individuals change physically, cognitively, emotionally, and socially over time. The course covers the major developmental changes and milestones across the lifespan from conception to adulthood. The course will also explore the different research methods developmental psychologist use to explore development, and will include an exploration of the scientific literature as it related to developmental issues. This course will also include an exploration of how different Native American and Indigenous groups perceive developmental concepts such as, defining childhood, becoming an adult, and death.

PSY 289: Research Methods in Social Sciences  
**Corequisite:** MAT 225  
**Credits:** 4 cr. hrs. (6 pds: 3 lec, 3 lab)  
**Course Description:** This course examines the qualitative and quantitative methods employed in the scientific study of behavior and mental processes. It is an introduction to the design and analysis of psychological research. Topics include the logic and philosophy of psychological research, conceptualizing research questions, hypothesis testing, data collection, and analysis strategies used by researchers in psychology. This course will include a survey of different methodologies used by Native American and Indigenous Social Scientists and will compare and contrast these methods from traditional western research models.
Science (SCI)

SCI 101: Pathways to Science  
**Prerequisite:** None  
**Credits:** 2 cr. hrs. (2 pds: 2 lec)  
**Course Description:** This course will introduce students to opportunities and career pathways in science, strengthen students’ academic skills and prepare them to be a successful college student. Students will be introduced to the Man in the Maze and how to use it for goal setting, self-awareness, and empowerment. Fundamental mathematical and scientific concepts will be covered to provide foundational knowledge for success in future STEM courses. Students will strengthen academic skills in math and science through culturally embedded problem-based learning involving critical thinking, data analysis, and problem-solving. Students will be introduced to college resources and student success techniques such as learning strategies, time management, stress management, and study skills.

SCI 290: Special Topics in Science  
**Prerequisite:** MAT 151 and eight (8) credits of Science or permission of Instructor  
**Credits:** Between 2-5 Lecture, 1 credit lab  
**Course Description:** This special-topics course increases student knowledge in a specialized area of science, provides an opportunity to engage in scientific inquiry, and includes experience in field, lab, or computing skills and techniques. Methods of course delivery vary based on topic. Each version of the SCI 290 will undergo review by the Curriculum Committee, Himdag Committee, and the Dean of Academics to ensure academic integrity and address culturally sensitive issues, if any.

Social Services (SSE)

SSE 111: Group Work  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Examination of group dynamics. Includes communication patterns, leadership, decision-making, conflict resolution, problem solving, and personal growth within groups. Also includes application of concepts through observation, group exercises, and case studies.

SSE 121: Introduction to Substance Abuse  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)  
**Course Description:** Introduction to the history of drug abuse, including alcohol in the United States. Includes classification of drugs, historical review of drug laws, prohibition, and theories of addiction, treatment, strategies, cultural perspectives and treatment interventions. Also includes special populations, education, and available resources to addicts, alcoholics and their families.

SSE 123: Substance Abuse Prevention  
**Prerequisite:** None  
**Credits:** 3 cr. hrs. (3 pds: 3 lec)
Course Description: Comprehensive review of approaches to prevention. Includes drug control policies and the impact of abused substances on all segments of society. Also includes focus on the resources of multiple societal sectors to reduce the demand for drugs.

SSE 211: Group Technique Applications
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Students examine the nature and development of group practice within behavioral health settings. Specific attention is given to group dynamics theory, leadership and group facilitation skills, stages of group development, theories and techniques adapted to a variety of treatment and task group contexts, ethical standards for group practice, and cultural/ethnic considerations in behavioral health group intervention.

SSE 212: Casework Methods II
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Advanced techniques in interviewing, recording, client evaluation, case management, strategies for intervention, and focus on diverse and special populations. Includes application of advanced skills in varied settings and attention to service delivery in a fragmented community resource system.

SSE 220: Treatment of the Substance Abuser
Prerequisite: SSE 121
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Principles and techniques of treating the substance abuser. Includes therapeutic communities, day care programs, methadone maintenance, detoxification, and psychotherapy.

SSE 222: Political and Legal Aspects of Drug Use
Prerequisite: SSE 121
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Overview of drug abuse and the law. Includes the influence of politics, economics, civil liberties, court decisions, and public opinion. Also includes consideration of international trafficking, gangs, and money laundering.

