



**THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY®**

18345 Ventura Boulevard, Suite 210, Tarzana, CA 91356

Phone (818) 996-1863 [www.austc.us](http://www.austc.us)

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This catalog covers the academic year 2012-2013 that starts (Aug. 15, 2012) and ends (Aug. 7, 2013) – all information included is current. Any additions or changes shall be posted on our website [www.austc.us](http://www.austc.us) and will show in this catalog either as an update or insertions.

## **01 – THE UNIVERSITY**

### **01.01 - MISSION STATEMENT**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY is a (501) (C) (3) Nonprofit Public Charity Educational Facility offers recognized bachelor's, Master's and doctoral degrees in several disciplines to domestic and international adult students through well engineered programs that assure competency and apply the required knowledge and skills to meet jobs market's demands.

### **01.02 – BPPE APPROVAL**

The American University for Science and Technology is classified at the state of California (BPPE) as a private institution, and is allowed to operate as a degree granting university after submission of its affidavit to the State of California Bureau for Private Postsecondary Education (BPPE). Any questions regarding this catalog that have not been satisfactory answered by the university may be directed to:

#### **The Bureau for Private Postsecondary Education**

2535 Capitol Oaks Drive, Suite 400,

Sacramento, CA 95833,

[www.bppe.ca.gov](http://www.bppe.ca.gov) ,

Phone Number: (916) 431-6959

Fax Number: (916) 263-1897

### **01.03 - ADDRESS:**

Main campus of the American University for Science and Technology is located at:

18345 Ventura Boulevard, Suite 210,  
Tarzana, CA 91356,  
Phone (818) 996-1863

All academic and administrative activities are provided at the above shown address, while it is possible to rent locations at the neighborhood for semester-end conferences and comprehensive academic activities if a wider space is required. In such cases, students and faculty shall be early notified about the actual address, date and time.

Additional and updated information may be found on [www.austc.us](http://www.austc.us)

## **01.04 - FACILITIES AND EQUIPMENT**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY provides attended and distance learning educational methods. All courses are based on written knowledge obtained from specified textbooks, Multimedia materials including life captured lectures and training sessions. Students are responsible for purchase and possession of any required software and hardware as well as a reliable method to access the internet for services, utilities and communication with AUST's faculty. AUSTC's location is equipped enough to assure very well managed systems and successful mentoring and follow-up, as well as a convertible classroom platform to provide a reliable faculty/students meeting area, auditorium and monitored exam area.

### **01.04.01 - Classroom Equipment**

- Fully equipped and air conditioned classrooms with convertible tablet lecture chairs accommodates up to (28) students at the main classroom, while the extension accommodates more than 50 students at a time.
- Area is convertible to be utilized as meeting area, small lecturing area, chalkboard and overhead presentation area, monitored testing area, or a computer lab.
- Ceiling mounted state of art projector with computer connectivity and sound output
- Large dropdown projection screen
- Portable Transparencies' overhead projector
- Lecturer's laptop connection to projector, with all required software,
- Fully equipped PC dedicated and installed in the classroom for presentation, internet access, local area network access and other uses.
- Classroom dedicated printer
- Wide Area Network (WAN) with state of art dedicated fileservers with data and media share capabilities
- Free Wi-Fi for students and lecturers' access
- A number of laptop computers for students' use within premises
- Chalkboard and related supplies
- Lecturer's podium and laser pointing device
- Lecturer's dedicated work service and utility desk with executive chair

**01.04.02 - Distance Education Facilities**

- Dedicated Website “[www.austc.us](http://www.austc.us)”
- Electronically featured access to rich libraries of subjects, knowledge and resources
- Audio/Video online conferencing facilities with presentation capabilities to allow sharing class and online attending groups at the same session
- Access to a wide range of courseware including video/audio recorded lectures, text, and media
- Well established communication and messaging services
- Dynamic student informative web pages with access to faculty contact
- Email connectivity and file submission services
- Online bookstore, Courseware, Video Captured Lectures, Congress Open Book Library, National Academies Resources, and Internet Public Library are utilized to provide unlimited resources for students, researchers and faculty members.
- Well trained and experienced faculty staff and mentors

**01.04.03 - ELECTRONIC COMMUNICATION**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY uses electronic communications. Most interaction occurs through AUSTC’s website ([www.austc.us](http://www.austc.us)).

Students are required to be able to navigate the World Wide Web. The University recommends using the most recent version of MS Internet Explorer. To view the tutorials and orientation information in the Students' area, Microsoft Windows Media Player is required.

The University may provide documents that require Adobe Acrobat Reader, which is available on <http://www.adobe.com/products/acrobat/readstep2.html> for free.

The American university for Science and Technology offers an Email address to every new student under the university’s domain. This method is offered to assure reliable and secure email access with the capability to send and receive attached files. Spam blockers must be directed to accept email from AUSTC domain. Students are responsible for reading their email and visit the website regularly to assure timely contact between the faculty and students.

The American university for Science and Technology diligently attempts to prevent the spread of computer viruses by employing the latest virus detection software on all University owned computer systems; however, the University makes no guarantee related to the unintentional propagation of computer viruses that may go undetected by its virus detection software.

The American university for Science and Technology will not be held liable for any direct, indirect, incidental, special, consequential or punitive damages of any kind, including but not limited to; loss of data, file corruption, or hardware failure, resulting from the effect of any malicious code or computer virus unintentionally transmitted.

## 01.05 - METHOD OF INSTRUCTION

The American University for Science and Technology adapts the following combined cluster of methods to create a uniquely engineered form that assures self-pacing, independent learning, monitored performance and accurate academic assessment:

- Distance interaction through electronic communication and virtual face to face online bidirectional conferencing
- Textbook based study plans
- Ongoing assignments and assessment
- Evening and weekends classroom scheduled faculty/student meetings
- Comprehensive reporting and standard three hours monitored exams for assessment and credit granting

The University assigns a faculty mentor for each course, update student's data to reflect mentors' information and inform each student about his assigned faculty members and mentors.

The university creates an email address for each student under the university's domain name, and informs each student about utilizing university assigned email address as the primary communication method.

Students are required to daily review and interact with the university assigned email to assure timely response.

Mentors start communication with the assigned student's group via a series of email messages and arrange scheduled online or face to face conferences when possible, on each subject, based on predesigned plan under supervision of program's director.

All assignments are transmitted to students via email.

Faculty members discuss the assignments with students during the scheduled online bidirectional conferences. Students may not post any completed assignment or subject report for scoring unless coordinated with the assigned faculty mentor regarding completion and submission date.

Students are responsible for purchasing their own textbooks either as a bulk package or separately whichever is convenient throughout the program.

The American University for Science and Technology selected and established a virtual bookstore on its website. All references and materials are selected from an actual list on that book store to assure availability for students.

The selected bookstore carries all references including new, used and e-books that are all available to be purchased directly through university's website.

The university may purchase and send textbooks and materials on behalf of overseas located students if such a service is requested after full payment of purchasing and shipment costs.

Instructions, communications, questions, and answers are all handled personally between the student and faculty mentor through email communication, online conferencing and life class room evening and weekend meetings.

As the course progresses, student incrementally submits assignments to the faculty mentor for evaluation and scoring.

Active self-education concept is to encourage students incorporate course knowledge and requirements into personal experience while faculty mentors play as resource providers and facilitators in the process of education.

Students demonstrate mastery of the course material and its personal relevance by completing assignments, term papers, examinations, and participating in class discussion forums as required. Upon completion of the course requirements and submission of comprehensive report or set for monitored exam, each student receives a course score and grade.

Degrees are conferred by the university to each student after successful completion of all academic, financial and administrative requirements. Graduation ceremonies are held in Los Angeles, California or at overseas affiliates' centers

## **01.06 - HOUSING**

Distance learning students are not required to physically attend full time programs, the American University for Science and Technology does not currently have any responsibility to find or assist a student in finding housing, while it is possible to voluntarily assist visiting students to find cost effective housing near to the university premises or location of activity that students are visiting to attend (e.g. graduation ceremonies, semester-end conferences).

## **01.07 - VISA**

The American University for Science and Technology admits students from other countries to its distance degree programs. The university neither provides visa services, nor vouches student's status.

All international students from countries where English is not the native language are required to proof English language proficiency. The American University for Science and Technology is registered member with ESL/TOEFL.

Our TOEFL code is (7370)

Applicants are required to successfully pass the Test of English as a Foreign Language (TOEFL)

The American University for Science and Technology provides English language services to domestic students including English Composition I and English Composition II that leads to proficiency level.

English language classes are attended study that requires students to physically show in classroom for three semester units for each program. Cost is \$160.00/Semester Unit.

The American University for Science and Technology currently considers English as the only academic and administrative language. No instruction will occur in a language other than English.

### **01.08 - BANKRUPTCY CLERANCE STATEMENT**

The American University for Science and Technology

- DOS NOT have any pending petition in bankruptcy
- IS NOT operating as a debtor in possession
- HAS NOT filed petition within the preceding five years
- HAS NOT had a petition in bankruptcy filed against it within the preceding five years that resulted in reorganization under chapter 11 of the United States Bankruptcy Code (11 U.S.C. Sec. 1101 et seq.)

**01.09 - FACULTY:**

To manage domestic and international students' communities and to assure the best academic support to students and researchers, The American University for Science and Technology implements faculty pool structure which is a collection of professors, associates, assistants, mentors, lecturers and teachers working together while being actually distributed in and out of the united states. The objective of such a structure is to assure existence of faculty members at where student are located. Students are assigned to faculty members as mentors at their country of existence.

**Current faculty pool includes, but not limited to the following members:**

**Guy Langvardt, PhD. (Chief Academic Officer)**

Adnan Masdani, PhD.

Antoin T. Medawar, PhD.

Andre Harper, PhD.

Ayad Cheikh, PhD.

Barbara DeSoto, PhD.

Carolyn Cunnington, PhD

Elias Sarkis, PhD.

Fayez H. Yassin, PhD.

Guy Langvardt, PhD.

H. Z. Amdouni, PhD.

Ibrahim Bushakra, PhD.

Imad Wazni, PhD.

Jad Shegade, PhD.

Khairo Dabbaseh, PhD.

Khalid Atwa, PhD.

Leonard Miller, PhD.

M. Sal Kheder, PhD.

M. Chatela, PhD.

Said Hadehah, PhD.

Tonny Karam, PhD.

Yanni Zack, PhD.

Waleid Abukhair, PhD.

Carrie Brakht, MA.

Christina Romero, MA.

Cymary Mongan, MA.

Elizabeth Craig, MA.

Hanna Chusid, MA.

Henietta Vinh, MA.

Jean Varagara, MA.

Meera Pitts, MA.

Qi Yang, MS.

Ross Siligman, MA.

Sara Alkire, MA.

Wendy Cottamn, MA.

Ali Adel Tabboush, MBA.

Elbahaa Elghali, MBA.

Khaled M. Atwa, MBA.

Hassan Khouwayer, MBA.

M. A. Kesserwani, MBA.

Michael Aubry, MBA.

Mued Jumma, MBA.

Samer Taha, MBA

Shareen Kabalan, MBA

Tarik Fathallah, MBA.

Ziad Buserha, MBA.

Ayad Cheikh, ME

Hadi Hanna, ME.

Richard Merheb, ME.

Charbel Khoury, ME.

Antoine Attallah, ME.

Anait Maghakayan, MS.

Askan Soltani, MS.

Brian Wyatt, MS.

Barbra Colombo, MS.

Chandra Drazich, MS.

Charles Fogel, MS.

Christie Soto, MS.

Dania Ayoub, MS.

Danial Drabinsky, MS.

Donald Roemer, MS.

Sayed Chokor, MS.

May Sedairi, MS.

Ra'ed Aween, MS.

Rober Dew, MS.

Hussien Kazemi, MS.

Haleh Kradsforoshan, MS.

Howard Langer, MS.

Jason Trapp, MS.

John S. Bonn, MS.

Kim Lennon, MS.

Robert Rodrigues, MS

Mitchell Thomas, MS.

## **02 - ACADEMIC AND ADMINISTRATIVE POLICES AND PROCEDURES**

### **02.01 - INSTITUTIONAL EFFECTIVENESS AND STUDENT OUTCOMES ASSESSMENT**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY is committed to its mission and to continuous improvement of its programs and services. Assessment is the ongoing process of evaluating Student academic achievements. Students, faculty mentors, staff, and external constituencies are asked to participate in assessment and institutional effectiveness activities that may include, but are not limited to, examination, performance assessments, questionnaires, surveys, focus groups, and interviews; education journals, portfolios, case studies, comprehensive exams and follow-up studies.

### **02.02 - STUDENT RESPONSIBILITY**

As a prospective student, you are encouraged to review this catalog prior to signing an enrollment agreement. You are also encouraged to read The School Performance Fact Sheet, which must be provided to you prior to signing an enrollment agreement.

It is the Student's responsibility to be familiar with the information presented in this reference, and to know and observe all regulations, policies and procedures relating to the program he/she is pursuing. In no case will a regulation be waived or an exception will be granted because Students pled ignorance of or contend that they were not informed of the regulations and procedures. Responsibility for following all policies and meeting all requirements and deadlines for degree programs rests with the Student.

### **02.03 – COMPLAINTS:**

A student or any member of the public may file a complaint about this institution with The Bureau for Private Postsecondary Education by calling Toll Free (888) 370-7589, or by completing a complaint form, which can be obtained on the bureau's internet web site ([www.bppe.ca.gov](http://www.bppe.ca.gov)).

### **02.04 – STUDENT RIGHTS AND GRIEVANCE PROCEDURE**

(Does not apply for dismissal or grade appeals)

In the event that a Student has a complaint, grievance or dispute with the American University for Science and Technology regarding University procedures, decisions, or judgments, the Student has a right to seek a resolution through the formal avenues of appeal and redress. When a grievance reaches the level for invoking the procedures detailed below, it is assumed that efforts to resolve the dispute by other personnel, at other levels, or through Student Affairs, have not been satisfactory.

**Step 1: Notification.** The Student must notify the related faculty mentor, staff or administrator in writing, postmarked and sent to the attention of related person at the physical address of the university: 18345 Ventura Boulevard, Suite 210, Tarzana, CA 91356; or emailed no later than 15 days after the occurrence, with the basis for the grievance, the details of the matter, and the sought-after remedy requested. The involved person shall notify the student of receipt and processing commencement, and respond with a decision in writing within 15 days of receipt notification date. Copies of complaint, receipt notification and decision will be sent to Student Affairs.

**Step 2: Appeal.** If the remedy requested is denied, or the involved person does not respond within 15 days after the notification receipt as of Step 1, the Student may appeal in writing, postmarked or emailed within an additional 15 day period, directly to the academic department chair or responsible administrator. The department chair or administrator and the Student Affairs Advisor will review the material and grievance and render a decision within 15 days of receipt of the Student's appeal. However, failure to initiate a Step 2 appeal within the 15-day time-frame means that the Student accepts the Step 1 decision as final and that the matter is closed.

**Step 3: Final Decision.** If the appeal remedy requested is denied or the cognizing person does not respond within 15 days after the Step 2 notice has been sent, then the Student may appeal in writing, postmarked or emailed within an additional 15 day period, directly to the President. The President will discuss with the department chair(s) or person(s) involved to investigate the matter and will render a decision within 15 days of receipt of the Student's appeal. The President's decision shall be final for the institution. However, failure to initiate a Step 3, appeal within the 15-day time-frame means that the Student accepts the Step 2 decision as final and that the matter is closed.

#### **02.05 - Student's Rights beyond the Institution's Grievance Procedure:**

If the complaint is not resolved after exhausting the institution's grievance procedure, the Student may file a complaint with

#### **California State Bureau for Private Postsecondary Education:**

Physical Address: 2535 Capitol Oaks Drive, Suite 400,  
Sacramento, CA 95833

Mailing Address: P.O. Box 980818,  
West Sacramento, CA 95798-0818

Phone Number: (916) 431-6959

Toll Free: (888) 370-7589

Fax Number: (916) 263-1897

Website is <http://www.bppe.ca.gov>.

E-mail: [bppe@dca.ca.gov](mailto:bppe@dca.ca.gov).

### **03 - ADMISSION REQUIREMENTS**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY offers Bachelor's, Master's and PhD. degree programs designed to meet the academic and work plan objectives for adult students and professionals. Meeting admission requirements is an indicator that the student is qualified to enter and pursue the degree program, however, the University emphasizes that success depends upon dedication to studies.

#### **03.01 - ADMISSION PROCEDURES**

All Students are required to complete and submit the online pre-admission distance learning questionnaire that collects details about applicants'

- (1) Technology Requirements
- (2) Technology Comfort Level
- (3) Expected Study Time dedication and Schedule
- (4) Learning Style

Applications must be submitted using the on-line application form. After an initial review of submitted information, and if the submitted details meet the minimum requirement for admission to the degree of concern, the applicant receives a notice of intent via his/her email address with instructions to submit additional documents by mail, fax or e-mail; and to pay a nonrefundable application fee

Applicants must request official transcripts be sent directly to AUSTC from prior colleges and universities during the application process. Only official transcripts will be evaluated. An academic review of submitted materials takes place after confirmation of application fees' payment. Applicants who apply for financial aid through a third party lender must provide all necessary documents as per lender's rules, to be processed along with enrollment process.

#### **03.02 – CREDIT TRANSFER ACCEPTANCE**

Applicants have the right pursue credit transfer to the American University for Science and Technology based on obtained degrees, postsecondary education or training.

1. Even though AUSTC had not entered into an articulation or credit transfer agreement with any other college or university, submitted documents are considered as basis for possible credit transfer if the granting facility is a state approved, accredited or an international facility that is an equivalent to us recognized degree granting facilities.
2. If the source is not recognized or the obtained education does not qualify for any credit transfer, the applicant must be officially informed and sign consent of agreement to proceed with enrollment without credit transfer.
3. If the facility transferring from is acceptable, an in-depth review must be performed to determine the value of obtained education and/or training measured in semester units.
4. Life experience does not count and it is prohibited to weaver a degree or to combine acceptance to more than a program at a time.

5. Review report must be submitted to admission committee chaired by the university's register for control and to assure that the evaluation is performed as per rules and regulations.
6. Registrar's office applies the current credit transfer policy:
  - 88 semester units maximum credit transfer to a bachelor's degree program
  - 8 semester maximum units credit transfer to Master's degree program
  - 8 semester units maximum Credit transfer to doctoral program

### **03.03 - BASIS OF ADMISSION TO DEGREE PROGRAMS**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY applies an open enrollment policy. Application for admission can be submitted and processed at any time during the year.

The "Application for Admission" is available through <http://www.austc.us> website. Potential students may submit an Initial Applications online, email scan of educational documents and ID to [admissions@austc.us](mailto:admissions@austc.us) with details on the degree program of concern.

Undergraduate Programs - Admission to the Bachelor's degree programs requires submission of evidence demonstrating that the applicant has passed and obtained a high school diploma or a state-authorized examination recognized as an equivalent, or other equivalent recognized by the Department of Education indicating that the applicant is qualified to study at the postsecondary level. Engineering programs requires a proof of successful completion and graduation from an engineering associate degree at the field of concern. A postsecondary two years associate degree from a recognized facility is evaluated as a successful transfer of (60 to 80) semester units based on the obtained program in length and received credit.