Sociology (SOC)

SOC 101: Introduction to Sociology
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Introduction to the basic concepts of sociology and sociological analysis. Includes identity, folkways, norms, mores, groups, status, role, gender socialization, social structure, culture and ethnicity. Also includes deviance, social control, bureaucracy, social change, social class, collective
behavior, social movements, social stratification, inequality, institutions, social organization, and globalization within and across contemporary societies and cultures.

SOC 127: Marriage and the Family  
Prerequisite: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Introduction to the social functions of marriage and the family. Includes structures of marriages and families, relationships, marriage, and transformation of marriage.

Speech (SPE)  

SPE 110: Public Speaking  
Prerequisite: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Study and training in public speaking with emphasis on audience adaptation. Includes developing skills in the areas of research, logic, analysis, organization, and delivery in a multicultural society.

SPE 120: Business and Professional Communication  
Prerequisite: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Study and training in organizational communication within a multicultural/global environment. Includes informative and persuasive speaking, interviewing, listening, and group problem-solving and decision making.

Student Success (STU)  

STU 100: College Success Skills  
Prerequisite: None  
Credits: 1 cr. hr. (1 pd: 1 lec)  
Course Description: Skills and techniques required for being an efficient student. Includes goal setting and problem solving, time management, organizing study materials/study techniques, college/community resources, learning styles, concentration and memory, note taking techniques, tips for making note taking easier, test taking techniques, and test anxiety.

STU 101: Becoming a Master Student  
Prerequisite: None  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Enhancement of academic and personal skills to maximize learning and success at the college setting. Includes assessing college readiness and learning skills, time management, building memory and concentration skills, reading for college, note taking, test taking, diversity, writing for college, relationships, lifestyle and wellness, and next step.

STU 109: Career Exploration
Prerequisite: None
Credits: 2 cr. hrs. (2 pds: 2 lec)
Course Description: Development of skills and knowledge necessary to make career choices. Includes values clarification, skills identification, interest and personality identification and recognition, adult developmental issues, career research, developing a plan of action, review of self-assessment inventory, eliminating stereotypes, advanced career research, information interviews, decision making, and developing an educational/career plan.

STU 230: Dynamics of Leadership
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Supervised practical training in leadership. Includes history, philosophy and vision of leadership, aspects of leadership, power of positive vision, goal setting, decision making, life planning, identifying a personal philosophy, team building, delegating, ethics in leadership, servant leadership, initiating change, managing conflict, and designing and completing leadership projects.

Social Work (SWU)

SWU 171: Introduction to Social Work
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Study of the unique tenants of social work practice and the institution of social welfare. The history and development of social work as a profession, concepts of social justice and human rights. An exploration of the functions and roles of social work and career settings. Students demonstrate increased awareness of personal values, the NASW Code of Ethics, and Himdag values.

SWU 291: Social Service Delivery Systems
Prerequisite: SWU 171, or Corequisite SWU 171, or Permission of the instructor.
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: The study of social welfare, the purposes, structures, and systems of human service delivery are examined. Public, private, and tribal entities are explored. Applies human behavior-in-social environment theory and the role of social policy. Includes 40 hours of volunteer/service-learning experience in local tribal and community settings.

SWU 295: Foundations of Social Work Practice: Effective Helping in a Diverse World
Prerequisite: SWU 171, WRT 101, and PSY 101 or SOC 101.
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: An examination of theoretical foundations, evidence-based practice and skills for culturally sensitive generalist social work practice with individuals, families, small groups, and larger systems. Professional values, ethics and dilemma decision-making are defined. Functions and roles in client case management with diverse populations. Emphasis on the practice of social work in the context of Southwest cultural and ethnic traditions.

SWU 299: Special Topics in Social Work
**Prerequisites**: SWU 171 or instructor permission.

**Credits**: 1-3 credits

**Course Description**: This course provides students with knowledge, values and skills related to special topics in social work practice. Methods of course delivery vary based on topic. A course fee may be assigned in experiences that require community immersion learning.