Graduate Programs - Admission to the master's degree programs requires a bachelor's degree, or equivalent, and admission to doctoral degree programs requires a master's degree or an equivalent from an accredited or a state approved institution. The equivalent to a bachelor's degree is 120 semester credits of postsecondary coursework from an accredited or state approved college or university, or an international equivalent, including a minimum of English composition I and II and a college-level mathematics course. Official transcripts documenting prior academic work and the award of the degree used as the basis of admission must be sent to the Registrar.

Resume - A resume is valuable and shows an organized presentation about the applicant but experience included does not count as credit equivalent.

Official Transcripts - Must be sent directly from the Registrar of applicant's prior colleges or universities to the registrar at THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY during the application process. Only official transcripts will be evaluated.

International Transcripts - Applicants submitting foreign credentials will be subject to credentials' evaluation. Official documents of all coursework must be sent directly to AUSTC from the awarding institution. If the transcripts are in a foreign language, an English translation is also required. Foreign credentials are required to be evaluated by a recognized independent agency that charges \$100.00 per transcript. AUSTC may send received documents to the evaluator after applicant's payment of fees.

**03.04 - EXPERIENTIAL CREDIT**

The American University for Science and Technology does not consider experience as basis to award credit. This policy is based on the university's believe that documents may list activities and periods of times doing some kind of work, but does not show the value or gained knowledge and training. Credit is only awarded to recognized and well documented education and/or training.

**03.05 - PERSONAL STATEMENT OF INTENT**

The personal statement of intent will be used by the Admissions Committee to assess your writing ability, your readiness to pursue an academic degree in higher education, and your potential for success as a Student at THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY. The personal statement of intent is an important evaluative component of the admission process.

Applicants are required to submit an essay for the personal statement of intent as part of the application. It should be at least 500 but not more than 1000 words. The statement consists of two parts.

**PART I**

Provide a one-page statement about your background, education and professional experiences that you feel prepare you for degree studies.

**PART II**

Respond to the following three questions:

1. What do you expect from your education?
2. How do you anticipate your education will affect your life?
3. What personal qualities do you feel are most important to your academic success?

Personal statement of intent is used by academic advisor in assessing the applicant's writing skills and to provide guidance for subsequent writing course enrollment if needed.

Personal Statements are evaluated using the following Characteristics of effective writing:

1. Focus – establishes a clear purpose.
2. Content – information is relevant and fully developed.
3. Organization – has a logical order and sequence.
4. Style – effective word choice and professional tone.
5. Conventions – spelling, grammar, writing mechanics.

**03.06 - BASIS OF ADMISSION TO NON-DEGREE PROGRAMS**

Enrolled students, graduates and external applicants may be interested in taking certain subject(s) from the published undergraduate or post graduate subjects' list for refreshment, continuing education or to meet certain requirements other than obtaining a degree. Interested personnel may use the online application indicating "NON DEGREE" and just enter the subject's code. No official transcripts or Personal Statements are required. Applicant will be advised of any prerequisites based on detailed properties of the selected subject.

**03.07 - ENGLISH LANGUAGE PROFICIENCY**

AUSTC's curriculum is primarily writing-based, so Students must have a competent knowledge of English communication skills for admission to the University and to benefit from instruction offered by THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY. All course textbooks and materials are printed in English. Assignments are to be submitted in English. Many course assignments include written papers. Faculty mentors correspond with Students and critique coursework in English. Students who demonstrate poor language skills upon admission will be required to take additional English composition courses. Also, re-evaluation of writing skills may be necessary during the Student's program if faculty report difficulty in communicating with the Student or assess deficient writing skills. If a Student is required to successfully complete English composition courses, they may be required to put their current course(s) on hold. This applies to both undergraduate and graduate Students.

Applicants whose primary language is not English, applicants from countries where English is not the primary language, applicants who earned degrees from universities where English was not the language of instruction, or applicants THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY has found to be deficient in English are required to submit the results of the Test of English as a Foreign Language (TOEFL). A minimum TOEFL score of 450 on the written test (or a minimum TOEFL score of 133 on the computer test) is required for undergraduate applicants, and a minimum TOEFL score of 500 on the written test (or a minimum TOEFL score of 173 on the computer test) is required for graduate applicants. Applicants can make arrangements for this test by writing to TOEFL/TSE Service, P.O. Box 6151, Princeton, NJ 08541-6151, USA. Information is also available on the Internet at [www.toefl.org](http://www.toefl.org). Test scores must be sent directly from the testing agency to the Registrar at THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY.

**03.08 - ACCEPTANCE TO THE UNIVERSITY**

Upon receipt of the Application for Admission materials, the University will evaluate the applicant's experience and goals to assure that the desired degree program is appropriate. The academic evaluation includes a review of the applicant's educational intent, prior college work, professional experiences, future goals, and writing skills.

Applicants will be notified of their admission status and the requirements for the degree program. The Applicant has 30 days to accept his/her enrollment, request and make payment arrangements. Upon acknowledgement of the degree plan and receipt of initial payment, the Student is enrolled in the University. Tuition payment options are specified in the enrollment agreement.

**03.09 - NON-DISCRIMINATION POLICY**

AUSTC welcomes all adult Students and does not discriminate on the basis of race, color, national origin, religion, disability, gender, age or in any other way in any of its policies, practices, or procedures involving applicants, Students, faculty, employees and the public.

**03.10 - NOTICE CONCERNING TRANSFERABILITY OF CREDITS  
AND CREDENTIALS EARNED AT OUR INSTITUTION**

The transferability of credits you earn at the American University for Science and Technology is at the complete discretion of an institution to which you may seek to transfer.

Acceptance of the degree you earn in the American University for Science and Technology is also at the complete discretion of the institution to which you may seek to transfer.

If the credits or degree that you earn at this institution are not accepted at the institution to which you seek to transfer, you may be required to repeat some or all of your coursework at that institution. For this reason you should make certain that your attendance at this institution will meet your educational goals. This may include contacting an institution to which you may seek to transfer after attending the American University for Science and Technology to determine if your credits or degree will transfer.

The transferability of credits earned at other facilities' transfer to The American University for Science and Technology are a subject for pre-admission evaluation. Even though credits obtained at accredited and state approved universities are generally acceptable, and assessment may be conducted to examine equivalency to AUSTC applied curriculum and syllabus.

The American University for Science and Technology has not entered into an articulation or transfer agreements with any other college or university at the time of making this catalog. Any change shall be inserted to this catalog and shall be posted on our web site [www.austc.us](http://www.austc.us) when occurs.

**04 TUITION AND FEES**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY, based on its mission, goals and as a public charity nonprofit organization, keeps tuition fees within an affordable level and applies easy payment plans in addition to institutional fee waiver to allow those of limited income, pursue post-secondary education without financial strains.

AUSTC adapts Tuition per credit basis. The student pays only for the credit taken at the American University for Science and Technology after credit transfer from other facilities as determined during admission and enrollment process.

When the student qualifies for credit transfer, he/she pays \$5.00 for each transferred semester unit. Financial plan recipients are exempted from credit transfer fees.

Institutional fee waiver covers 25% to 75% of tuition fees based on student's financial need and is determined at enrollment time after full review of submitted documents as detailed later in this catalog.

Financial fee waiver recipients are eligible for interest free payment plan equal to all other students, which is an another assistance to allow them pay the remaining tuition after deduction of granted assistance in easy monthly payments.

Student's enrollment agreement clearly shows the required and transferred credit; and the related payable tuition and fees.

**04.01 - Tuitions scale during the period covered by this catalog:**

Bachelor's degree	(Distance)	\$120.00 / Semester Unit
	(Attended)	\$160.00 / Semester Unit
Master's / Doctoral degree	(Distance)	\$240.00 / Semester Unit
	(Attended)	\$320.00 / Semester Unit
Training and Single Course Programs		\$120.00 / Semester Unit

**04.01.01 Estimated Charges for Full Program Tuition:**

Bachelor's degree (120 Semester Units)	(Distance)	\$14,400.00
	(Attended)	\$19,200.00
Master's Degree (44 Semester Units)	(Distance)	\$10,560.00
	(Attended)	\$14,080.00
Doctoral Degree (52 - 60 Semester Units)	(Distance)	\$12,480.00 / \$14,400.00
	(Attended)	\$14,400.00 / \$19,200.00

Tuition is per semester units, not per degree. In case of credit transfer, student pays only for credits taken at AUSTC

## 04.02 Tuition Payment Options:

In general, all payment options are interest free, while a discount is granted to students if student voluntarily prefers to make full payment in advance either as a total payment sum or within three months from date of enrollment. (Institutional Fee Waiver recipients are eligible.)

**Full Payment in Advance:** Lerner decides to make a full payment of tuition for the whole program as one payment in advance at enrollment time receives 10% of his/her tuition as advance payment discount.

**Two Equal Monthly Payments in Sequence:** Lerner decides to pay his/her full program tuition in two sequential monthly payments within the first three months after date of acceptance as one payment at enrollment month and the second payment within thirty days from first payment; receives (5%) as pay in advance discount.

**Interest free Monthly Payment Plan:** this payment plan is offered to all students unless full payment with special discount is selected, and it is applied spontaneously without any other processing than signing the enrollment agreement and acceptance of financial responsibilities as included.

- In this plan, student pays 20% of the full program tuition as an obligated enrollment payment,
- Remaining value is to be paid in 18 equal interest free monthly payments.
- If student completes all the academic requirements, his/her remaining unpaid balance becomes immediately due, and must be paid before graduation.

## Fees

Credit Transfer	\$5.00	Per Transferred Credit Unit
Course Drop/Cancel Fee	\$25.00	Per course
Course Add Fee	\$25.00	When adding a course
Withdrawal Fee	\$50.00	To be paid at time of withdrawal submission
Check Return or Deny	\$25.00	Per Check
Reevaluation of Credit Transfer	\$50.00	If occurs after enrollment
Official Transcript Fee	\$5.00	Per transcript
Diploma Replacement Fee	\$50.00	Per Diploma

**04.03 - STUDENT'S RIGHT TO CANCEL PROGRAM**

04.03.01 the student has the right to cancel his/her enrollment agreement and obtain a refund of charges paid through attendance at the first class session, or the seventh business day after enrollment, whichever is later.

04.03.02 to cancel an enrollment, the student is required to notify the registrar's office in writing. The date the notification is postmarked or emailed is the effective date of the withdrawal/cancellation notice.

04.03.03 Cancellation of enrollment and refund of any access tuition paid to the University must be based on a written, dated and signed notice from the student to the registrar.

**04.04 – TUITION AND FEES REFUND POLICY**

04.04.01 Students who withdraw from the program through attendance at the first class session, or the seventh business day after enrollment, whichever is later will obtain 100% refund of all paid charges.

04.04.02 If student withdraws after the first class session or after the seventh business day after enrollment, a prorated refund pursuant to section 94919(c) or 94920(d) or 94927 of the CALIFORNIA PRIVATE POSTSECONDARY EDUCATION ACT OF 2009 (California Education Code, Title 3, Division 10, Part 59, Chapter 8) shall apply no less than the total amount owed by the student for the portion of the educational program provided subtracted from the amount paid by the student, calculated as follows:

- (1) The amount owed equals the daily charge for the program (total institutional charge, divided by the number of days or hours in the program), multiplied by the number of days student attended, or was scheduled to attend, prior to withdrawal.
- (2) All refundable amounts paid by the student in excess of what is owed as calculated above shall be refunded.
- (3) Except as provided herein, all amounts that the student has paid shall be subject to refund unless the enrollment agreement and the refund policy outlined in the catalog specify amounts paid for an application fee or deposit not more than \$250.00, books, supplies, or equipment, and specify whether and under what circumstances those amounts are non-refundable.
- (4) For purposes of determining a refund under the Act and this policy, a student shall be considered to have withdrawn from an educational program when he or she withdraws or is deemed withdrawn in accordance with the withdrawal policy stated in this catalog.

04.04.03 If an institution has collected money from a student for transmittal on the student's behalf to a third party for a bond, library usage, or fees for a license, application, or examination and the institution has not paid the money to the third party at the time of

student's withdrawal or cancellation, the institution shall refund the money to the student within 45 days of the student's withdrawal or cancellation.

04.04.04 the institution shall refund any credit balance on the student's account within 45 days after the date of the student's completion of, or withdrawal from, the educational program in which the student was enrolled. For purposes of this subdivision and section 94919(d) of the Code, "day" means calendar day

04.04.05 the institution shall maintain a cancellation and withdrawal log, kept current on a monthly basis, which shall include the names, addresses, telephone numbers, and dates of cancellations or withdrawal of all students who have cancelled the enrollment agreement with, or withdrawn from, the institution during the calendar year. Note: Authority cited: Sections 94803, 94877 and 94885, Education Code. Reference: Sections 94885, 94919 and 94920, Education Code.

All refunds are based on the amount due for the current courses and previous courses attempted, less a withdrawal processing fee of \$50. The University will refund the amount of any overpayment. The Student is responsible for paying any amount due to the University as a result of underpayment.

Application fee, STRF and Credit Transfer Processing fees are not refundable.

## 04.05 - STUDENT TUITION RECOVERY FUND (STRF)

Enrolled student must pay the state-imposed assessment for the Student Tuition Recovery Fund (STRF) if all of the following apply:

1. Student is a California resident, or is enrolled in a residency program, and prepay all or part of tuition either by cash, guaranteed student loans, or personal loans, and
2. Student's total charges are not paid by any third-party payer such as an employer, government program or other payer unless the student has a separate agreement to repay the third party.

Student is not eligible for protection from the STRF and is not required to pay the STRF assessment, if either of the following applies:

1. Student is not a California resident, or is not enrolled in a residency program, or
2. Student's total charges are paid by a third party, such as an employer, government program or other payer, and you have no separate agreement to repay the third party."

The State of California created the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic losses suffered students who are California residents, or enrolled in a residency program attending certain schools regulated by the Bureau for Private Postsecondary Education.

Student may be eligible for STRF if he/she is a California resident or is enrolled in a residency program, prepaid tuition, paid the STRF assessment, and suffered an economic loss as a result of any of the following:

1. The school is closed before the course of instruction was completed.
2. School's failure to pay refunds or charges on behalf of a student to a third party for license fees or any other purpose, or to provide equipment or materials for which a charge was collected within 180 days before the closure of the school.
3. School's failure to pay or reimburse loan proceeds under a federally guaranteed student loan program as required by law or to pay or reimburse proceeds received by the school prior to closure in excess of tuition and other costs.
4. There was a material failure to comply with the Act or this Division within 30 days before the school closed or, if the material failure began earlier than 30 days prior to closure, the period determined by the Bureau.
5. An inability after diligent efforts to prosecute, prove, and collect on a judgment against the institution for a violation of the Act.

### 05.01 Distance Instruction Policy and Procedure

Distance education does not require the physical presence of students and faculty at the same location but provides for interaction between students and faculty by means as telecommunication, correspondence, electronic and computer augmented educational services and postal service

(1) Educational programs offered through distance education are appropriate for delivery through distance education methods;

1. The American university for science and technology assures that all degree programs are within the range of self-monitoring and self-pacing to cover subjects that need the minimum or no one-on-one training at all.
  - i. School of business and technology management offers bachelor's, master and doctoral degree programs at concentrations that does not require one on one training or hands on practice.
  - ii. School of Education offers only post graduate degree programs in areas of concentration that are general in nature and aim to polish teacher's abilities and prepares them to take over administrative and leadership positions at the field of basic and postsecondary education as well as leadership of technology education.
  - iii. School of Social and Behavioral Science offers post graduate degree programs to professionals who have received formal training and already licensed to practice. The only undergraduate offered is in general psychology.
  - iv. School of Engineering does not accept fresh high school graduates but only offers bachelor's degree programs to associate engineers who have completed an associate engineering degree program and received all the required one-on-one and hands-on engineering technology training. Those associate engineers are an appropriate ground to start from towards a graduation with all the required academic engineering knowledge, added to the previously obtained training and experience to end with a successfully graduated engineer, ready for the work market and safely practices the profession

(2) Assessment of each student, prior to admission, in order to determine whether he/she has the skills and competencies to succeed in a distance education environment.

1. All Applicants must complete and submit to the university a pre-admission questionnaire that will assess student's willingness and ability to complete the program and that he/she meets the technology requirements, technology comfort level, dedicated learning time and schedule; and learning style.

2. All undergraduate degree programs applicants are required to proof ability
    - i. TOEFL exam pass level is required to proof English language fluency
    - ii. Show last obtained transcript with concentration on related subjects
      1. English language, mathematics and arts proficiency for those applicants to the school of Business and technology management
      2. English language art and proficiency for applicants to Psychology
      3. English language and mathematics and computer driving proficiency for applicants to computer science
      4. Associate degree at field of engineering concentration and proof of hand on training for applicants to engineering programs.
  3. All postgraduate degree applicants are required to submit a transcript at the same field of concentration from an accredited or state approved school showing GPA not less than 2.5 out of 4
- (3) Insurance that the materials and programs are current, well organized, designed by faculty competent in distance education techniques and delivered using readily available, reliable technology;
1. The American University for Science and Technology maintains a comprehensive database application to manage a listing of all offered degrees' subjects and each department chairman carries out the responsibility of updating textbook listing to assure currency of the textbook that is required not to be more than two years old unless the specific reference is the latest on the subject.
  2. Listing is very well organized and managed by department chairman in coordination with department's professors and associate professors.
  3. If a staff member creates a textbook or a reference on the subject, it is published through an official publisher and pushed to the market in order to be available to our students as well as the community.
  4. Subjects are applied utilizing state of art methodologies including video lectures library, online views of open books, e-books; and video conferencing
- (4) Meaningful interaction with faculty who are qualified to teach using distance education methods;
1. Faculty staff members are academically qualified with enough background implementing distance learning methodologies.
  2. The American University for Science and Technology procures and implements state of art internet communication methods to assure excellent direct contact between faculty and students.
  3. All students are assigned email address under the domain name of the university and are arranged in groups related to degrees and subjects to simplify invitation to online lectures and conferences as well as webinars.

4. Bidirectional contact is available to students and faculty through email or messaging system as well as regularly held video conferences.
- (5) Maintaining clear standards for satisfactory academic progress;
1. Enrolled students are classified into groups, and assigned to a faculty mentor per group for each subject.
  2. Each faculty mentor directly communicates with his assigned students and represents the university at all academic and administrative aspects related to his subject.
  3. Every subject curriculum includes a number of assignments to be completed within a given time frame each.
  4. Each completed assignments is reviewed and scored at the same or next business day of submission, and reported to subject's professor who audit the scoring, issue a letter grade and submit the result to the chief academic officer who approves the grade and refer the document to the registrar in order to response to the student.
  5. Faculty mentor discusses the results of assignments with his/her group of students during the very next conference after last submitted and scored submission on the current assignment.
  6. At end of subject's course work, students are individually given the choice either to submit a comprehensive report on the subject for review scoring and grading or to set for three hours monitored exam.
  7. Monitored exams are held at school's premises or in student's respected areas or countries of residence after coordination to assign a monitor, who may be a faculty mentor at student's area/country or an assigned monitor from school's alumni.
  8. All answers must be submitted to the subject's assigned mentor in a secured envelop without any access from the monitor whose job is only to monitor the exam and assure that it is done fairly and within the preset three hours' time limit.
  9. Comprehensive reports minimum pass score is 75% while monitored exams are treated traditionally.
- (6) Timely complete student evaluations of learning outcomes by duly qualified faculty, which are appropriate for use with the distance education methods used, and evaluated by duly qualified faculty.
1. Qualified faculty review and score student's submitted assignments, comprehensive reports or monitored exam answers immediately at the same or next business day of submission.
  2. Scores are submitted to subject's professor for review and grading
  3. Scores and grades are reported to Dean/CAO for approval and submission to registrar for insertion to student's academic historical record

4. Graduation projects, thesis and dissertations are reviewed by a formed committee on the subject and reported to professor then to CAO
5. Elapse days from submission to response back to student with results must be in a period of time that does not exceed ten business days from the date of submission.

(7) Employment of a sufficient number of faculties to assure that

- a. The institution's response to, or evaluation of, each student lesson is returned to the student within 10 days after the lesson is received by the institution;
- b. The institution's response to, or evaluation of, each student project or dissertation is returned to the student within the time disclosed in the catalog; and
- c. The American University for Science and Technology Maintains a computerized record of the dates on which lessons, projects, and dissertations were received and responses were returned to each student.

### **05.02 - Specific Provisions for Instruction Not in Real Time**

(A) The American University for Science Technology as a provider of distance educational programs where the instruction is not offered in real time transmits the first lesson and any materials to any student within seven days after the institution accepts the student for admission, receipt of student's signed enrollment agreement and receipt of student's first payment.

(b) The student has the right to cancel his/her enrollment agreement and receive a full refund before the first lesson and receipt of materials, if any.

- Cancellation is effective on the date written notice of cancellation is sent to the university.
- The American University for Science and Technology shall make the refund pursuant to rules and as described in the signed enrollment agreement.
- If the student has received his/her first lesson and materials before an effective cancellation notice was received at the registrar's office, the American University for Science and Technology shall make a refund within 45 days after the student's return of the materials.

(c) The American University for Science and Technology shall transmit all of the lessons and other materials to the student if the student:

- Has fully paid for the educational program; and
- After having received the first lesson and initial materials, requests in writing that all of the material be sent.

(d) If The American University for Science and Technology transmits the balance of the material as the student requests, the institution shall remain obligated to provide the other educational services it agreed to provide, such as responses to student inquiries, student and faculty interaction, and evaluation and comment on lessons submitted by the student, but shall not be obligated to pay any refund after all of the lessons and material are transmitted.

## 06 - RECORDKEEPING AND RECORDS' RETENTION POLICY

### 06.01 - RECORDKEEPING:

- (1) The American University for Science and Technology maintains a safely secured computerized database system that includes all students' financial and academic data in a controlled environment following the maximum safety and confidentiality data mining methods.
  - a. Secured storage area is assigned in the network dedicated server
  - b. Access to data is secured and maintained with a sophisticated access control mechanism
  - c. Regularly generated backup files are saved separately in a fire proof secured area
- (2) Financial and Academic documents are filed in separate charts while copies of financial records are filed together with Hard copies of academic documents in a the unified record filing system that is maintained in parallel with the paperless computerized archive.
- (3) The American University for Science and Technology adapts unit file linked references filing system that issues a serial number to each student at his/her first enrollment and considers this issued number as the unit file number and the unique reference link for this particular student's documents.
- (4) Any document related to the same student carries the same reference link number as the main identifier, even if a local serial identifier is issued to any activity record.
- (5) All records related to the same person are filed in the same chart following in chart partitioned organization filing method that makes a section for personal data, another for financial, a third for administrative and the main section for academic documents.
- (6) If the same person returns for another degree program, a new serial and degree code are assigned and an out-guide is created and inserted at the filing location related to the new serial number with a pointer to the main reference link number to assure double referencing.
- (7) Actual academic documents are chronologically filed in the same chart separated according to degree program, while financial and administrative documents are filed in a straight forward chronological filing method.

- (8) All hard copy records are securely maintained and filed in an access controlled area to assure confidentiality of students' personal, financial and academic information.
- (9) Both of paperless filing server and paper records filing archive are located at the same location of the university at 18345 Ventura Boulevard. Suite 210, Tarzana, CA 91356.

#### **06.02 – RECORDS' RETENTION**

- (1) Records are retained in the active filing area for 50 years from date of enrollment and subsequently transferred to a fireproof and safe accessible warehouse
  - a. Transcripts as well as all other academic data files and hardcopies are permanent and may not be destroyed
  - b. Records transfer to warehouse is only a space saving process, and is not a transfer to an inactive filing,
  - c. All records either in the active files or safe accessible warehouse are maintained in a method to keep them all secured, fire protected and retrievable

## **07 - ACADEMIC SUPPORT SERVICES**

### **07.01 - AUSTC LIBRARY (ELECTRONIC EDUCATION RESOURCE CENTER)**

The Electronic Education Resources Service (ELRS) assists undergraduate and graduate Students, as well as, faculty mentors and University staff in their research activities. The ELRS provides the following library services.

#### Online Courseware

This collaborative service in coordination with MIT provides an access to a wide range of knowledge classified to majors and schools of study. This service is provided to all students, faculty and guests absolutely free of charge. Users may access the services from AUSTC website to browse a listing leads to a rich source of lectures, discussions, guidance and exams in formats of TEXT, HTML, PDF in addition to Media records of lectures as audio/video or audio only. The audio/video provides an actual recording of lectures and discussions on the subject that allows actual attendance and ability to control and repeat the lecture up to full understanding which is a step ahead of actual attendance that only provides a onetime chance of living attendance.

#### Congress Library (the Online Books)

This service is a very handy source of knowledge that provides an access to online books, where student, researcher, faculty or guest may browse an index and select a major of concern to display an up to date listing of available books and information resources. Users may browse or download the subject of concern absolutely free of charge.

#### National Academies Press

This is a major source of knowledge that provides an extensive variety of textbooks, articles, research papers, and literatures. User may select a major topic to visit a very well managed list of materials. Users may read the selected book online, order a hardcopy and pay for purchase right from AUSTC website, or just pay a very little value to download a DPF format of the same book to be a valuable EBook reference on user's desktop or laptop.

#### Internet Library

This service is available to public, and AUSTC provides it as a link to allow students, researchers, faculty and guests get an access to the valuable source of knowledge which is highly appreciated as a very handy tool and source of supporting knowledge. Information is classified by subject to simplify searching and obtainment of knowledge from its main source.

### **07.02 - STUDENT AND ALUMNI SERVICES**

Student and Alumni Services supports Students in achieving their educational goals by introducing Students to AUSTC practices and procedures, monitoring Students' progress to insure studies are continuing and assisting Students with non-academic concerns. Once a Student graduates from AUSTC, Student and Alumni Services will offer continued support through the AUSTC Alumni Service which provides Alumni resources, and allows Alumni to share news, published works, promotions and wisdom with current AUSTC Students.

**07.03 - ACADEMIC ADVISOR**

An academic advisor is assigned to guide the Student through the chosen program of study. The academic advisor approves all course requests to ensure that courses taken will meet the degree program requirements. Students should contact their academic advisor about academic questions related to the degree program.

**07.04 - FACULTY MENTOR**

Each enrolled student is assigned a faculty mentor for each course at THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY. The name of mentor and the mentor's contact information is on the Course Registration Information (CRI), sent to student via e-mail from the Registrar. Students are required to contact their faculty mentors any time they may have questions about course assignments, course concepts, or related information. The preferred way of contacting mentors is via the AUSTC email address assigned to each mentor and included in (CRI). Students may also choose to contact mentors via phone.

**07.05 - STEPS TO EARNING YOUR DEGREE**

The University assigns a faculty mentor for each course. Once tuition has been paid, accounting notifies the registrar to issue the course and to send an email to Student giving the course details and syllabus. Students may not post an assignment to AUSTC prior to the course start date. Students are responsible for purchasing their own textbooks either as a bulk package contains all textbooks or gradually while completing requirements. In order to simplify textbook purchasing, AUSTC coordinated with MBS direct and established a virtual book store that provides textbooks using subject reference, with availability of used books that makes book purchasing less costly. An additional service is provided to international students Due to the fact that of having difficulties finding textbooks in their respected countries, AIUC in coordination with MBS Direct sends each international student a package includes all textbooks and materials during enrollment process and after payment of costs.

Additional instructions, communications, questions, and answers are handled personally between the Student and faculty mentor by class discussion forums, AUSTC's messaging system, email, telephone, or by fax. As the course progresses, the Student incrementally submits assignments to the faculty mentor for evaluation and feedback.

The focus of active self-education is to encourage Students to incorporate the course knowledge into their personal situations using faculty mentors as resources and facilitators in the process of education. Students demonstrate mastery of the course material and its personal relevance by completing assignments, term papers, examinations, or participating in class discussion forums as required. Upon completion of the course requirements, the Student receives a course grade.

When all academic, financial, and administrative requirements are completed, the degree is conferred. Graduation ceremonies are held in Los Angeles, California; Students and guests are invited to attend.

**07.06 – PROGRAM AND COURSE START DATE**

The program start date is the start date of the first course for the Student's program. Courses begin the first of each month. Once the 16 week course term has begun, a Student can only add/drop courses within the first 7 days of the course term. After the allowed add/drop period, a Student cannot begin a new course until the start of the next 16-week term. Students may request their next term course at any time during their current term (up to the 21st day of the last month of the current term). The course outline / syllabus will be available on the Student's subject package as soon as the course is issued. However, course work cannot be submitted until the course start date.

**07.07 - COURSE LENGTH AND COMPLETION**

Courses are to be completed within a 16-week term. Students may complete the course early with the mentor's approval and begin another course before the 16-week term is complete.

If a course is not completed within the 16-week term, and the mentor does not post a final grade within 5 days of the course end date, an Incomplete will automatically be issued. If an Incomplete is issued, the Student must complete the course and a final grade must be posted within the next 25 days.

If the mentor posts no final grade, an "F" will automatically be issued.

An Incomplete grade does not extend the course end date.

## **08 - ACADEMIC POLICES**

### **08.01 - ENROLLMENT**

A Student is expected to maintain enrollment until the program is completed. Enrollment in a course means that the Student has requested and made payment arrangements for his/her next course, and the course has been issued with the course starting on the next qualifying start date of the new course term. See SECTION 04.05 for information on Breaks and SECTION 04.06 for information on Leave of Absence.

Students must be current in their financial obligations to the University in order for a course request to be processed. Students who are delinquent in payments cannot receive accounting approval for their next course. Failure to maintain enrollment will result in dismissal of the Student.

Students utilizing tuition assistance programs through their employers must ensure timely receipt of necessary forms and funds in order to maintain active enrollment in their AUSTC studies.

### **08.02 - BREAKS**

A Student may take a "break" between course terms (a single "break" is defined as a period of 30 days between the ending of a course and the start of the next course). Up to three breaks (i.e., 90 days) are allowed within a Student's individual three-term cycle. After a break, Students will continue with their degree program and will restart their program on a new course term cycle.

If a break is longer than 90 days, the Student will be withdrawn. When resuming studies, after a withdrawal, the Student will need to re-apply and be subject to the terms and conditions at the time of restart.

### **08.03 - LEAVE OF ABSENCE**

Students may take one 30-day Leave of Absence per 16-week term. The Request for a Leave of Absence must be submitted through the Course Review section of the Students' website (Request Leave TAB), and include sufficient information on the reason for the leave (maximum of 250 characters). A Leave of Absence will not be granted in the final month of a course term, except in emergency situations approved by the department chair. Taking a leave of absence while enrolled in a course term WILL NOT extend the course end date; however it will prevent the Student from being dismissed for lack of progress because there has been no instructional activity. Students may not submit coursework during a leave of absence.

### **08.04 - Students in Active Military**

MLOA - A Military Leave of Absence (MLOA) is available, with advisor approval, to Students who are deployed by the United States military and whose specific critical assignments will not permit them to continue their AUSTC studies for a period of time. A copy of the Student's military orders, a letter from his/her commanding officer, or other documentation will be required to support the request for military leave.

If the MLOA is for more than 30 days, the Student must be withdrawn from the course.

Students on an MLOA will have access to their Student site except the Student will not have the ability to upload assignments and will not have access to the databases. When they return from their critical military duty, the Student will re-enroll and be reissued the course(s), with the same faculty mentor if available. Students on military leave return to their studies without financial penalty.

### **08.05 - ATTENDANCE REQUIREMENTS / INSTRUCTIONAL ACTIVITIES**

Because the University offers courses through distance education, it does not require formal, on-campus or classroom attendance and therefore does not have a physical residence requirement. The Student is required to enroll in courses and make progress towards completing the degree requirements in order to maintain active status.

Students are expected to be involved in a minimum of one scheduled instructional activity per week. To meet this expectation, Students should make contact with the faculty mentor on a weekly basis through one of the following methods:

- Posting of an assignment (e.g., paper, project, etc.) in the Course Work area of the Student's course website
- Posting of an assignment to share with the faculty mentor and other Students in the course website (e.g., a review of a book or article, a proposal for a research study, a presentation in the form of a PowerPoint presentation file, reporting on participation in a research study, etc.).
- Participation in a threaded discussion in the course website (e.g., commenting on a discussion question posted by the faculty mentor, providing feedback to another Student, etc.).
- Viewing instructional materials (e.g., a PowerPoint presentation prepared by the faculty mentor, a streaming audio or video presentation, etc.).

Students must use the AUSTC messaging system to contact faculty mentors. Students who fail to make contact within the time period of one month may be withdrawn from the course by AUSTC.

#### **Military Students:**

Military Students may have special circumstances that inhibit their ability to academically participate on a weekly basis. Such Students should contact their faculty mentor, through AUSTC's messaging system, to establish a schedule for submitting their coursework. The Student should also notify Student Affairs ( and their academic advisor so that AUSTC can provide additional support, as needed, for the Student to complete his/her academic program.

### **08.06 - ACADEMIC INTEGRITY**

All assignments, exams, term papers, and other projects submitted to faculty mentors must be the Student's own work. Faculty may submit coursework to Third party for originality evaluation. The submission of another person's work represented as that of the Student's without properly citing the source of the work will be considered plagiarism. To avoid plagiarism, student should not "copy and paste" into any assignments without using quotation marks and citing in APA format the source of the material.

The faculty mentor has the prerogative to challenge a Student's work, and to ask a Student to

resubmit an assignment or to retake an exam. Students may be asked to have a proctor present when they take an exam. Faculty mentors have the academic freedom to reject questionable work and not assign a grade to the corresponding assignment. When the first incident of plagiarism is discovered, faculty mentors may assign an unsatisfactory grade for the assignment or for the entire course.

The first incident of plagiarism will result in a formal warning. AUSTC may conduct an investigation to review past assignments submitted by the Student in this and prior courses. AUSTC reserves the right to change past grades awarded by the University if plagiarism is subsequently found on assignments for such courses. If additional incidences of plagiarism are found, the Student will be informed of the cases and Academic Standards will review the situation.

Any further incident of plagiarism detected by a faculty mentor will result in the academic dismissal of the Student.

### **08.07 - STUDENT INTERACTION**

There are many ways for Students, AUSTC staff, and faculty mentors to interact with each other:

- Bulletin Board – General comments, questions or concerns may be posted on the Bulletin Board by the general public, Students, faculty mentors and AUSTC staff.
- Discussion Forum – Ongoing general topic conversations may be viewed and commented on by Students, faculty mentors and AUSTC staff.
- Course Forum – The course forum is a "course specific" discussion area where the course faculty mentor and fellow classmates post comments related to the specific course topics.
- Message Center – This communication system is for all electronic messages between Students, faculty mentors, and University staff. Primarily established as an online application and modified to be through cellular messaging which is much convenient to staff and students.
- Student List – Directory listing of all AUSTC Students who have chosen to display their information available to Students, faculty mentors and AUSTC staff.
- Mentor List -- Directory listing of all current faculty mentors available to Students, faculty mentors and AUSTC staff.
- Staff Directory – Directory listing of the AUSTC staff available to Students, faculty mentors and AUSTC staff.

**08.08 - STUDENT CONTACT INFORMATION**

Students must report any changes to their contact information, including address, telephone numbers, or email address. Name changes must be documented and coordinated with the Registrar in writing.

AUSTC will not release any Student information except for the Student's name, degree earned and date of graduation, without a written authorization from the Student specifying the information to be provided and the approved recipient(s).

Note: A Student who does not want his or her name, degree or other information used in the University newsletter, graduation program or other publications, must notify the Registrar in writing.

**08.09 - SEMESTER CREDITS**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY awards credit earned based on semester credits. Most courses carry 4 semester credits. It is expected that a Student taking a 4-credit course will need to spend approximately 9-12 hours per week on education experiences such as reading and study, research, faculty mentor-Student interaction, demonstration of defined education outcomes through assignments, papers and projects; examinations; class discussions; and assessment of performance.

**08.10 - TEXTBOOKS**

Appropriate textbooks, course syllabi, and course outlines are used for each course. Required texts are indicated in the course outline and on the study plan by title and ISBN. Students are responsible for purchasing textbooks. AUSTC's online textbook supplier is MBS Direct. A direct link is available on the AUSTC website to the textbook provider source at <http://www.mbsdirect.net>. Students only need to search by course code to order the correct book and edition. MBS Direct also offers previously-used books for some texts. MBS Direct provides international shipping and expedited shipping within 48 hours. Students having difficulty finding needed textbooks may seek university's assistance.

**08.11 - COURSE MATERIALS TO INTERNATIONAL STUDENTS**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY adapts a policy of bulk textbook and materials order and supply to international students in coordination with a selected bookstore. International students may order their textbooks directly from the bookstore, or seek the university's assistance if they face any difficulty making the order.

If a student selects textbooks' purchase assistance, he/she is obligated to pay full costs of textbook purchase and services in advance after receiving total cost's determination.

**08.12 – FREE REDISTRIBUTION OF DONATED TEXTBOOKS AND MATERIALS**

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY has a charitable used book collection and redistribution program where students donate their used materials and the university gives them away free of charge to enrolled students until all distributed. Students may pick up the free materials or order them and pay shipping costs only as paid to courier.

**08.13 - INTERNATIONAL STUDENTS STUDYING IN THE UNITED STATES**

The American University for Science and Technology recognizes that distance Students may reside in locations that may not have an easy access to educational resources. Applied distance education methods assists international students to access unlimited libraries and life or video captured lectures on all subjects through our website [www.austc.us](http://www.austc.us).

The American University for Science and Technology is not currently authorized to issue I-20 documents. International Students with a visa status other than F-1, as well as those F-1 visa Students attending and residents at another university approved as a study site for students who are not United States citizens, may be eligible for study at AUSTC.