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**Tohono O'odham Language (THO)**

**THO 101**: Elementary Tohono O'odham I

**Prerequisite**: None

**Credits**: 4 cr. hrs. (4 pds: 4 lec)

**Course Description**: An introduction to the Tohono O'odham language. The course will explore the structure and grammar of the language with an assessment of language usage in the community. Includes basic listening, speaking, reading, writing, and development of language skills. Also includes an emphasis on examination of Tohono O'odham cultural traditions and values.

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**THO 102**: Elementary Tohono O'odham II

**Prerequisite**: THO 101 or instructor consent

**Credits**: 4 cr. hrs. (4 pds: 4 lec)

**Course Description**: An increased knowledge of the structure and grammar of the language with improved practice in listening, speaking, reading, writing, and usage of the language. Includes study of the relationship between the language and Tohono O’odham cultural traditions and values.

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**THO 106**: Conversational Tohono O'odham I

**Prerequisite**: None

**Credits**: 4 cr. hrs. (4 pds: 4 lec)

**Course Description**: Introduction to conversational Tohono O’odham. Development of communication skills to achieve basic proficiency in the language. Includes greetings, interpersonal transactions, proper pronunciation of the O’odham sound system and an emphasis on cultural perspectives.

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**THO 107**: Conversational Tohono O'odham II

**Prerequisite**: THO 106 or instructor consent

**Credits**: 4 cr. hrs. (4 pds: 4 lec)

**Course Description**: Increased development of communication skills with continued practice of interpersonal transactions. Includes practical use of the language in a community setting and further examination of O'odham cultural perspectives.

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**THO 201**: Intermediate Tohono O’odham

**Prerequisite**: THO 102

**Credits**: 4 cr. hrs. (4 pds: 4 lec)
**Course Description**: Increased proficiency in listening, reading, writing, and speaking the O’odham language. Derive meaning from written text, create simple sentences in written form and respond verbally to familiar topics and questions. Includes examination of Tohono O’odham cultural traditions and the relationship to the O’odham language.

**THO 202**: Advanced Tohono O’odham  
**Prerequisite**: THO 201  
**Credits**: 4 cr. hrs. (4 pds: 4 lec)  
**Course Description**: Increased proficiency in listening, reading, writing, and speaking the O’odham language. Derive meaning and demonstrate comprehension from written text, create paragraphs in written form. Respond to questions and converse in the language. Includes examination of Tohono O’odham cultural traditions and the relationship to the O’odham language.

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**Tohono O’odham Culture (TOC)**

**TOC 150**: Tohono O’odham Food Systems  
**Prerequisite**: None  
**Credits**: 3 cr. hrs. (3 pds: 3 lec)  
**Course Description**: Overview of Tohono O’odham food systems. Includes pre-encounter methods of farming, hunting, and food gathering, current cultivation methods, effects of food subsidy programs on traditional diet, and cultural importance of food systems in the past and present.

**TOC 151**: Tohono O’odham Writing Systems  
**Prerequisite**: None  
**Credits**: 1 cr. hr. (1 pd: 1 lec)  
**Course Description**: History of the development of Tohono O’odham writing systems. Includes the three existing systems, and sounds and symbols of the language.

**TOC 226**: Tohono O’odham Nation Government  
**Prerequisites**: Completion of WRT 101 or permission of instructor. WRT 102 if course is to be used for AGEC I requirement.  
**Credits**: 3 cr. hrs. (3 pds: 3 lec)  
**Additional Information**: Cross-listed as POS 226  
**Course Description**: Examines the development of Tohono O’odham government, both pre- and post-1934. Includes cultural, legal and political basis of Tohono O’odham government, structures and functions of Tohono O’odham Nation powers, and its services, fiscal changes and administrative growth. Addresses political relations, developments, and transitions related to state and federal governments and highlights major contributions of Tohono O’odham leaders.

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**Tohono O’odham Studies (TOS)**

**TOS 111**: Tohono O’odham Traditional Arts
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Tohono O’odham Traditional Arts courses will serve to preserve and perpetuate students’ knowledge and use of Tohono O’odham cultural arts, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the historical use and production of the cultural art. Students will use natural and contemporary materials to construct finished products.

TOS 111a: Wire Baskets
Prerequisite: None
Credits: 1.5 cr. hrs. (1.5 pds: 1.5 lec)
Course Description: Tohono O’odham Traditional Arts courses will serve to preserve and perpetuate students’ knowledge and use of Tohono O’odham cultural arts, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the historical use and production of the cultural art. Students will use natural and contemporary materials to construct finished products.