An enrolled international student who is visiting the United States, is invited and welcomed to meet his/her academic advisors and department chair, but travel is not required.

The American University for Science and Technology does not require on-campus or classroom regular attendance and, therefore, does not have a physical residence requirement. The institution does not have housing facilities.

**08.14 - GRADING SYSTEM**

AUSTC awards letter grades in recognition of academic performance of each course. Grade points are used to calculate G.P.A.

<b>A+</b>	4.00 grade points
<b>A</b>	<b>3.75</b> grade points
<b>B+</b>	3.50 grade points
<b>B</b>	3.00 grade points
<b>B-</b>	2.75 grade points
<b>C+</b>	2.50 grade points
<b>C</b>	Lowest graduate passing grade 2.00 grade points
<b>C-</b>	1.75 grade points
<b>D+</b>	(undergraduate only) 1.50 grade points
<b>D</b>	Lowest undergraduate passing grade 1.00 grade points
<b>D-</b>	(Undergraduate only) 0.50 grade points
<b>F</b>	Fail 0.00 grade points
<b>S</b>	<b>Satisfactory</b> indicates completion of a dissertation course or practicum course with academic work equivalent to a B grade or better. The grade does not contribute to the calculation of G.P.A
<b>U</b>	<b>Unsatisfactory</b> indicates completion of a dissertation course or practicum course with academic work equivalent to less than a B grade. A Student who receives a "U" may not be allowed to continue with the program. The grade does not contribute to the calculation of G.P.A.
<b>CX</b>	<b>Cancel</b> indicates cancellation of a course requested by the Student before the course start date.
<b>DR</b>	<b>Dropped</b> course during the add/drop period (first week of the course session).
<b>W</b>	<b>Withdrawal</b> from a course requested by the Student within the first 2 months of a course session. The Student's request to withdraw from a course must be sent by AUSTC's messaging system to his/her academic advisor. After the first 2 months of a course session, but before the course end date, a withdrawal may be granted only with a passing status in the course or the department chair's approval. A Student may not withdraw from a course after the faculty mentor has submitted a grade.
<b>I</b>	<b>Incomplete</b> indicates that a Student has not satisfied the requirements for a course by the end date; a grade of Incomplete is entered unless the faculty mentor posts a letter grade. Thirty (30) calendar days later, the "I" grade changes an "F" grade unless the faculty mentor has posted a letter grade.
<b>R</b>	<b>Retaken.</b> An "R" grade is indicated on the transcript when the course grade has been superseded by a later grade. Only the later grade will be used in computing the G.P.A.

**08.15 - WRITING SCORES**

In addition to a content letter grade, a numerical writing score (1-4) will be given on each assignment with substantial writing. These writing standards are defined in AUSTC's Writing Rubric.

**08.16 - DROP A COURSE**

Students may drop a course during the first week of the course session. The Student may replace the dropped course with another course (see drop-add fee in Financial Information). The replacement course must be completed in the same course session, i.e. the course start and end dates of the replacement course will be the same as those of the dropped course.

Students who notify their academic advisor of their request to drop a course after the first week of the course session but prior to the end of the 2nd month will receive a "W" (Withdrawal) grade for the incomplete course. Students who drop a course after completing two months of a course session will receive a letter grade, A through F, based on the work completed to date.

**08.17 - REPEATED COURSES**

Any course in which a letter grade was earned can only be repeated one time.

THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY considers a grade of "D" to be the minimum passing grade for undergraduate courses, although an overall GPA of 2.0 (or "C") is required for graduation. A grade of "C" is the minimum-passing grade for graduate courses, although an overall GPA of 3.0 ("B") or better is required for graduation. A Student has the option of repeating the course or enrolling in an alternate course of equal credit (if such an alternate is available) that will meet the degree program requirements. The Student's academic advisor must agree with the course request. Whether the course is repeated or an alternate course is taken, the Student will be required to pay tuition for the course and to complete all course requirements.

If a course is repeated, the original course grade will be changed to an "R" (retaken) and only the later grade will be used in computing the cumulative grade point average. If an alternate course is taken, the grade for both courses will appear on the Student's transcript and both grades will be used in computing the cumulative grade point average.

**08.18 - STUDENTS RIGHT TO APPEAL A GRADE**

A Student may appeal a course grade issued by a faculty mentor. The appeal must be made to the faculty mentor from whom the grade was received in writing and must be postmarked or emailed no later than 15 days after the Student received notification of the grade. If the appeal is denied, or if the faculty mentor does not respond within 15 days after receiving the appeal, the Student may appeal directly to the department chair within an additional 15-day period. The department chair will render a final decision on the grade within 15 days after receiving the Student's appeal.

**08.19 - SATISFACTORY ACADEMIC PROGRESS**

Students at THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY must maintain satisfactory academic progress toward completion of their degree program. Satisfactory academic progress will be evaluated for all AUSTC Students on a quarterly basis. Students are considered to be making satisfactory academic progress if they meet all of the following conditions:

- Maintain a cumulative grade point average sufficient to meet graduation requirements. Undergraduate Students must maintain at least a "C" average, or 2.0 GPA on a 4.0 scale. Graduate Students must maintain at least a "B" average, or 3.0 GPA on a 4.0 scale.
- Complete at least 67% of the total number of AUSTC credits attempted with a minimum passing grade.
- Complete the AUSTC degree program within the maximum allowed number of attempted credits. At AUSTC, this is defined as no more than 150% of the number of credits required to complete a degree program. For bachelor's degrees, Students may take a maximum of 180 semester credits. For master's degrees, Students may take a maximum of 60 semester credits. The maximum number of semester credits includes the number of semester credits accepted in transfer from other institutions (i.e., the number of semester credits that will be applied towards the degree) plus the number of semester credits attempted at AUSTC, including any leveling courses required for graduate Students.
- All AUSTC credits attempted will apply towards the Satisfactory Academic Progress measures. Attempted credits include those courses receiving grades (A-F, S/U), as well as repeated, "R", withdrawal, "W", incomplete, "I", and in-progress courses, "IP". Cancelled "CX" and dropped "DR" courses are not counted as attempted credits. Grades of "I" (incomplete), "IP" (in-progress), "W" (withdrawn), "F" (failing), and "U" (unsatisfactory) are not considered passing. "D" grades are also not considered passing for graduate Students.

**08.20 - PROBATION/DISMISSAL DUE TO LACK OF SATISFACTORY ACADEMIC PROGRESS**

Students found not making satisfactory academic progress will be placed on probation or dismissed according to the following set of events:

- The first time a Student is found not making satisfactory academic progress, he/she will be placed on "Probation-1" status. The reason(s) for probation will be noted in the Student's academic record. The Student will have until the next quarterly review of Satisfactory Academic Progress to rectify the situation.
- If the Student is found not meeting satisfactory academic progress requirements in the next quarterly review, but the Student has made progress towards achieving the minimum satisfactory academic progress requirements, the Student may be placed on "Probation-2" status. The reason(s) for probation will be noted in the Student's academic record. The Student will have until the next quarterly review of Satisfactory Academic Progress to rectify the situation.
- The Student will be dismissed if one of the following conditions exists: the Student is found not making satisfactory academic progress in the next quarterly review after "Probation-1" status is given; OR the Student is found not making satisfactory academic progress in the next quarterly review after "Probation-2" status is given. The reason(s) for unsatisfactory progress will be noted in the Student's academic record. The Student's degree program status will be indicated as "Dismissed-SAP".

Students will receive written notification when they are placed on "Probation-1", "Probation-2", or "Dismissed-SAP" status. This notification will be sent via AUSTC's messaging system or other means that can be documented and/or verified of attempt to notify.

When mitigating circumstances are involved in a Student's failure to maintain satisfactory academic progress, the Student may appeal the decision that he or she has not complied with the academic progress requirements. Examples of mitigating circumstances may include documented serious illness or severe injury, or death of an immediate family member. To appeal, the Student must submit a letter to the Chief Academic Officer within 30 days after the Student received notification of the probation or dismissal. The letter must include the reason(s) why satisfactory academic progress is not being made and any documentation that supports the rationale for the appeal. Appeals may be accepted without provision, or they may be accepted provisionally, entailing a probationary period in which the Student must earn a given number of credits and/or earn a specified GPA. Appeals may also be denied. It is the Student's responsibility to initiate any appeal.

Any Student who fails to maintain satisfactory academic progress may appeal the probation or dismissal actions regardless if he is receiving financial aid or not. The appeal must be sent to the Chief Academic Officer in writing, and must be postmarked or emailed no later than 30 days after the Student was notified of the academic probation or dismissal.

**08.21 - ACADEMIC PROBATION**

A Student whose coursework does not adhere to academic integrity will be placed on probation status; that includes notification to the Student that may be made by mail, fax, email, AUSTC's messaging system, in conversation with the Student in person or by telephone. A complete record of the notification must be made and inserted in the Student's file.

**08.22 - ACADEMIC DISMISSAL**

A Student may be dismissed from the University for:

- Failure to maintain continuous enrollment;
- Failure to keep current with financial obligations (causing non-continuous enrollment);
- Failure of submitted coursework to adhere to academic integrity in a subsequent offense after having been issued a formal warning about plagiarism
- Falsification of any work or records submitted for review or academic credit;
- Sexual misconduct; or
- Other unacceptable behavior or violation of University policy
- Unsatisfactory grades that are not included in the GPA calculation, including "U" grade in a dissertation course or practicum.

Students may be placed on probation or immediately dismissed for violation of ethical standards in their studies, examinations, presentation of papers, coursework and dissertations.

The notice of dismissal will be sent by email and mail. A copy will be kept in the Student's file.

**08.23 - APPEAL OF ACADEMIC PROBATION OR ACADEMIC DISMISSAL**

Students who have been dismissed stemming from failure to keep current with financial obligations to the University must first pay the outstanding balance due.

A Student has the right to appeal academic probation or dismissal to the Chief Academic Officer. The appeal must be in writing and must be postmarked or emailed no later than 30 days after the Student received notification of the academic probation or dismissal. After receiving the Student's appeal request, Academic Standards will review the academic probation or dismissal, and will make a recommendation regarding the appeal to the Chief Academic Officer. Within 15 days of receiving the Student's appeal, the Chief Academic Officer shall render a decision. The Chief Academic Officer's decision will be final.

**08.24 - STUDENT CONDUCT**

The University has established the following Code of Conduct for Students and graduates as a body and as individuals that they should:

1. Reflect the integrity of the University, its programs and all associated with the University in behavior, activities and actions.
2. Strive to fulfill professional responsibilities with honesty and integrity.
3. Support the principle of due process and equal treatment under the law.
4. Obey laws.
5. Adhere to ethical academic practices in their studies, examinations, and presentation of papers, theses and dissertations.
6. Maintain the standards and seek to improve the effectiveness of the profession through continuing professional and personal development.
7. Honor all contracts until fulfillment or release.
8. Pursue appropriate means to correct those laws, policies and procedures that are not consistent with sound educational goals.

**08.25 - SEXUAL MISCONDUCT**

It is the policy of THE AMERICAN UNIVERSITY FOR SCIENCE AND TECHNOLOGY that sexual misconduct, including assault, harassment, or inappropriate behavior by Students, faculty mentors, or University staff shall not be condoned nor tolerated. Anyone who believes that he or she is the recipient of such behavior shall immediately contact the Chief Academic Officer or the President with a written account and details of the incident(s) so that an appropriate investigation can be made. All communications will be held in the strictest confidence and the constitutional rights of the individuals involved will be protected.

**08.26 - TRANSCRIPTS**

A complete set of the Student's records, including a transcript of grades, is kept in a permanent file. Transcript copies may be ordered from the Registrar at a cost of \$5 each. The University will not honor requests for transcripts unless requested in writing by Students who have fulfilled all financial obligations to the University.

**08.27 - JOB PLACEMENT ASSISTANCE**

The University does not provide or guarantee job placement to Students upon program/course completion or upon graduation.

**08.28 – AUSTC DEGREES' ACCEPTANCE AT JOB MARKET**

Some employers including the Government agencies at the state of California prefer graduates of regionally or nationally accredited universities, while many other employers do not care about degree accreditation as long as the facility is state approved as long as attended educational and training programs meet job requirements and the graduate has an enough ability and skills to fulfill the specific job requirements.

**08.29 - LICENSING AND CREDENTIALS**

Most professional organizations, societies, states and licensing jurisdictions have specific requirements for licensure, membership or certification. If licensing or credentialing is a major objective, Students are advised to first check the standards of their particular states, school districts, professional associations and agencies for specific license requirements. The University does not represent that its courses or programs of study meet any licensing requirements.

## 09 - Financial Aid Policies and Procedures

### 09.01 - Introduction

The American University for Science and Technology is a (501)(C)(3) Public Charity Organization that does not receive Title IV aid funding or MGI Bill benefits while applies Self-Funded Financial Aid programs stem from a belief that student aid services should facilitate and foster the successful academic participation of financially needy students

As part of its commitment to help students have a positive university experience, the university provides this information to help students better understand their relationship with AUSTC self-funded financial aid.

It is the goal of the Financial Aid Office to provide students with the most current policy information affecting their financial aid while at The American University for Science and Technology. Accordingly, as regulations change or university practices evolve, this policy will be updated.

The American University for Science and Technology is approved by the State of California Bureau for Private Postsecondary Education (BPPE) as a post-secondary degree granting facility offers Bachelors, Masters and Doctoral degrees from schools of Business and Technology Management, Engineering, Science, Education and Behavioral and Social Sciences.

### 09.02 - Minimum Academic Year Definition

Academic programs offered at The American University for Science and Technology are calculated in units and measured by semesters, even though students may speed up through early completion and continue with additional subjects either to catch previously missed or cut future requirements towards graduation.

### 09.03 – Financial Aid Programs Offered

In addition to AUSTC's commitment to apply low cost tuition which is usually about 50% of regularly applied at for profit post-secondary facilities, AUSTC develops customized financial-aid packages based on student's qualifications, financial need, and the availability of allocated funds. Every student package may include any or a combination of the following major financial aid programs:

- **Gift aid** does not require repayment and is divided into three categories:
  - **Grants** (which recognize financial need)
  - **Scholarship and Awards** (which recognize academic merit, special talents, or other achievements)
  - **Interest free payment plan**

- **Loans** must be repaid (usually after graduation) and can come from private lenders and university sources when allocated funds are available.
- **Work-study** allows students to earn money for college expenses while gaining valuable skills - often in their intended field.

#### **09.04 - Ability to Benefit (ATB)**

Any student who has not graduated from high school or received a GED and would like to join AUSTC undergraduate degree programs must demonstrate an ability to benefit from university enrollment. The American University for Science and Technology's Assessment Center will guide students through the process which must be completed before the student can be admitted.

#### **09.05 - Packaging Policy**

When a student applies for financial aid, the funds will usually come from more than one account allocation in AUSTC budget where some of them are donations and controlled funds and others are planned financial aid policy self-funded allocations. This combination of allocation resources is referred to as packaging. All financial aid attempts are always subject to availability of budget allocated funds.

#### **09.06 - Available Financial Aid Sources**

Every institution has the option of which kind of financial aid programs to offer to its students. The American University for Science and Technology is currently follows self-funded allocations.

- Unrestricted Community Charitable Donations' Fund (UCCDF) which is a community donation without donors' conditions to be spent in a specific activity, and are allocated to support students' financial aid.
- Restricted Community Charitable Donations' Fund (RCCDF) which is a community donation restricted by donors to be spent for students' financial aid.
- AUSTC Charitable Commitment, which is a case by case award of budget funded scholarships, awards or waiver.
- Work-Study Program (WS)
- Private Lenders' Loans

#### **09.07 - Definition of Financial Need**

Student financial aid is packaged (given financial aid from several of the programs for which a student is eligible) based on the student's financial need. Financial need is determined by a student's Expected Family Contribution (EFC) as compared to The American University for Science and Technology's Cost of Attendance (COA).

AUSTC defines the neediest students as those whose EFC = \$0.

### **09.08.01 - Resources Included in Award Packaging**

Financial aid packages are awarded as 25% up to 75% of tuition after deduction of credit transfer if any, and are funded from the following resources:

1. Restricted Community Charitable Donations' Fund (RCCDF) while allocated funds are available and are granted on first come first served.
2. Unrestricted Community Charitable Donations' Fund (UCCDF) while allocated funds are available and are granted on first come first served.
3. AUSTC Self-Funded Institutional Aid which is awarded to those students who qualify for the financial assistance while allocated RCCDF and UCCDF allocations are given away to other qualified students as described above.

The above listed resources may be utilized together as an award packing to serve the largest possible number of qualified students.

### **09.08.02 - Resources Not Included in Award Packaging**

The American University for Science and Technology's financial aid packaging does not include loans (student, parent, or alternative). Information about our loan program is provided upon request.

The American University for Science and Technology is a 4-year or more postsecondary facility; students should note that loans are limited to lenders' conditions and amounts. Cost of attendance as shown on student's enrollment agreement is the only considered value for loan amount purposes.

The American University for Science and Technology does not include Work-Study Program (WS) in the initial financial aid package. Eligible students are awarded WS funds on a first come, first served basis. The American University for Science and Technology allocates a limited amount of this type of fund.

The American University for Science and Technology does not include the Academic Competitiveness Grant (ACG) in the student's initial financial aid package. This is awarded to students on an individual basis after reviewing their eligibility.

## **09.09 - Verification Policy**

### **09.09.01 - Verification Process**

Each year AUSTC financial aid office designates financial aid recipients whose documentation will be verified. The American University for Science and Technology financial aid verification committee verifies every identified file as part of its own verification process. Financial aid recipients' files are verified all year using the same format of verification worksheet designed by The Department of Education.

### **09.09.02 - Verification Documentation**

A dependent student is required to provide copies of the student's signed Federal parent's tax return as well as the student's signed Federal personal tax return. An independent student is required to provide the student's signed Federal personal tax return and that of the student's spouse, if the student is married. If prepared by a tax preparer the student and/or parents must sign the tax document.

The American University for Science and Technology, when possible, will attempt to gather income information from the parents of dependent students who reside out-of-the-country.

### **09.09.03 - Secondary Verification**

The American University for Science and Technology uses a secondary verification process specific to the campus. For example, the University verifies all students who answer yes to the question "Are you a ward of the court?" If a student is independent only because they answered yes to this question, then the University will require documentation to support this.

### **09.09.04 - Eligibility Changes Resulting from Verification**

If the verification process results in a change of a student's financial aid eligibility, The American University for Science and Technology repackages the student for financial aid based on their new eligibility status and notifies the student with a new award letter.

Corrections are made in the Local Financial Aid System and sent a hard copy to Registrar's office and Central Records Area for processing and documentation. Students are notified of corrections through receipt of an acknowledgment form from student's financial aid office.

## **09.10 - Eligibility Issues**

### **09.10.01 - Citizenship Documentation**

The American University for Science and Technology uses any acceptable documentation in the Federal and/or state laws for US citizens or residents.