TOS 111b: Wood Crafts
Prerequisite: None
Credits: 1.5 cr. hrs. (1.5 pds: 1.5 lec)
Course Description: Tohono O’odham Traditional Arts courses will serve to preserve and perpetuate students’ knowledge and use of Tohono O’odham cultural arts, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the historical use and production of the cultural art. Students will use natural and contemporary materials to construct finished products.

TOS 112: Tohono O’odham Traditional Arts: Pottery & Basketry
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Tohono O’odham Traditional Arts courses will serve to preserve and perpetuate students’ knowledge and use of Tohono O’odham cultural arts, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the historical use and production of the cultural arts of pottery and basketry. Students will use natural and contemporary materials to construct finished products.

TOS 112a: Pottery
Prerequisite: None
Credits: 1.5 cr. hrs. (1.5 pds: 1.5 lec)
Course Description: Tohono O’odham Traditional Arts courses will serve to preserve and perpetuate students’ knowledge and use of Tohono O’odham cultural arts, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the historical use and production of the cultural arts of pottery and basketry. Students will use natural and contemporary materials to construct finished products.

TOS 112b: Basketry
**Prerequisite:** None

**Credits:** 1.5 cr. hrs. (1.5 pds: 1.5 lec)

**Course Description:** Tohono O'odham Traditional Arts courses will serve to preserve and perpetuate students’ knowledge and use of Tohono O'odham cultural arts, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the historical use and production of the cultural arts of pottery and basketry. Students will use natural and contemporary materials to construct finished products.

**TOS 114: Apedag Wellness & Wellbeing: O'odham Dances, Songs, and Music**

**Prerequisite:** None

**Credits:** 3 cr. hrs. (3 pds: 3 lec)

**Course Description:** History and practice of Tohono O'odham cultural activities to promote the Wellness and Wellbeing of the O'odham and community.

**TOS 114a: O'odham Dancing**

**Prerequisite:** None

**Credits:** 1.5 cr. hrs. (1.5 pds: 1.5 lec)

**Course Description:** The history and use of traditional cultural dancing as well as contemporary Spanish/Mexico influenced dancing. (Waila, Pako’ola) Includes gender roles.

**TOS 114b: O'odham Songs and Music**

**Prerequisite:** None

**Credits:** 1.5 cr. hrs. (1.5 pds: 1.5 lec)

**Course Description:** The history and use of traditional songs as well as contemporary music influenced by Spanish/Mexico music (Piast). Includes gender roles.

**TOS 115: Foundations of O'odham Philosophy and Culture**

**Prerequisite:** None

**Credits:** 3 cr. hrs. (3 pds: 3 lec)

**Course Description:** TOS 115 is an introductory course on the foundational beliefs of O’odham philosophy and culture. The course will examine elements of the O’odham Himdag including oral traditions, social structure, spirituality, traditions, values and other factors of O’odham society. Students will be encouraged to identify and explore the core values of the college as it relates to their own upbringing and identity.

**TOS 120: Traditional Basketry**

**Prerequisite:** None

**Cross Listed:** ART 120

**Credits:** 3 cr. hrs. (3 pds: 3 lec)

**Course Description:** This course will serve to preserve and perpetuate students’ knowledge, creation and use of Tohono O’odham Basketry, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the use and production of baskets. Students will use natural and contemporary materials to construct finished products.
TOS 121: Traditional Pottery
Prerequisite: None
Cross Listed: ART 121
Credits: 3 hrs. (3 pds: 3 lec)
Course Description: This course will serve to preserve and perpetuate students' knowledge, creation and use of Tohono O'odham pottery, both historical and contemporary. Students will learn oral history, songs and stories pertaining to the use and production of pottery. Students will use natural and contemporary materials to construct finished products.

TOS 230: Contemporary Tohono O'odham and Native American Issues
Prerequisite: WRT 101 or instructor signature. Completion of or concurrent enrollment in HIS 122 or TOC 226/POS 226
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: A study of historical and contemporary Tohono O'odham and Native American issues, their political developments, implementation and effects among the Tohono O'odham and other Native American tribal groups, including the contemporary state of Tribal nations, federal legislation and social movements.

TOS 240: Academic Writings about the Tohono O'odham
Prerequisite: WRT 102
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: An introduction to academic literature on the Tohono O'odham. Includes an examination of these works in their disciplinary context, a comparison of historical and contemporary approaches to research, and relevance to Tohono O'odham society.

TOS 298: Service Learning Capstone
Prerequisite: WRT 101 or instructor signature. Completion of or concurrent enrollment in HIS 122 or TOC 226/POS 226
Credits: 1 cr. hr. (1 pd: 1 lec)
Course Description: This capstone course allows students to gain experience by completing a service-learning project in a community setting. Coordinated and supervised by faculty and/or community or institutional partners, this course places students in a service-learning position where the student can apply their knowledge and skills in real-world contexts.

Writing (WRT)

WRT 101: Writing I
Prerequisite: None
Credits: 3 cr. hrs. (3 pds: 3 lec)
Course Description: Principles and practices of writing. Includes writing college-level essays, review of basic writing skills, and written works. Also includes narrative/descriptive, expository, and persuasive writing. May be offered in modules.
WRT 101L: Writing I Lab  
Prerequisite: Writing placement score below WRT 101 level  
Credits: 1 cr. hrs. (1 pds: 1 lab)  
Course Description: This course is designed to engage students in collaborative sessions that develop stronger writing skills. Support for all stages of the writing process related to various classroom assignments will be provided, ranging from brainstorming, organization, and development to drafting, revising, and grammar/mechanics. Guidance in MLA and APA formatting will also be available.

WRT 102: Writing II  
Prerequisite: WRT 101 or equivalent to placement test.  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: Continuation of WRT 101. Includes writing analytical or critical papers, analysis and discussion of various types of literature, developing research skills, and written works. Also includes writing a research paper.

WRT 287: Beginning Creative Writing Workshop in Fiction  
Prerequisite: Completion of Writing 102  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: This class will teach the craft of fiction writing in terms of mechanics, style, voice, formalism, narrative structures and other related elements, while providing a survey of past and contemporary fiction writers for understanding of literary movements both past and present. In the process, the student will be introduced to the language and ideas necessary to participate.

WRT 288: Beginning Creative Writing Workshop in Poetry  
Prerequisite: Completion of Writing 102  
Credits: 3 cr. hrs. (3 pds: 3 lec)  
Course Description: This class will teach the craft of poetry writing in terms of mechanics, style, voice, formalism, free verse, narrative structures and other related elements, while providing a survey of past and contemporary poets for understanding of literary movements both past and present.
Chapter 7 – Personnel

Running a college, even a fairly small college like Tohono O’odham Community College takes a significant number of staff and faculty with a wide range of skills. This chapter includes a list of the TOCC employees who make it possible to have a college. Their names and titles are current as of May 2020. They are listed according to their roles: Board of Trustees, President, Leadership Team, Faculty, Staff, and Administration. The year in parenthesis that follows each person’s name indicates the date that employee started working for the College. The list will be updated annually in the Catalog that is posted on the TOCC website at www.tocc.edu. Adjunct faculty are listed on the TOCC website and updated each semester.
Board of Trustees

Mary Bliss (2019)
Member
Retired Social Worker, Tucson Unified School District MSW in Social Work, Arizona State University
From San Xavier District

Anthony M. Chana (2007)
Elder Trustee/ Secretary
Retired Counselor, Pima Community College
B.A. in Education, Arizona State University
From Ge Aji (Gu Achi) District

Elizabeth “Libby” Francisco (2002)
Member
Chief Operations Officer Tohono O’odham Gaming Enterprise; B.A. in Political Science, University of Arizona
From San Xavier District

Jonas R. Robles (2007)
Elder Trustee
Counselor, Tohono O’odham Behavioral Health; Attended Pima Community College and Northwest Indian College
From Gu Achi District

Bernard G. Siquieros (2002)
Vice Chairman
Retired Education Curator Tohono O’odham Nation Cultural Center & Museum B.A. in Elementary Education, University of Arizona; Graduate Studies in Education Administration, Arizona State University
From Sells District