### **09.10.02 - Conflicting Data**

If in the process of reviewing a student's financial aid file, The American University for Science and Technology's Financial Aid Office notices conflicting data, the conflict must be resolved before awarding can take place.

### **09.10.03 - Resolving Conflicting Data**

The process of resolving the conflicting data is for the Financial Aid Office to:

1. Send notification to students
2. Have a phone conversation with the student.
3. Request agency certification

### **09.10.04 - Timelines**

The American University for Science and Technology will not award a student financial- aid (including the Institutional Fee Waiver) until the student replies and the conflicting data is resolved. Additionally, if conflicting data turns up even after the first disbursement to a student, the conflicting data must be resolved before additional disbursements can be made.

### **09.11 - Deadlines**

#### **09.11.01 - Financial Aid Deadlines and Priority Dates**

The American University for Science and Technology publishes deadlines and priority dates for various programs in the Financial Aid Handbook, on the Web, and other public postings.

#### **09.11.02 - Late Documents**

The American University for Science and Technology does not accept documents that have passed a hard deadline. If there are extenuating circumstances, the student should talk to a Financial Aid officer and the decision is made on a case by case basis by the Financial Aid Program Manager.

### **09.12 – Student’s Rights and Responsibilities**

#### **09.12.01 - Rights**

Students at The American University for Science and Technology applying for, and receiving financial aid, have a right to the following:

1. Information on all financial assistance available.
2. Disclosure of application deadlines for each financial aid program, and for any supporting documentation.
3. Specific information regarding fees, tuition, and the refund policy for those who drop out of school (withdraw).
4. An explanation of how students are selected for receipt of financial aid, and how financial need is determined. This process includes a consideration of costs of tuition and fees, books and supplies, personal and miscellaneous expenses, etc., plus the student’s income and assets, parental contribution, other financial aid (such as scholarships) and so on.
5. Knowledge of what resources are considered in the calculation of student need.
6. Knowledge of how a financial aid package is determined.
7. An explanation of various programs awarded in the student’s financial aid package. If a student feels unfairly treated, a reconsideration of the award may be requested.
8. Knowledge of how The American University for Science and Technology determines whether students are making “satisfactory academic progress” and the consequences of not meeting this requirement.

### **09.12.02 - Responsibilities**

Students at The American University for Science and Technology applying for and receiving financial aid are responsible for the following:

1. Reviewing and considering all information about The American University for Science and Technology's academic programs before enrolling.
2. Completing all the application forms accurately and completely and submitting them to the right place on time. If this is not done, financial aid could be delayed. Since errors may cause misunderstanding and misrepresentation of information provided, errors must be corrected before any financial aid can be received. Intentional misreporting of information on application forms for federal financial aid is a violation of the law and is considered a criminal offense subject to penalties under the U.S. Criminal Code, and subjects the student's application to denial. Additionally, regulations require that all cases of suspected fraud emanating from misrepresentation, be reported to the Office of the Inspector General.
3. Promptly returning all additional documentation, verification, corrections and/or new information requested by either the Financial Aid Office or the agency or agencies to which an application was submitted.
4. Reading and understanding all forms that the student is asked to sign.
5. Notifying the loan holder (if the student has a loan) of changes in the name, address or school enrollment status.
6. Performing the work that is agreed upon in accepting a university work-study award.
7. Knowing and complying with the deadlines for application or reapplication for aid.
8. Repaying financial aid funds if it is determined that the student was ineligible to receive the funds.
9. Knowing that if a student obtains a loan to pay for an educational program, the student will be responsible to repay the full amount of the loan plus interest, less the amount of any refund to the lender, and if the student has received federal student financial aid funds, the student is entitled to a refund of the money not paid from federal student financial aid program funds.

### **09.13 – Self-Funded Institutional Fee Waiver**

The self-funded Institutional Fee Waiver Program is available to any California resident who meets the financial eligibility requirements or qualifies through another program. California state law pertaining to the Institutional fee waiver allows universities discretion in certain areas. These are The American University for Science and Technology's practices with regards to the Institutional fee waiver policies.

1. The university's Financial Aid Office considers the summer session a "trailer" for the academic year. If a student applies for Institutional fee waiver for the summer session of 2011, the student is in effect applying for financial aid for the 2010-2011 academic year, not the 2011-2012 academic year.
2. If a student wants to qualify for the Institutional fee waiver, the student must submit the institutional fee waiver application with the appropriate supporting documentation.

3. If The American University for Science and Technology Admissions enrolls a student without a social security number, the student may receive Institutional fee waiver as long as they are a California resident and otherwise qualify for the program.
4. If a student signs the Institutional fee waiver application and reports a registered domestic partnership, The American University for Science and Technology does not require additional documentation to verify the student's status.
5. If a student is independent only under the Institutional fee waiver application criteria, The American University for Science and Technology accepts the information on the signed application without requiring any additional documentation.
6. In order to qualify under for the Institutional fee waiver, The American University for Science and Technology accepts the following documentation:
  - a. TANF cash assistance – the student must provide a current or previous month copy of their benefits and a letter from the county confirming that the student receives assistance during the time of application.
  - b. SSI/SSP – the student must provide a current or previous month printout clearly stating their monthly benefits.
  - c. General Assistance – the student must provide a current or previous month printout from the county confirming that the student will receive assistance during the period of time for which the student is requesting financial aid. Evidence of the student receiving food stamps or Medi-Cal is not enough.
7. If a student requests an adjustment be made to the student's/family's income for the Institutional fee waiver then the student must request special condition consideration. Professional judgment is not used by The American University for Science and Technology for the Institutional fee waiver application alone. Any consideration will be in the context of a broader determination of a student's eligibility for all types of financial assistance.
8. If after verification is completed, it is discovered that the student is not eligible, then the Institutional fee waiver will be removed and the student will be responsible for all fees.
9. The American University for Science and Technology requires all eligible students to self-certify their information and does not collect any additional documents unless conflicting information presents itself upon receipt of a FAFSA.
10. The Institutional fee waiver is considered an award in the package of financial aid to cover the enrollment fees.
11. Students must provide documentation demonstrating eligibility for the Dependents of Law Enforcement or Fire Suppression Personnel Fee Waiver. The American University for Science and Technology requires a letter from the appropriate public agency indicating that the student is the surviving spouse, registered domestic partner or the child, natural or adopted, of a deceased person who met all of the requirements of Education Code Section 68120 (5.6.1).

The letter must be on agency letterhead and indicate for the deceased person, that:

- a. He or she was a resident of California;
- b. He or she was employed by a public agency;
- c. His or her principal duties consisted of active law enforcement service or active fire suppression and prevention;
- d. He or she was killed in the performance of active law enforcement or active fire suppression and prevention duties.

12. The American University for Science and Technology establishes all students' eligibility for the Institutional fee waiver program the same day the student's application is complete unless conflicting or incomplete information is provided. The last day to establish eligibility for the Institutional fee waiver for the fall, spring, and summer semesters is the last day of the summer semester.
13. The American University for Science and Technology will reimburse students for fees if the student establishes Institutional fee waiver eligibility after having paid the fees. Students have until the last day of the summer semester to request reimbursement for fall, spring and summer fees.

If The American University for Science and Technology determines that a student is eligible for the Institutional fee waiver program at the time of application, and later discovers that they are ineligible, AUSTC will pursue the repayment of fees.

## **09.14 - Satisfactory Academic Progress**

Regulations require that all financial aid recipients make satisfactory academic progress and remain in good academic standing. Academic progress is reviewed each semester, prior to the student's first disbursement for the following academic year. In addition, students who do not complete any units in the semester will be terminated from financial aid as soon as grades or withdrawals are available.

### **09.14.01 - Determining Enrollment Status:**

Prior to each disbursement, the Financial Aid Office will verify the number of units a student is enrolled in. Based on the verified unit enrollment, a determination is made as to whether the student is eligible for additional funds. For purposes of the satisfactory academic progress, units attempted mean the number of units the student is enrolled in at the time of the final disbursement for the semester.

In determining whether or not a student is making satisfactory academic progress, the student's enrollment status is defined as the number of units the student was enrolled in at the time of the final disbursement for the semester.

If the student is enrolled in 12 or more units when his or her final disbursement for the semester is made, the student is considered to be full-time.

If the student is enrolled in 9 to 11.5 units when his or her final disbursement for the semester is made, the student is considered to be 3/4 time.

If the student is enrolled in 6 to 8.5 units when his or her final disbursement for the semester is made, the student is considered to be 1/2 time.

If the student is enrolled in .5 to 5.5 units when his or her final disbursement for the semester is made, the cost of attendance will be adjusted and the student is responsible to complete all units enrolled.

Completed units means that credit was received for the units enrolled. Classes in which a student receives a grade of "U", "CX", "DR", "W", "I" or "R" will not be counted as completed classes for satisfactory academic progress, but will be counted as units attempted.

In all enrollment categories, the student is expected to maintain a 2.0 (C average) cumulative grade point average (GPA).

By the end of each semester, to be considered in making satisfactory progress toward the educational goal, students must complete the minimum number of units required for their enrollment status with a 2.0 GPA at the conclusion of each term, as indicated below:

<b>ENROLLMENT STATUS</b>	<b>UNIT COMPLETION REQUIREMENT</b>
Full-time (12 + units/semester)	9 units
$\frac{3}{4}$ time (9 to 11.5/semester)	8 units
$\frac{1}{2}$ time (6 to 8.5 units/semester)	6 units
Less than $\frac{1}{2}$ time (0.5 to 5.5 units/semester)	all units enrolled

Units earned from credit transfer are not counted for financial aid purposes.

### **09.14.02 - Maximum Time Length and 180 Unit Limitations:**

Regulations allow students to receive aid for 150% of the published length of an undergraduate program. The American University for Science and Technology publishes in its catalog that students can earn their Degree by completing the required credits in full. Students at The American University for Science and Technology, therefore, may receive aid for a maximum of 120 semester units (120 X 150%= 180 semester units). Once a student has attempted 120 semester units at The American University for Science and Technology (including accepted transfer credits), he/she is no longer eligible to receive financial aid.

A student may receive financial aid until a total of 180 semester units have been attempted, regardless of how much aid has been received. Up to 30 units of remedial coursework and all ESL courses will be deducted. A student who has been terminated from financial aid due to attempting over 180 units may appeal to the Financial Aid Advisory Committee, provided the student is eligible to enroll at The American University for Science and Technology.

A student is allowed to transfer up to 88 semester units to another postsecondary education if he decides to continue his degree program in a facility other than The American University for Science and Technology. It is the student's responsibility to monitor the number of units they take so that they do not make him/her-self ineligible for transfer to his/her preferred university.

### **09.14.03 - Repeated Course Work:**

Credits for repeated courses count only once as credits earned and only once in a student's GPA; however, these credits are counted as attempted credits for each repeated course and

also counts towards maximum time length limitations (120 semester units). The most recent grade for any repeated course is used in calculating GPA.

#### **09.14.04 - Non-Degree Course Work:**

The American University for Science and Technology non-degree courses are considered the same as credit courses for tuition, and for academic standing with the exception that the grades assigned for non-degree course work are not included in GPA calculations. Credits for non-degree course work are included in the calculation of the 75%-completion requirement and in the maximum limit of 120 credits attempted.

It is the student's responsibility to request transcripts from previously attended institutions, if the student chooses to apply any of those units toward the current educational objective. Upon the student's request, transcripts from post-secondary facilities that are state approved or regionally accredited will be evaluated for use toward the student's current educational objective. All units applicable toward the current education objective will be counted when calculating the maximum time frame for financial aid. All units attempted, although earned before the student was receiving financial aid, will be considered toward the maximum time frame.

#### **09.15 - Financial Aid Suspension and/or Termination:**

Students who have exceeded their maximum time frame, have not completed the required number of units, or have a cumulative grade point average less than 2.0, will be terminated from financial aid. Students who have been terminated because of insufficient units completed or a grade point average deficiency will not receive further financial aid until they have made up the deficiency or filed and received an approved reinstatement petition.

If a student has been attending The American University for Science and Technology without the benefit of financial aid, the student has been held to the regular university standards for good standing. Pursuant to Section 55756 of Title 5, California Code of Regulations, students on academic probation shall be subject to dismissal from university if their cumulative grade point average is less than 2.0 in all units attempted in each of three consecutive semesters, excluding summer, or if their cumulative grade point average is less than 1.0 in each of two consecutive semesters attended, excluding summer. The student must be reinstated by the American University for Science and Technology Readmission Committee to be able to continue at The American University for Science and Technology.

#### **09.16 - Appeal Procedures**

Any student who has been terminated from financial aid may submit a written appeal to the Financial Aid Advisory Committee (FAAC). Each appeal will be reviewed and approved or denied based on the student's individual circumstances, and his or her proposed course of action. If the written appeal is denied, the student may appeal that decision in person to the Financial Aid Advisory Committee. This decision of the Financial Aid Advisory Committee is final.

**09.17 - Fraud**

A student who attempts to obtain financial aid by fraud will be referred to the Dean of Admissions for disciplinary action and suspended from financial aid for unsatisfactory conduct. The University will report such instances to local law enforcement agencies, to the California Student Aid Commission and/or to the Federal Government, Office of Inspector General. Restitution of any financial aid received in such a manner will be required.

**09.18 - STUDENT LOAN DEFERRMENT**

Loan deferment requests, if any, are processed by the AUSTC Registrar's office. Student must obtain a Deferment Request Form from the Lender and submit it to AUSTC for processing. AUSTC has no control over deferment decisions made by Lenders.

**09.19 - FINANCIAL OBLIGATIONS**

Upon completion of the degree program, all outstanding financial balance is due and payable immediately. A Student may not graduate, nor receive any degree diploma or transcript, until all unpaid financial accounts have been satisfied.

**09.19.01 - DEFAULT OF FINANCIAL OBLIGATIONS**

If the Student's financial obligations are in default, defined as not paying a financial obligation within 30 days of due date, AUSTC may declare the entire balance due without further notice. That amount must then be paid immediately. Failure to pay the unpaid balance within 10 days may result in any or all of the following:

- a) Denial of registration, transcripts, diplomas, grades and graduation;
- b) Assignment of the account for collection; and
- c) Reporting the delinquent account status to a credit bureau.

Furthermore, if this account is turned over for collection, the Student is obligated to pay AUSTC's collection expense. If a lawsuit or other action is filed, the Student agrees to pay AUSTC's attorney's fees as fixed by the trial court. If any party appeals any part of the trial court's decision, the Student promises to pay AUSTC's attorney's fees for the appeal as fixed by the appellate court.

## 10 - DEGREE REQUIREMENTS BY TYPE OF PROGRAM

### 10.01 - INFORMATION RESEARCH COURSES

AUSTC requires all degree program Students to provide a transferable credit of a course on information resources or to take the course at AUSTC. Undergraduate Students must take Information Research Methods, and graduate Students must take Information Research Strategies.

### 10.02 - GENERAL EDUCATION

AUSTC's General Education program for undergraduate degree programs has been designed to provide lifelong Students with those tools, skills and knowledge fundamental to successful, scholarly bachelor degree studies and for enhancing personal future effectiveness in all aspects of life.

The Student-centered focus is reflected in a course-embedded assessment process and interactive mentoring system that provides Students with continuous guidance and support for education success. Required initial courses are those necessary to distance education and the information-technology age, skills with lifelong benefits. Advancement and success in our global, information systems environment depends on being comfortable with and knowledgeable about the necessary tools and abilities.

Written communication and writing skills are essential for success in AUSTC's programs and are therefore a foundation of general education. The curriculum provides sequential writing courses that support developmental, academic and critical thinking education opportunities.

#### Objectives of the General Education Program

The undergraduate curriculum offered supports preparation for meeting the emerging professional challenges in a diverse and interconnected world by becoming more aware of the interrelationships of knowledge. By acquiring these skills and information, Students are provided the foundation for mastering the competencies in their selected field of study and preparing for a continuously complex society.

The General Education program objectives will provide Students the means to:

1. Achieve the ability to think clearly and logically, to find and critically examine information, and to communicate clearly;
2. Acquire knowledge about their world and about themselves from the physical, social, and humanities perspectives;
3. Come to understand and appreciate lifelong active self-education principles, and the methods, value systems and thought processes in human inquiry and endeavors;
4. Acquire an integrated knowledge of cultural diversity with a global perspective.

These objectives are carried out through a student-centered and interactive distance education process that provides students with continuous guidance and support for education success. Courses offered are those essential for succeeding in online education and the information-technology age. The University's General Education program includes courses in the natural sciences, social sciences, political sciences, quantitative reasoning, humanities, and independent education and research skills.

#### Bachelor Degree General Education Requirements

AUSTC requires that students satisfactorily complete of 40 semester credits in general education for the bachelor's degree programs. This requirement may be satisfied by the transfer of General Education courses completed at the associate and bachelor's degree levels at approved postsecondary colleges and schools.

For students who need to complete general education courses at AUSTC to meet the 40 credits for the bachelors or who do not have these specific courses, the following courses are required in specific areas:

- 1 Informational Literacy course
- 2 college English courses
- 1 college Mathematics course

The following course groups are recommended to add breath and meet the 39 credits:

- 2 courses in Humanities
- 2 courses in Natural Sciences
- 2 courses in Social or Political Sciences
- 3 General Education electives

## **UNDERGRADUATE GENERAL EDUCATION COURSES**

### **Informational Literacy Course**

The following course is required:

LS1007 - Information Research Methods

### **College English Courses**

The following courses are required:

LS1002 - English Composition I

LS2002 - English Composition II

### **College Mathematics Courses**

One of the following courses is required:

LS1008 - Mathematics

LS1009 - College Algebra

### **Humanities Courses**

Two courses from the following:

HU1001 - American Literature

HU1002 - Introduction to African American Studies

HU1003 - Appreciating the Visual Arts

HU1004 - The Art of Wondering and Philosophy

HU1006 - Concert Music – The Fine Art of Listening

HU1007 - My Community's History

HU1008 - Exploring Cinema

HU1009 - Culture and Religion

HU1010 - The Short Story

### **Natural Sciences Courses**

Choose two courses from the following:

NS1002 - Introduction to Meteorology

NS1003 - Introduction to Geology

NS1004 - Controversial Environmental Issues

NS1005 - General Biology

NS1006 - Health and Nutrition

**Political or Social Sciences Courses**

Choose two courses from the following:

PS1001 - American History  
PS1002 - U.S. Government  
PS1008 - Western Civilization  
SS1003 - Marriage and Family  
SS1004 - Sociology  
SS1005 - Psychology of Adjustment  
SS1007 - Psychology in Business  
SS1009 - Introduction to Cultures  
SS3007 – Storytelling

**General Education Electives**

Selection of three additional courses from the Humanities, Natural Sciences, Political or Social Sciences, or from the following Education Skills courses:

LS1003 - Understanding Media  
LS1004 - Introduction to Statistics  
LS1005 - Business Math  
LS1006 – Logic and Critical Thinking  
LS2003 - Advanced English Composition

**10.03 - BACHELOR'S DEGREE PROGRAMS**

Bachelor's degree requires a total of 120 semester credits.

- A minimum of 32 credits of instruction must be completed through the University.
- A minimum of 20 credits must be in general education with requirements in specified areas.
- A minimum of 56 credits in the program area (Business & Technology Management, Education, Engineering or Psychology) with 20 of those credits in the required core courses.
- Cumulative grade point average of "C", 2.0, or higher.
- Official transcripts on file for all transfer credits accepted by the University.
- Official documents on file for basis of admission: high school transcript or GED.
- All financial obligations to the University paid in full.

The University may accept a maximum of 88 lower and upper division semester credits in transfer toward the bachelor's degree for coursework completed at an accredited or approved college or university with a grade "C" or better. Up to 69 lower divisions semester credits may be transferred.

**10.04 - MASTER'S DEGREE PROGRAMS**

The master's degree requires a total of 44 semester credits at the graduate level beyond the bachelor's degree (note: the marriage and family therapy specialization in Psychology requires 52 graduate semester credits).

- A minimum of 32 credits of graduate instruction must be completed through the University.
- A minimum of 44 credits is required for the Marriage and Family Treatment Specialization.
- Completion of subject area competency requirements for graduate program.
- Elective courses must be appropriate to the department's graduate program.
- Cumulative grade point average of "B", 3.0, or higher.
- Official transcripts on file for all transfer credits accepted by the University, and for basis of admission.
- All financial obligations to the University paid in full.

The University may accept a maximum of 8 semester credits in transfer toward the master's degree for graduate coursework completed at an accredited or approved college or university with a grade of "B" or better.

### **10.05 – DOCTOR OF PHILOSOPHY PROGRAMS**

The Doctor of Philosophy degree must be completed within seven years after the date when the student first enrolled as a matriculated student (after obtainment of bachelor's degree)

The requirements for the doctoral degree are

- Completion of a minimum of 72 credits of graduate study beyond the baccalaureate degree, of which a minimum of 42 credits must be taken at the University of Rhode Island;
- Passing of a qualifying examination;
- If required by the department, proficiency in one or more foreign languages and/or in an approved research tool;
- Passing of a comprehensive examination;
- Completion of a satisfactory dissertation;
- Passing of a final oral examination in defense of the dissertation; and
- Fulfillment of the residence requirement by taking a minimum of six credits per semester (specific graduate programs may require more) for at least two consecutive semesters after satisfying qualifying examination requirements. Residence is interpreted as attendance on campus

The University may accept a maximum of 8 semester credits in transfer toward the doctoral degree for graduate coursework completed at an accredited or approved college or university with a grade of "B" or better.

### **10.06 – SINGLE SUBJECT NON-DEGREE STUDY**

Many serious Students enter studies not intending to obtain a new degree, but rather to enhance personal and professional knowledge. They may want to advance in their present career, acquire the background to make a career change, or make up academic deficiencies before entering a degree program. If the Student later applies for admission to a degree program, such non-degree study will be evaluated as to whether the coursework will be applied to the degree requirements. Minimum enrollment requirements for a degree program must be satisfied after the Student is accepted into the AUSTC degree program. Tuition for non-degree study is charged at the current semester credit rate at time of course enrollment.

## 11 - TYPES OF DEGREE PROGRAMS OFFERED

### 11.01 - SCHOOL OF BUSINESS AND TECHNOLOGY MANAGEMENT

#### Bachelor of Business Administration (BBA)

##### Concentrations:

Accounting  
Applied Computer Science  
Management  
Marketing

#### Master of Business Administration (MBA)

##### Specializations:

Applied Computer Science  
Electronic Commerce  
Financial Management  
Health Care Administration  
Human Resources Management  
International Business  
Management  
Management of Engineering and Technology  
Management Information Systems  
Public Administration

#### 11.01.01 – BS, BUSINESS ADMINISTRATION (BS.B.A)

##### Objectives of the BSBA Degree Program

The objectives for the Bachelor of Business Administration degree program are:

- To provide Students with the knowledge and skills necessary to understand and function effectively in a business and administrative organization;
- To familiarize students with the fundamental bodies of theoretical and applied knowledge of business represented in the core courses;
- To provide Students an opportunity to concentrate their education in areas such as accounting, management, and marketing as represented in upper level courses;
- To enable Students to integrate formal academic education with their business related experiential education so that meaningful personalized education results that relates to their personal or professional needs;
- To encourage Students to experience self-improvement and professional growth, and (6) to expose Students to the global business environment.

##### **BS, Business Administration Degree Requirements: (Total 120 Semester Units)**

General Education Courses 40 credits  
Business Administration Core 20 credits  
Business Administration Concentration 36 credits  
Electives 24 credits  
*Total 120 credits*

**Overview of the Concentrations**

The following BBA program concentrations are offered:

Accounting  
Applied Computer Science  
Management  
Marketing

Students who complete at least 20 semester credits in a single area of concentration at AUSTC may elect to have the concentration recorded on their transcript and diploma. A concentration is not required.

**Accounting**

Accounting is the process of systematically collecting, analyzing, and reporting financial information. Accounting is the language of business. In modern society, it is impossible to manage a business without accurate and up-to-date information supplied by a firm's accountants. Managers, lenders, suppliers and stockholders rely on information contained in three fundamental reports: the balance sheet, income statement, and a statement of cash flows.

**Applied Computer Science**

We live in a growing and rapidly changing information society. Until businesses began using computers, data was transformed into information manually. Computers are an essential part of transforming data into information in every aspect of our daily lives. Computers are used to control the nerve centers of automobiles, toys, and even the human heart. Applied Computer Science is a discipline that uses basic computational theories and techniques to solve practical information retrieval, analysis and dissemination problems for business and industry.

**Management**

Managers have to plan for the future, implement their plans in the present, and evaluate results against what has been accomplished in the past. Operations managers are concerned with present and future sales levels and with the availability of resources. Marketing managers need to have detailed information about their firm's product mix. Human resources managers must be aware of anything that pertains to their firm's employees. Administrative managers are responsible for the efficient and effective use of human, financial and material resources. Managers need a well-rounded background in marketing, financial analysis, human relations, and information systems.

**Marketing**

The business activities that make up a firm's marketing efforts are those directly concerned with satisfying customers' needs. The basic approach to marketing is defined by the mix of four elements: product, price, distribution, and promotion. A firm that understands marketing will enhance the creation of utility for the purchase of its products. Leaders who plan the future of their firms are challenged to find a marketing strategy that makes sense. Change is occurring at an accelerated rate: today is not like yesterday, and tomorrow will be different from today. Three developments have great influence on marketing strategy: globalization, technological advances, and deregulation.

**UNDERGRADUATE COURSES****Core Course Requirements**

BUS3000 - Introduction to Business  
BUS3001 - Basic Business Law  
BUS3002 - Practical Business Accounting  
BUS3003 - Computer Information Systems  
BUS3004 – Economics

**Concentration Area Courses**Accounting Concentration

ACT4013 - Computerized Accounting  
ACT4040 - Financial Accounting  
ACT4050 - Managerial Accounting  
ACT4051 - Intermediate Accounting I  
ACT4052 - Intermediate Accounting II  
ACT4053 - Cost Accounting  
ACT4064 - Advanced Accounting  
ACT4065 - Tax Accounting  
ACT4067 – Auditing

Applied Computer Science Concentration

CS4000 - Introduction to Computers and Information Systems  
CS4001 - Computer Operating Systems  
CS4006 - Professional and Technical Writing  
CS4009 - The Internet  
CS4010 - Inside LAN Networks  
CS4011 - Network Administration  
CS4016 - Computers in Business  
CS4017 - Web Technology and Development  
CS4018 - Computer Systems Architecture

Management Concentration

BUS4001 - Small Business Management  
BUS4002 - Essentials of Human Resources Management  
BUS4003 - Money, Banking and Business Finance  
BUS4004 - Supervisory Management  
BUS4005 - Career Management and Personal Marketing  
BUS4009 - Administrative Office Management  
BUS4010 - Manufacturing Systems

Marketing Concentration

BUS4000 - Essentials of Marketing  
BUS4001 - Small Business Management

BUS4005 - Career Management and Personal Marketing  
BUS4006 - Advertising  
BUS4007 - Retail Management  
BUS4008 - Sales

**Business Administration Elective Course**

BUS4099 - Professional Studies Application Project (2-5 credits)

**General Education Courses**

See General Education.

**General Education Electives for BBA**

Also includes all undergraduate Psychology courses.

**11.01.02 - FUNDAMENTAL COMPETENCY REQUIREMENTS FOR GRADUATE BUSINESS PROGRAMS**

Students in graduate business administration programs must demonstrate competency in those subject areas that define the fundamental breadth of understanding of the discipline. Competency can be demonstrated through prior undergraduate or graduate coursework or by successfully completing prescribed courses at AUSTC. A listing of course options to satisfy requirements within the fundamental subject areas follows:

Information Research (must be taken at AUSTC as first program course)

LS6010B - Information Research Strategies

General Management (Select at least one of the following courses)

MGT5000 - Business Organization and Management

HRM5000 - Human Resources Management

MGT5025 - Total Quality Perspectives in Management

Accounting / Finance (at least one of the following courses)

MGT5005 - Management Finance and Control

MGT5012 - Managerial Accounting for Decision Making

FIN5015 - Financial Statement Analysis

Marketing (at least one of the following courses)

MGT5002 - Marketing Management

IB5013 - International Marketing

HCA5018 - Health Care Marketing

Satisfying the above fundamental requirements is a prerequisite for enrolling in any other graduate course in business. *Courses taken to satisfy the fundamental requirements may not be counted towards a specialization.*

### **11.01.03 - OVERVIEW OF SPECIALIZATIONS - M.B.A. PROGRAMS**

**The following M.B.A. program specializations are offered:**

Applied Computer Science  
Electronic Commerce  
Financial Management  
Health Care Administration  
Human Resources Management  
International Business  
Management  
Management of Engineering and Technology  
Management Information Systems  
Public Administration

Students who complete at least 20 graduate semester credits in a single area of specialization at AUSTC (not counting any fundamental courses) may elect to have the specialization recorded on their transcript and diploma.

#### **Applied Computer Science**

The Applied Computer Science Specialization is the discipline of designing methods for solving problems by means of computers. The curriculum is designed to provide preparation for professional careers in the areas of Software and Network Administration. Admission is open to holders of any Bachelor's degree or the equivalent who have computer and industrial/business experience.

#### **Electronic Commerce**

The Electronic Commerce specialization is designed for Students who want to become proficient in conducting business on the Internet and/or the World Wide Web. Online marketing, Web-based applications, enabling methodologies and tools for online payment and transactions are included in the curriculum.

#### **Financial Management**

The lifeblood of every organization - private, public, religious or corporate - is its financial resources. Managers must know how to manage and allocate resources in order to ensure long-term profitability and organizational health. This specialization concentrates on developing these essential skills.

#### **Health Care Administration**

With the growing concern over health care and the economical delivery of health care services, there is an increasing requirement to bring managerial expertise to the health care industry. Health care administrators are in demand at entry and for advanced managerial positions in hospitals, in health maintenance organizations, in health insurance companies, and in governmental, public health, voluntary, and social service agencies. This specialization develops the essential managerial perspective and skills for this industry.

#### **Human Resources Management**

Throughout history the challenge to managers has been to manage the organization's human resources to achieve peaceful, productive and profitable organizational outcomes. This specialization studies the interrelationships between human resources and the business organization, equipping the manager to function as a HRM specialist in business, industry, and service organizations.

#### **International Business**

The global economy requires that domestic and foreign business managers have the knowledge of cultural, economic, political and legal environments of business and the necessary managerial skills for making management decisions in an international context. This specialization focuses on the essential elements required to understand and manage international organizations.

**Management**

This specialization is for the manager-generalist who must understand how the key parts of an organization function and interrelate. Effective enterprise results when the manager-generalist organizes the efforts of specialists in order to accomplish organizational outcomes. Students gain the conceptual overview of modern theory and practice in each of the key areas of management.

**Management of Engineering and Technology**

The engineering and technology manager brings together technical expertise with management know-how, which creates a synergism between technology and business in order to improve organizational outcomes.

**Management Information Systems**

The Management Information Systems (MIS) specialization is a user-friendly graduate specialization designed for administrators and managers. It is for managers who recognize that success in today's competitive environment requires an understanding of management and how managers use computer information systems to enhance the management process and business outcomes. The MIS specialization combines and applies the best from both disciplines: computer systems and management. Admission is open to holders of any Bachelor's degree or the equivalent who have industrial and/or business experience and who recognize that managers need expertise in both management and information systems. Knowledge of computer programming is not a requirement.

**Public Administration**

Managers possessing the wide range of skills in public administration are meeting the challenges in government management at the local, state and federal levels. For practicing public administrators as well as those seeking entry into public administration, this specialization focuses on acquiring the administrative knowledge and skills in such diverse areas as budgeting, government relations, personnel policies, politics, and urban planning.

**11.01.04 - M.B.A. DEGREE PROGRAM**

Specializations in Applied Computer Science, Electronic Commerce, Financial Management, Health Care Administration, Human Resources Management, International Business, Management, Management of Engineering and Technology, Management Information Systems, and Public Administration

**Objectives of the M.B.A. Program**

The objectives for the Master of Business Administration degree program are to:

1. Present managers and prospective managers with the conceptual overview of modern theory and practice in each of the key areas of managerial responsibility;
2. Integrate this formal academic education with business related experiential education so that meaningful personalized education results;
3. Enable Students to experience self-improvement and professional growth; and
4. Expose Students to international business.

**M.B.A. Degree Requirements**

The Master of Business Administration degree program emphasizes traditional business administration and management studies at the graduate level. Students must complete a minimum of 44 semester credits in business or other approved graduate courses. Elective courses must be appropriate to the Student's degree program.

**M.B.A. Course Sequence**

Fundamental competency courses are to be completed first (LS6010B, General Management fundamental, Accounting/Finance fundamental, and Marketing fundamental). Specialization and elective courses can then be completed in any sequence.

**11.01.05 - LISTING OF GRADUATE BUSINESS & TECHNOLOGY MANAGEMENT**

An asterisk (\*) indicates that the course has a prerequisite. The prerequisites are shown in the course descriptions.

**NOTE:** All courses are not available during all terms. If a course is unavailable, your academic advisor will assist you in selecting an alternative course.

**Applied Computer Science Specialization**

CS5000 - Decision Support and Expert Systems

CS5001 - C Programming

CS5002 - C++ Programming

CS5003 - Computer Graphics

CS5005 - Database Management

CS5006 - Networking Technologies

CS5008 - Client Server Relationships

CS5009 - Computerized Systems for Business and Management

CS5010 - Managing Communication

\*CS6010 - Applied Computer Science Research Project

MIS5005 - Local Area Networks (LAN)

MIS5007 - Wide Area Networks (WAN)

**Electronic Commerce Specialization**

ECM5000 - Introduction to E-Commerce

ECM5001 - E-Commerce for Entrepreneurs

ECM5002 - Web-Based Applications

ECM5003 - Graphics Designs for Electronic Commerce Applications

ECM5004 - Managerial Electronic Commerce

ECM5005 - Electronic Payment Systems

ECM5006 - Integrated Supply Chain Management

ECM5007 - E-Commerce Marketing for the Internet

ECM6010 - Electronic Commerce Research Project

**Financial Management Specialization**

FIN5013 - Investment Management

FIN5014 - Financial Institutions

FIN5015 - Financial Statement Analysis

FIN5016 - International Finance

FIN5017 - Quality Concepts in Financial Management

FIN5018 - Accounting for Nonprofit Organizations

FIN6010 - Financial Management Research Project

MGT5005 - Management Finance and Control  
MGT5012 - Managerial Accounting for Decision Making

**Health Care Administration Specialization**

HCA5012 - Health Care Financial Management  
HCA5013 - Health Care Legal and Ethical Issues  
HCA5014 - Health Care Policy Analysis and Development  
HCA5015 - Health Care Administration Principles and Practices  
HCA5016 - Health Care Grants  
HCA5017 - Total Quality Management in Health Care  
HCA5018 - Health Care Marketing  
HCA5019 - Managed Health Care Systems  
HCA5020 - Survey Research in Health Care Planning and Administration  
HCA5021 - Comparative Health Care Systems  
HCA5022 - Strategic Planning in Health Care  
HCA6010 - Health Care Administration Research Project

**Human Resources Management Specialization**

HRM5000 - Human Resources Management  
HRM5001 - Recruitment and Human Resources Information Systems  
HRM5002 - Compensation Issues in Human Resources Management  
HRM5003 - Labor Relations  
HRM5004 - Supervisory Concepts and Practices  
HRM5005 - Quality Concepts in Human Resources  
HRM5006 - Managing Human Resources for Innovation and Change  
HRM5007 - Human and Cultural Issues in Technology Management  
HRM5008 - Legal Issues in Human Resources Management  
HRM6010 - Human Resources Management Research Project  
IOP6006 - Organizational/Industrial Psychology

**International Business Specialization**

IB5012 - International Economics  
IB5013 - International Marketing  
IB5014 - Cultural Environment of International Business  
IB5016 - Global Business Strategic Management  
IB5017 - International Business Law  
IB5018 - Total Quality Management in International Business  
IB6010 - International Business Administration Research Project

**Management Specialization**

MGT5000 - Business Organization and Management  
MGT5001 - Economics and the Modern Manager  
MGT5002 - Marketing Management

MGT5005 - Management Finance and Control  
MGT5006 - Organizational Behavior  
MGT5007 - Strategic Management  
MGT5008 - Production and Operations Management  
MGT5009 - International Business  
MGT5010 - Leadership in Organizations  
MGT5011 - Managerial Women: Strategies and Skills  
MGT5012 - Managerial Accounting for Decision Making  
MGT5013 - Entrepreneurship  
MGT5014 - Business and Management Consulting  
MGT5015 - Interpersonal Dynamics  
MGT5016 - Managing Change  
MGT5017 - Contemporary Policy Issues in Business  
MGT5018 - Industrial Management  
MGT5019 - Ethics in Business  
MGT5021 - Managing Creativity in the Organization  
MGT5022 - Organizational Development  
MGT5023 - Crisis Management  
MGT5025 - Total Quality Perspectives in Management  
MGT5026 - Effective Managerial Communications  
MGT5027 - Legal Implications in Management  
MGT5028 - Applied Statistics  
MGT5029 - Strategic Leadership  
MGT6010 - Management Research Project  
MGT7010 - Applied Management Project  
MIS5000 - Management Information Systems

### **Management of Engineering and Technology Specialization**

MET5000 - Principles of Productivity  
MET5002 - Applied Systems Theory  
MET5003 - Applied Decision Theory  
MET5006 - Operations Research  
MET5010 - Quality Management  
MET5011 - Environmental Systems Management  
MET5015 - The Process and Impact of Technology  
MET5016 - Improving Productivity Through Technology  
MET5017 - Emerging Technologies  
MET5018 - Industrial Management  
MET5020 - Management of Technology  
MET5023 - Managing the Research and Development Organization  
MET5029 - Project Management  
MET6010 - Management of Engineering and Technology Research Project  
HRM5006 - Managing Human Resources for Innovation and Change  
HRM5007 - Human and Cultural Issues in Technology Management  
MGT5001 - Economics and the Modern Manager

MGT5005 - Management Finance and Control  
MGT5007 - Strategic Management  
MGT5008 - Production and Operations Management  
MGT5009 - International Business  
MGT5013 - Entrepreneurship  
MGT5019 - Ethics in Business  
MGT5021 - Managing Creativity in the Organization  
MGT5022 - Organizational Development  
MGT5028 - Applied Statistics  
MIS5000 - Management Information Systems

**Management Information Systems Specialization**

MIS5000 - Management Information Systems  
MIS5001 - Information Systems Development  
MIS5002 - Database Management Systems  
MIS5003 - Information Support Systems  
MIS5004 - Telecommunications Management  
MIS5005 - Local Area Networks (LAN)  
MIS5006 - Total Quality Management in MIS  
MIS5007 - Wide Area Networks (WAN)  
MIS5011 - Computer Management Consulting  
MIS6010 - Management Information Systems Research Project

**Public Administration Specialization**

PUB5000 - Introduction to Public Administration  
PUB5002 - Public/Government Relations  
PUB5003 - Public/Urban Politics  
PUB5004 - Urban and Regional Planning  
PUB5005 - Public Budgeting and Finance  
PUB5006 - Public Health Administration  
PUB5007 - Quality Management in Public Administration  
PUB5009 - Public Program Evaluation  
PUB5010 - Complex Public Organizations  
PUB5011 - Terrorism – What Public Administrators Need to Know  
PUB6010 - Public Administration Research Project  
FIN5018 - Accounting for Nonprofit Organizations  
HCA5015 - Health Care Administration Principles and Practices  
HRM5000 - Human Resources Management

**Other Graduate Courses**

LS5001 - Research Writing  
LS5050 - Graduate Writing Review  
LS6010B - Information Research Strategies

### **11.01.06 Ph.D., Business Administration**

The Ph.D. program in Business Administration is a research-based program. In addition to advanced course work, students work closely with faculty to conduct research on business issues of national and global importance.