Ofelia Zepeda, Ph.D. (2002)
Chairwoman
Professor, Ph.D., M.A., B.A., in Linguistics, The University of Arizona.
From Stanfield, Arizona

President

Paul Robertson (2016)
Ph.D. in Cultural Anthropology, Union Institute; M.A. in Cultural Anthropology University of New Mexico; B.A. in Cultural Anthropology, California State University
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Leadership Team

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Student Life Director
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Mario Montes-Helu (2014)
Dean for Sustainability
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M.S. in American Indian Studies (Indigenous Rights & Social Justice), Graduate Certificate in Public Administration, B.S. in American Indian Studies, Arizona State University; A.A. in Secondary Education in History, Glendale Community College
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Faculty

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Literature and Humanities Instructor
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Community College

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TOCC Policy Statements

Affirmative Action and Equal Employment Opportunity
The Board of Trustees of Tohono O’odham Community College has affirmed that the College is an equal educational and employment opportunity institution. Discrimination is prohibited by Titles VI and VII of the Civil Rights Act of 1964 and 1991; Title IX of the Education Amendments of 1972; Sections 503 (793) and 504 (794) of the Rehabilitation Act of 1973, as amended in 1988; the Americans with Disabilities Act (ADA) of 1990; the Vietnam Veterans Readjustment Acts of 1972 and 1974; the Age Discrimination Act of 1967, as amended in 1978 and 1986; the Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA); and other federal and state statutes, executive orders, and regulations. The College has policies relative to nondiscrimination on the basis of sex, sexual orientation, race, religion, color, national origin, age, disability, or on the basis of membership as set forth in USERRA, or any other basis which is prescribed by law. Such policies apply to educational programs, services, activities, and facilities, and include, but are not limited to, student admissions, applications, access to programs/classes/services, financial aid, and employment.

Americans with Disabilities Act
Tohono O’odham Community College complies with the Americans with Disabilities Act (ADA) of 1990, the Americans with Disabilities Amendments Act (ADAAA), and Section 504 of the Rehabilitation Act of 1973, as amended. In addition, TOCC complies with other applicable federal, state and tribal laws and regulations that prohibit discrimination on the basis of disability. Reasonable accommodations, including materials in an alternative format, will be made available for individuals with disabilities when a minimum of five working days advance notice is given. Students needing accommodations are encouraged to contact the Dean of Student Services, at (520) 383-8401. For additional information, see the TOCC Student Handbook.

Family Educational Rights and Privacy Act (FERPA)
Tohono O’odham Community College complies with the Family Educational Rights and Privacy Act (20 U.S.C. §1232g; 34 CFR Part 99). This act was designed to protect the privacy of educational records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students have the right to file complaints with the FERPA Office concerning alleged failures by the institution to comply with this act. Upon admission to the college, all students must complete the Disclosure of Student Information Form, available from the TOCC Admissions & Records Office.

Sexual Harassment
Tohono O’odham Community College is committed to promoting and maintaining a productive work and educational environment free of discrimination and harassment. In keeping with this commitment, Tohono O’odham Community College will not tolerate verbal or physical conduct by an employee or student that harasses, disrupts, or interferes with another’s work performance or education or that creates an intimidating, offensive or hostile work or educational environment. For additional information, see the TOCC Student Handbook.
Drug Free Schools and Communities Act
Tohono O’odham Community College is committed to the Drug Free Schools and Communities Act Amendments of 1989 (Public Law 101-226, 20 U.S.C. §1145G). For additional information, see the TOCC Student Handbook.

Cultural/Religious Observance and Practices
Tohono O’odham Community College recognizes the importance of the religious and Native American cultural observances and practices of its students, unless these will result in undue hardship to College programs. At least two weeks before the religious or cultural observance, students must submit a written statement to their instructor(s) that contains both the date and location of the observance. Absences for religious and cultural observances and practices do not count in the number of absences allowed by an instructor. For additional information, see the TOCC Student Handbook.
Addendums

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This catalog was originally approved by the Board of Trustees on June 11. 2020

07.07.2020 version 20.01 – No content was changed to catalog but several grammar errors were found by the Academic Adviser, Academic Coordinator, and changes approved by Academic Dean. Because content was not changed was not considered an Addendum.