The program prepares students for faculty positions at research colleges and universities. The Ph.D. program is highly selective—only a small number of students are accepted each year. To be admitted, applicant must demonstrate both academic merit and research capabilities.

Admission requirements: GMAT or GRE, a master's degree, original online application, a statement of purpose, a résumé, three letters of recommendation, and transcripts of all previous degrees are required. Applicants with diverse academic backgrounds and previous industry experience are encouraged to apply.

Due to the selectivity of the programs, new admissions to the doctoral program must be limited to a small number each year. Since applicants are evaluated by the doctoral faculty in each of the specialization areas independently, all applicants must specify a single area of specialization on the application form. Completed application packages must be received by February 1.

Applicants for whom English is not the native language will be expected to score 575 (paper-based), 233 (computer-based), or 91 (IBT) or above on the TOEFL and to meet the University minimum on each of the four sections of the exam. Students may substitute the IELTS (minimum score of 6.5) for the TOEFL.

The GMAT or GRE scores and master's grade point average are not the sole criteria for admission. However, those with master's grade point averages of less than 3.20 on a 4.00 point scale or those who score lower than 600 on the GMAT or GRE have a low probability of admission.

#### **Ph.D., Business Administration's Objectives:**

- Acquire advanced knowledge relevant to student's areas of specialization.
- Develop advanced academic research skills for students' areas of specialization.
- Be well prepared for the instructional responsibilities of higher education.
- Present at and attend academic conferences.
- Produce quality, co-authored scholarly papers with faculty.
- Obtain employment in academic settings upon graduation.

#### **Program requirements:**

Students must have a broad understanding of the major disciplines that comprise the study of business administration and their application to organizational settings. If applicant does not have this prerequisite knowledge, he/she may be required to complete up to 12 credits of prerequisite course work in the following areas: behavioral science applications to business administration (management or marketing), financial economics (economics or finance), statistics, and accounting. These prerequisite courses are not included for program credit. Students with previous course work in these areas are normally exempted. There are other avenues for an exemption. Students should discuss these alternatives with the doctoral program director.

The advanced course work phase entails a minimum of 60 credit hours of advanced course work beyond the master's degree. Student may transfer up to 8 semester credits from another accredited or recognized higher educational facility. Credit taken at AUSTC It consists of:

- Up to 20 Credits of fundamental subjects
- 32 Credits or more of advanced specialty subjects
- Submission of Concept Paper,
- Comprehensive Exam
- Dissertation

Student will write two major papers of publishable quality under the guidance of professors. This phase culminates in written and oral comprehensive examinations covering area of specialization, research methods, and other areas deemed appropriate by your doctoral dissertation committee.

After passing the comprehensive examination, doctoral candidates enter the dissertation research phase and engage in significant research under the supervision of their major professor and the doctoral committee.

Doctoral dissertation research is expected to make a major contribution to the state of knowledge in the candidate's field. The dissertation defense is a final oral examination administered according to procedures established by the Graduate School.

#### **Ph.D., Business Administration – Subjects list**

##### Fundamental Subjects (Up to 20 Semester Units Including Information Research Strategies)

ALS 6010 Information Research Strategies (Required)  
RSE 7102 Research methods and design (Required)  
RSE 7103 Dissertation planning and defending (Required)  
DSC 7274 Statistical Modeling and Analysis  
OSUST 7515 Design of Experiments  
Math 7513 Introduction to (Real) Analysis  
Math 7555 Mathematical Modeling  
Math 7556 Networks and Combinatory  
Math 7564 Mathematical Statistics

##### Advanced Specialty Subjects (32 credits or more)

ECON 7375 Econometrics  
MGT 7390 Philosophical Foundations  
FINA 7397 Microeconomics  
ECON 7301 Microeconomic Theory  
DNSC 7275 Advanced Statistical Modeling and Analysis

ECON 7376 Econometrics II  
DSC 7533 Information Analysis for Managerial Decisions  
DSC 7544 Business Database Management Systems  
DSC 7566 Project and Operations Management Models  
DSC 7577 Supply Chain Operations and Information  
DSC 7588 eBusiness  
DSC 7610 Multivariate Methods  
OSU IE 7563 Advanced Production Planning & Control  
OSU IE 7522 Industrial Systems Optimization  
OSU ST 7583 Non-Linear Optimization  
OSU ST 7515 Design of Experiments  
OSU ST 7543 Applied Stochastic Models

Research

CTR 7104 Concept Paper 4  
DIS 7200 Doctoral Comprehensive Examination 4  
DIS 7301 Doctoral Dissertation Research I 4  
DIS 7302 Doctoral Dissertation Research II 4  
DIS 7303 Doctoral Dissertation Research III 4

## 11.02 - SCHOOL OF EDUCATION

### 11.02.01 - FUNDAMENTAL COMPETENCY REQUIREMENTS FOR SCHOOL OF EDUCATION PROGRAMS

This category refers to the conceptual framework within which educational practices are to be understood. It is divided into Educational Fundamentals, and Professional Fundamentals. After completing the required Fundamental courses, Students are encouraged to select courses that reflect their academic and career goals and interests. Each specialization has specific fundamental courses to be fulfilled either through prior coursework or at AUSTC. A review of Student's transcripts and consultation and review with the Academic Advisor will determine which fundamentals remain to be fulfilled.

#### **Courses Required for Graduate Degree:**

LS6010 – Information Research Strategies

ED5001 – Contemporary Issues in Education

ED5002 – Current Trends in School Curricula

ED5003 – Philosophy of Education

ED5004 – School Law

In order to satisfy the requirement for ED5020, candidate must have taken a comparable course within 3 years prior to making an application to AUSTC.

**NOTE: One or more fundamental courses may be required depending on specialization and academic background.**

## 11.02.02 - OVERVIEW OF SPECIALIZATIONS- Master of Education

Following specializations are offered for the Master of Education

- Educational Leadership
- Organizational Leadership
- Higher Education Leadership
- Education Technology Management
- Exceptional Student Education
- Instructional Leadership
- Teacher Leadership

### **Educational Leadership**

The School of Education at AUSTC is committed to preparing educational leaders and scholars through a comprehensive program of study in educational leadership addressing the ever-changing conditions and emerging issues within the context of education. Dedicated to the University's mission of providing excellence in teaching, research, and service the Program promotes a broad array of values, knowledge, and skills essential to renew and improve education in the 21st Century. Students pursuing the specialization in Educational Leadership engage in study related to the setting in which they are interested in working. The specialization in Educational Leadership allows Students to pursue a coherent set of structured education experiences including traditional coursework, research, and professional practice to achieve education outcomes.

### **Organizational Leadership**

Organizational Leadership appeals to Students who are focused on developing the competencies required of organizational leaders. The strategically crafted courses serve to enhance Student's commitment to the understanding and practice of leadership. Grounded in research, facilitated by leadership practitioner faculty and customized for maximum professional impact, the AUSTC Leadership course of study is appealing to Students who currently serve as or want to become change agents within their organization. This specialization has broad appeal, and Students whose professional goal is organizational consulting or a generalist leadership position in corporate, government, not-for-profit, or community organization find the curriculum to be especially appealing and relevant.

### **Higher Education Leadership**

The specialization in higher education offers M.Ed. Students with an opportunity to pursue studies in higher education. Students pursuing the higher education specialization are usually seeking to develop their leadership skills and/or desire to move into faculty roles in higher education. They may already work at a community college or university and are seeking job advancement. They may wish to pursue a faculty position by continuing their studies at the doctoral level. Coursework may be tailored to complement interests and professional aspirations within the higher education environment.

**Education Technology Management**

Technology Management in Education (LTM) is designed for education professionals who are developing their leadership role in the field of educational technology. Focus of the program is in establishing a knowledge base and application of new technologies, current research in the field and designing curriculum and instruction through technology integration and instructional planning. Students will develop skills and knowledge to advance their instructional effectiveness in varied settings through application of technology theory and practice. Technology Management in Education is designed for educational trainers, teachers and supervisors.

**Exceptional Student Education**

The Exceptional Student Education specialization is designed to prepare graduates to teach and work with individuals with various types of disabilities. The specialized curriculum prepares Students to teach students with mental, physical, behavioral and education disabilities, as well as work in a variety of related fields. The course offerings within the ESE specialization covers a wide spectrum of issues relating to individuals with disabilities, including the development and characteristics of students, individual education differences, instructional strategies, social development, and language development. The curriculum encompasses education environments, instructional planning, assessment, professional and ethical practices, and collaboration.

**Instructional Leadership**

The specialization in Instructional Leadership and Supervision at AUSTC provides a solid foundation for Students with the desire to improve the instructional capacity of schools and increase student achievement. Instructional leadership, not just by the principal but by others in both formal and informal leadership roles play a pivotal role in leading instructional improvements to enhance student education and achievement.

Through the efforts of accomplished instructional leadership experts, the IL specialization focuses on improving the effectiveness of individuals in instruction-related leadership roles, including lead teachers, department chairs, building and district administrators, and program coordinators.

**Teacher Leadership**

The specialization in Teacher Leadership prepares Students with a knowledge base, skill set, and competencies necessary to assume diverse leadership roles in the educational enterprise. Teacher Leadership is about energizing and mobilizing the "sleeping giant"-the untapped attributes and contributions of teachers to strengthen student performance and increase student achievement.

Teacher Leadership offers Students the opportunity to develop their understanding of teaching and education; to augment their understanding of school culture; to challenge the barriers to school reform and change; to build collaborative coalitions, and to create new system paradigms. Teacher Leadership is geared to Students who wish to extend their professional influence beyond their classrooms without leaving the teaching profession.

### **11.02.03 - MASTERS OF EDUCATION DEGREE PROGRAM**

The Master of Education program is suited to Students who want to combine a strong understanding of current theory and practice in education and/or organizational leadership with their personal needs and career focus. The Master of Education also provides Students with the foundational knowledge and skills necessary for doctoral level study.

Students who are planning on pursuing state licensing or certification are advised to check with state or national requirements before selecting a course of study.

#### **Objectives of the Masters of Education Program**

1. A major objective of the M.Ed. is to provide knowledge and enable Students to develop individual leadership skill sets for solving particular educational problems, whether in teaching, supervision, or administration, while keeping solutions in balance with organizational, community, or school system needs and expectations.

2. A second objective is to facilitate students' acquisition of sound principles and techniques essential to working effectively in a wide range of instructional or organizational settings.

#### **Master of Education Degree Requirements**

The M.Ed. is comprised of 44 semester credits in education or other approved AUSTC graduate courses. After the fundamental courses are fulfilled, Students need to complete the remaining semester hours which include ED6001 and either ED6002 OR LAC6001 to qualify for graduation.

##### Master's Level Research (4 credits)

ED6001 - Action Research for the Education Practitioner (REQUIRED)

##### **And either one of the following:**

ED6002 - Action Research Project (4 credits)

LAC6001 - Leadership Academy Capstone (4 credits)

#### **Certification and Licensing**

The School of Education serves educational leaders by providing online graduate studies in education to reach worldwide populations. The M.Ed. program is designed to reach national and international markets and does not purport to provide licensure or certification in any particular state or country.

There are several reasons why an educator would want to pursue a graduate degree in education that does not lead to state licensing or certification. For instance:

- Desire to "move up" steps on the salary schedule.
- Improve skills and professionalism in general or to pursue "leadership" position out of the classroom (school-based or district level).
- To be perceived as a "teacher leader" through advanced degree (already has a bachelor's degree and certification).
- Better meet the needs of increasingly diverse students.
- Does not work in a traditional K-12 classroom environment (trainer, educational consultant, etc.)

Certification requirements vary by state and district. Students are advised to contact their state department of education for guidance in obtaining certification or licensure or local school district for approval in fulfilling district level incentive programs. Students entering the M.Ed. degree program must follow program outlines listed for their elective(s) and/or specialization and must comply with program requirements for degree candidacy and completion.

**11.02.04 - LISTING OF GRADUATE COURSES FOR SCHOOL OF EDUCATION****Educational Leadership**

ED5011 Leadership for Human Resource Development  
ED5012 Leadership for Educational Organizations  
ED5013 School Finance  
ED5014 School Organization  
ED5015 School Safety  
ED5016 Instructional Leadership and Supervision  
ED5017 System Leadership: Systems Thinking and System Dynamics  
ED5020 Applied Statistics  
ED5022 Educational Policy and Practices  
ED5023 Multicultural Relationships in Educational Organizations  
ED5025 Education for Social Change  
ED5026 Cognition, Emotion and Motivation  
ED5027 School Counseling and Support Services  
ED5029 Measurement and Assessment in Education  
ED5030 Organizational Development  
ED5031 Policy and Politics in the Administration of Education  
ED5033 School Based Leadership  
ED5034 School Community Relations  
ED5035 Supervision of Curriculum  
ED5036 Innovation and Change  
OL7001 Conflict Resolution and Mediation

**Organizational Leadership**

OL7001 Conflict Resolution and Mediation  
OL7002 Building Organizational Capacity  
OL7003 Leadership for Excellence  
OL7004 Theory and Practice of Organizational Leadership  
OL7005 Ethical Leadership  
OL7006 Leading Education for Organizational Sustainability  
OL7007 Leader as Coach  
OL7008 Executive Leadership in Nonprofit Organizations  
ED5011 Leadership for HR Development and Management  
ED5017 Systemic Leadership: Systems Thinking and Systems Dynamics  
ED5030 Organizational Development  
ED5036 Innovation and Change

**Higher Education Leadership**

LHE7005 Legal Issues in Higher Education  
LHE7006 Student Affairs Leadership  
LHE7007 Strategic Enrollment Leadership  
LHE7008 Financial Management in Higher Education

LHE7009 Development of Higher Education in Society  
LHE7010 Current Trends and Topics in Higher Education  
LHE7011 Academic Leadership for Higher Education  
LHE7012 Institutional and Program Planning Assessment for Higher Education  
LHE7013 Community College Curriculum and Program Development  
OL7001 Conflict Resolution and Mediation  
OL7006 Leading Education for Organizational Sustainability  
ED5011 Leadership for HR Development and Management  
ED5017 Systemic Leadership: Systems Thinking and Systems Dynamics  
ED5036 Innovation and Change  
ED5038 Art and Science of Adult Education

**Education Technology Management**

LTM5000 Educational Applications on the Internet  
LTM5001 Instructional Design  
LTM5002 Technology Management  
LTM5003 Design and Development of Educational Media  
LTM5004 Computer Applications Management  
LTM5005 Connected Classroom: Curriculum Development and Technology  
LTM5006 Designing Instructional Materials for the WWW  
LTM5007 Multimedia Product Management  
LTM5008 Assessment Strategies for Technology Management in Education  
LTM5009 Telecommunications Applications for Education  
LTM5010 Distance Education: Theory and Process

**Exceptional Student Education**

ESE5000 Introduction to Special Education  
ESE5001 Exceptional Student Assessment  
ESE5002 Characteristics of Education Disabled Students  
ESE5003 Characteristics of Emotionally Disabled Students  
ESE5004 Teaching Methods for the Mentally Disabled  
ESE5005 Exceptional Strategies for Education Disabled and Behavioral Disorders  
ESE5006 Language Disabilities  
ESE5007 Transition Programs for Exceptional Students

**Instructional Leadership**

IL5000 Instructional Leader as Creator of Education Culture  
IL5001 Instructional Leader as Advocate and Decision Maker  
IL5002 Instructional Leader as Community Conduit  
ED5014 School Organization  
ED5016 Instructional Leadership and Supervision  
ED5023 Multicultural Relationships in Educational Organizations  
ED5025 Cognition, Emotion and Motivation  
ED5029 Measurement and Assessment  
ED5033 School Based Leadership

ED5035 Supervision of Curriculum

ED5036 Innovation and Change

ESE5000 Introduction to Special Education

LTM5001 Instructional Design

LTM5005 Connected Classroom

LTM5008 Assessment Strategies for Technology Management in the Classroom

**Teacher Leadership**

TL5000 Teacher Leadership: The Teacher as Leader

TL5001 Teacher Leadership: The Teacher as Mentor

TL5002 Teacher Leadership: The Teacher as Change Agent

TL5003 Teacher Leadership: The Teacher as Trainer

TL5004 Teacher Leadership: Standards and Best Practices

TL5005 Teacher-Leadership: Technology for Teacher Leadership

ED5036 Innovation and Change

### **11.02.05 Ph.D., Education**

The American University for Science and Technology offers a Ph.D. in education which prepares scholar practitioners for new professional roles as educational leaders, mentors, and scholars.

The program is grounded in the knowledge bases of school teaching and learning.

#### **Objectives of the Ph.D., Education Program**

- 1) Develop and employ collegial relationships through professional collaboration;
- 2) Acquire and apply the skills and processes of scholarly inquiry;
- 3) Demonstrate expertise in an area of specialization that advances the mission of American education; and
- 4) Implement professional practices that promote progress in educational settings.

Designed for professionals involved in prekindergarten through adult education, the doctoral program admits 12 to 15 students per year.

This cohort-based research program is for students who previously earned a master's degree in education or an allied field or have earned at least 30 graduate credits from an accredited or recognized institution.

#### **The graduate-level work must include four credits in each of the following areas:**

- Educational foundations;
- Curriculum; and
- Research

A major segment of each student cohort will be made up of practicing teachers and administrators who are committed to developing advanced teaching, leadership, and research skills.

#### **Admission requirements:**

Graduate Record Exam (GRE) scores no older than 5 years, official transcripts, curriculum vitae, and letters of recommendation are required.

## FUNDAMENTAL COMPETENCY REQUIREMENTS FOR Ph.D., Education

The program requires a minimum of 56 credits beyond the master's degree. Core seminars emphasize different aspects of education from history, culture, and foundations, to curriculum development, teaching, and learning, and finally to administration, leadership, and policy analysis. Field research seminars are coordinated between school of education and faculty mentors to be taken in parallel with the core seminars.

Field-based research explores community service and service learning in the context of schools. Students gain research expertise to help their development as school leaders through course work and the field research seminars. Scholarly expertise in a professional area is acquired through specialization courses (12 credits).

All students must complete a doctoral dissertation (12 credits).

To progress through this program, students must

- 1) Receive positive recommendations from core seminar professors;
- 2) Pass a qualifying examination upon completion of the first core seminar and the course in research methodology if they have not previously completed a master's degree in education or a closely related field;
- 3) Pass a comprehensive examination after completion of all core seminars and research courses; and
- 4) Complete a successful dissertation and defense.

Required = 60 Semester Units and research work  
Maximum Credit Transfer = 8 Semester Units  
Minimum Taken at AUSTC = 52 Semester Units

Up to 20 Credits of fundamental subjects  
Remaining Credit of advanced specialty subjects  
Submission of Concept Paper,  
Comprehensive Exam  
Dissertation

### Fundamental Subjects (Up to 20 Semester Units)

ALS 6010 Information Research Strategies (Required)  
RSE 7102 Research methods and design (Required)  
RSE 7103 Dissertation planning and defending (Required)  
DSC 7274 Statistical Modeling and Analysis  
OSUST 7515 Design of Experiments  
Math 7513 Introduction to (Real) Analysis  
Math 7555 Mathematical Modeling  
Math 7556 Networks and Combinatory  
Math 7564 Mathematical Statistics

## **Advanced Specialty Subjects**

### Technology and E-Learning

ELT 7001 Principles and Practices in E-Learning 4  
ELT 7002 E-Learning Instructional Strategies 4  
ELT 7003 Instructional Design and E-Learning Activities 4  
ELT 7007 Ethical and Legal Issues in an Online Course 4  
ELT 7008 Online Learning Communities in an Online Course 4  
LTM 7003 Educational Media 4  
LTM 7004 Applications of Technology 4  
LTM 7005 Technology and the Curriculum 4  
LTM 7006 Instruction and the Internet 4  
LTM 7008 Evaluating Technology in Education 4  
LTM 7012 Educational Technology Leadership 4

### Curriculum and Instruction

CTE 7000 Developing Instructional Strategies and Curriculum 4  
CTE 7001 Role of the Teacher Practitioner 4  
CTE 7002 Identifying and Maximizing Learning / Teaching Styles 4  
CTE 7003 Teaching and Learning Foundations 4  
CTE 7004 Language and Literacy Education 4  
CTE 7005 Literacy: Focus on Curriculum 4  
CTE 7006 Multiple Intelligences 4  
CTE 7007 Leadership for Student Achievement 4

### Research

CTR 7104 Concept Paper 4  
DIS 7200 Doctoral Comprehensive Examination 4  
DIS 7301 Doctoral Dissertation Research I 4  
DIS 7302 Doctoral Dissertation Research II 4  
DIS 7303 Doctoral Dissertation Research III 4

**11.03 - SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCE****Bachelor of Arts in Psychology (BA)****Master of Arts in Psychology (MA)**Specializations:

General Psychology

Health Psychology/Behavioral Medicine

Industrial/Organizational Psychology

Marriage and Family Therapy (MA)

**11.03.01 - BACHELOR OF ARTS IN PSYCHOLOGY (BAPSY)****Objectives of the B.A. in Psychology Degree Program**

The objectives for the Bachelor of Arts in Psychology degree program are to: (1) introduce Students to the field of psychology and behavioral studies; (2) familiarize Students with the fundamental theoretical and applied knowledge of psychology; (3) provide Students with a basic understanding of human behavior to better understand themselves and their relationships with others; (4) enable Students to integrate formal academic education with their personal experiences so that education is meaningful, personalized, and relates to their personal or professional needs, and (5) expose Students to the diversity of the global environment.

**B.A. in Psychology Degree Requirements:**

General Education Courses 40 credits

Psychology Core 20 credits

Psychology Electives 36 credits

Electives 24 credits

*Total 120 credits***UNDERGRADUATE COURSES****Psychology Core Course Requirements**

PSY3000 - Introduction to Psychology

PSY3001 - Theories and Techniques of Counseling and Psychotherapy

PSY3002 - Abnormal Psychology

PSY3003 - Human Development

PSY3004 - Fundamentals of Research Methodology

**Psychology Elective Courses**

PSY3010 - Human Relations  
PSY4000 - Social Psychology  
PSY4001 - Human Sexual Behavior  
PSY4002 - Theories & Techniques of Group Counseling  
PSY4003 - Ethical and Professional Issues  
PSY4004 - Crisis Intervention  
PSY4006 - Psychology of Communication  
PSY4007 - Intercultural Psychology  
PSY4008 - Psychology and Health  
PSY4099 - Research Project (2-5 credits)  
LS1004 – Introduction to Statistics

**General Education Courses**

See General Education Section

**11.03.02 - FUNDAMENTAL COMPETENCY REQUIREMENTS FOR GRADUATE PSYCHOLOGY PROGRAMS (NOT INCLUDING MFT)**

Students in the graduate psychology programs (M.A.) must demonstrate competency in those subject areas that define the fundamental breadth of understanding of the discipline. Competency can be demonstrated through prior graduate coursework or by successfully completing prescribed courses at AUSTC.

A listing of course options to satisfy requirements within the fundamental subject areas follows:

Information Research (Required)

LS6010P - Information Research Strategies

Theory and Practice (At least one of the following courses)

PSY5000 - Theories of Personality

PSY5002 - Counseling Theories and Strategies

Psychopathology / Diagnosis

PSY5006 - Psychopathology

Ethics, Law and Psychology

PSY5004 - Professional Ethics, Law and Psychology

Human Development

PSY5005 - Theories of Human Development and Functioning

Satisfying these fundamental requirements is a prerequisite for enrolling in any other graduate course in psychology. Courses taken to satisfy the fundamental requirements may not be counted towards a specialization.

**11.03.03 - FUNDAMENTAL COMPETENCY REQUIREMENTS FOR MARRIAGE AND FAMILY THERAPY SPECILIZATION**

Students in the M.A. program with a specialization in MFT must demonstrate competency in those subject areas that define the fundamental breadth of understanding of the discipline. A listing of course options to satisfy requirements within the fundamental subject areas follows:

## Information Research (Required)

LS6010P - Information Research Strategies

Theory and Practice

PSY5002 - Counseling Theories and Strategies

Diversity

PSY5008 - Gender and Culture Diversity

Ethics

MFT5004 - Professional Ethics and Family Law

Human Development

MFT5005 - Individual and Family Development: A Life Cycle Approach

Research

MFT5039 – Research Design in MFT

Satisfying these fundamental requirements is a prerequisite for enrolling in any other MFT graduate course in psychology.

**11.03.04 - OVERVIEW OF SPECIALIZATIONS - MA**

The following M.A. program specializations are offered:

- General Psychology
- Health Psychology / Behavioral Medicine
- Industrial/Organizational Psychology
- Marriage and Family Therapy (MFT)

Students who complete at least 20 graduate semester credits in a single area of specialization (36 for MFT) at AUSTC may elect to have the specialization recorded on their transcript and diploma.

**General Psychology**

The General Psychology program trains Students to work in a variety of settings. These programs prepare Students for research and field experience. All psychology graduate Students must first obtain a firm grounding in several basic areas of psychology and research methodology. Within the General Psychology program, the Student is expected to become competent in theory, research, and applications of psychology. The program is established to allow Students maximum flexibility in the direction of their studies.

**Health Psychology/Behavioral Medicine**

Health Psychology/Behavioral Medicine is a newly developed and important area of research, teaching, and clinical practice. It is the study of the total matrix of factors influencing the psychological and physical health of people and takes a bio-psychosocial approach in accounting for illness and behavioral health. This specialization develops essential knowledge and skills for this vital area.

**Industrial/Organizational Psychology**

The Industrial/Organizational Psychology program prepares Students to work in a variety of settings. The Student is expected to become competent in theory, research, and applications of psychology as they relate to human behavior in organizations. The program emphasizes the contributions of both industrial and organizational psychology to the understanding of people in the world of work. Training is received in conducting basic and applied research, and in the applications of theory and research to organizational and human resource management problems in organizations.

**Marriage and Family Therapy**

The MFT program is designed to provide an integrated education experience for adult Students seeking training in marriage and family therapy. Students in the program will critically analyze a broad range of theories of marriage and family therapy. The program's training prepares Students for therapeutic and educational work in a variety of settings including mental health centers, public service agencies, correctional institutions, industry, medical settings, and private practice

## 11.03.05 - MASTER OF ARTS IN PSYCHOLOGY DEGREE PROGRAM

### Objectives of the Master of Arts in Psychology Programs

The objectives of the Masters programs are to:

1. Enable individuals to continue their formal professional education at the graduate level in the behavioral science of psychology;
2. Provide the knowledge and skills for professional growth such as advancement in employment, status, and position;
3. Encourage personal growth, self-improvement, intellectual accomplishment, and global awareness;
4. Enable individuals to integrate formal academic education with individual and community problems so that meaningful personalized education takes place; and
5. Prepare and encourage individuals to continue their education in psychology at the doctoral level.

### **Master of Arts in Psychology Degree Requirements**

Students in the Master of Arts in Psychology degree program must complete a minimum of 44 semester credits (54 for MFT) in psychology or other approved graduate courses. Elective courses must be appropriate to the department's degree program, and are expected to be selected from the Graduate Psychology Courses list.

### **M.A. Course Sequence**

Fundamental competency courses are to be completed first. Specialization and elective courses can then be completed in any sequence.

### **M.A. Specialization Requirements**

#### General Psychology Specialization

In addition to the fundamental courses, Students must complete a minimum of 20 credits for the specialization in General Psychology. Students may take any non-fundamental psychology courses at the 5000, 6000, or 7000 levels to fulfill their specialization requirements.

#### Health Psychology/Behavioral Medicine Specialization

In addition to the fundamental courses, Students must complete a minimum of 18 credits for the specialization in Health /Behavioral Medicine. Three of these specialization courses are required and three are electives.

### **Required Courses**

PSY7001 - Physiological Psychology

HBM6006 - Psychology of Chronic Illness

HBM6007 - Behavioral Medicine I \* (*Prerequisite-PSY7001*)

**Electives (select 3)**

HBM6000 - Graduate Research Project in Health Psychology/Behavioral Medicine\* (*Prerequisite-PSY5040*)  
HBM6008 - Behavioral Medicine II \* (*Prerequisite-HBM6007*)  
HBM6009 - Pain Management  
HBM6012 - Psychopharmacology  
HBM7004 - Health Psychology/Behavioral Medicine Practicum  
HBM7010 - Applied Health Psychology/Behavioral Medicine Project  
PSY5012 - Group Therapy  
PSY5018 - Foundations of Hypnosis  
PSY5052 - Community Psychology  
PSY5024 - Cognition, Emotion and Motivation  
PSY5027 - Psychology of Stress and Stress Related Disorders  
PSY5051 - Positive Psychology  
HCA5016 - Health Care Grants  
HCA5019 - Managed Health Care Systems  
HCA5021 - Comparative Health Care Systems  
HCA5022 - Strategic Planning in Health Care  
Other Electives to complete 36 semester credits

**Industrial/Organizational Specialization**

In addition to the fundamental courses, Students must complete a minimum of 24 credits for the specialization in Industrial/Organizational Psychology. Four required and two are electives.

**Required Courses**

PSY5015 - Social Psychology  
PSY5040 - Applied Statistics  
IOP6005 - Psychological Tests and Measurements\* (*Prerequisite-PSY5040*)  
IOP6006 - Organizational/Industrial Psychology\* (*Prerequisite-PSY5015*)

**Electives (select 1)**

MGT5000 - Business Organization and Management  
MGT5006 - Organizational Behavior  
MGT5022 - Organizational Development

**Electives (select 1)**

PSY5001 - Human Communication: Interviewing Skills  
IOP6000 - Graduate Research Project in I/O Psychology\* (*Prerequisite-PSY5040*)  
IOP6007 - Consulting in Business, Education and Mental Health  
IOP6008 - Survey Research Methods\* (*Prerequisite-PSY5040*)  
IOP7010 - Applied I/O Psychology Project  
HRM5000 - Human Resources Management  
HRM5005 - Quality Concepts in Human Resources  
HRM5007 - Human and Cultural Issues in Technology Management  
MGT5000 - Business Organization and Management  
MGT5006 - Organizational Behavior  
MGT5010 - Leadership in Organizations

MGT5015 - Interpersonal Dynamics  
MGT5022 - Organizational Development  
Other Electives to complete 36 semester credits

#### Marriage and Family Therapy Specialization

In addition to the fundamental courses, Students must complete a minimum of 44 credits for the specialization in Marriage and Family Therapy. Eight courses are required and three are electives.

#### **Required Courses**

MFT5006 Psychopathology and the Family  
PSY5009 Family Systems Theory  
MFT5060 Couples Therapy  
MFT5061 Therapy with Children and Adolescents  
MFT5025 Theory and Techniques in Marriage and Family Therapy  
MFT5026 Advanced Techniques in Marriage and Family Therapy  
MFT7004 Practicum

#### **Electives (select 3)**

MFT5014 Brief Marriage and Family Therapy  
MFT5055 Special Issues: Domestic Violence, Spousal Abuse, Child Assessment and Reporting  
PSY5000 Theories of Personality  
PSY5007 Sexual Issues: Sexuality, Sexual Problems, and Sex Therapy  
PSY5011 Clinical Survey of Substance Abuse and Dependence  
PSY5012 Group Therapy  
PSY5015 Social Psychology  
HBM6012 Psychopharmacology  
IOP6005 Psychological Tests and Measurements  
Other Electives to complete 51 semester credits

### **11.03.06 Ph.D., Psychology and Behavioral Sciences**

This degree program is offered to psychologists who obtained their bachelor's and master's degree in psychology and behavioral science; and actually practice the profession either in the United States or overseas.

The Ph.D. Program in School of Behavioral and Social Sciences at American University for Science and Technology strives to provide expert quality training to develop broadly educated psychologists. The doctoral program, as compared to the specialist program, provides more advanced training in applied skills and has a heavier emphasis on scientific inquiry.

The purpose of the doctoral program is to educate trainees who will promote the highest quality psycho-educational and mental health services. The program is based on the scientist-practitioner model of psychology.

Our goal is to educate psychologists who integrate their knowledge of scientific principles with their applied clinical. This integrated approach to science and practice promotes the development of complementary skills fostering a career-long process of psychological investigation, intervention, and evaluation. As scientist-practitioners, our doctoral alumni are able to distinguish fact from opinion in the application of psychological principles to human behavior, to use existing theory and techniques to develop innovative practice in the field, and to develop research to address applied issues.

Graduates are educated to assume a variety of leadership positions in professional psychology. As health care providers, graduates deliver a variety of psychological services directly to children, parents, and families. Graduates may be supervisors of other psychologists and administrators responsible for the development, implementation, and evaluation of educational and mental health programs. As educators, some graduates of the doctoral program will supervise and educate students enrolled in pre-service training at universities and advance the state of scientific knowledge. Regardless of the setting in which graduates will work, they are able to function as scientist-practitioners well versed in collaborative problem-solving.

In addition, doctoral trainees are immersed in the discipline of developmental psychopathology. As such, they are familiar with clinical work and research designs that focus on multiple pathways of development, and view professional practice from a risk and resilience perspective. They seek to find variables that moderate children's multi-final trajectories, thereby identifying potential buffers or protective factors that may inform prevention and intervention.

### **Objectives of the Ph.D., Behavioral Sciences and Psychology Programs**

The objectives of the program are to:

- Enable individuals to continue their formal professional education at the graduate level in the behavioral science of psychology towards additional understanding of theories and practice;
- Provide research and editorial skills to qualify psychologists for teaching and research status, and positions;
- Encourage personal growth, self-improvement, intellectual accomplishment, and global awareness; and
- Enable individuals to integrate formal academic education with individual and community problems so that meaningful personalized education takes place

### **Ph.D. Program requirements:**

Students must have a broad understanding of the major disciplines that comprise the study of behavioral sciences and their application to organizational, clinical and analytical settings. Graduates with Master's degree in Behavioral Science and/or Psychology are expected to meet the prerequisites and knowledge obtained through out AUSTC's Bachelor of Arts and Master's degree in Psychology. If the required knowledge is not reflected in student's submitted academic transcripts, he/she must take the missing subjects to qualify for admission without adding any credit towards Ph.D. graduation.

Ph.D. degree course work phase entails a minimum of 60 credit hours of advanced work beyond the master's degree. Student may transfer up to 8 credits from another accredited or recognized school. Study plan includes up to 20 Credits of fundamental subjects and 32 Credits or more of focused advanced specialty subjects.

Student will write two major papers of publishable quality under the guidance of professors. This phase culminates in written and oral comprehensive examinations covering area of specialization, research

methods, and other areas deemed appropriate by the doctoral dissertation committee.

After passing the comprehensive examination, doctoral candidates enter the dissertation research phase and engage in significant research under the supervision of their major professor and the doctoral committee.

Doctoral dissertation research is expected to make a major contribution to the state of knowledge in the candidate's field. The dissertation defense is a final oral examination administered according to procedures established by the Graduate School.

### **Ph.D., Psychology and Behavioral Sciences – Subjects list**

Required = 60 Semester Units and research work

Maximum Credit Transfer = 8 Semester Units

Minimum Taken at AUSTC = 52 Semester Units

- Up to 20 Credits of fundamental subjects
- Remaining Credit of advanced specialty subjects
- Submission of Concept Paper,
- Comprehensive Exam
- Dissertation

#### Fundamental Subjects (Up to 20 Semester Units Including Information Research Strategies)

ALS 6010 Information Research Strategies (Required)

RSE 7102 Research methods and design (Required)

RSE 7103 Dissertation planning and defending (Required)

DSC 7274 Statistical Modeling and Analysis

OSUST 7515 Design of Experiments

Math 7513 Introduction to (Real) Analysis

Math 7555 Mathematical Modeling

Math 7556 Networks and Combinatory

Math 7564 Mathematical Statistics

#### Advanced Specialty Subjects

PSY 7600 Multicultural Issues in Psychology: Theory, Research, and Practice

PSY 7601 Physiological Psychology

PSY 7602 Learning and Motivation

PSY 7603 Development

PSY 7604 Cognitive Psychology

PSY 7605 Personality

PSY 7606 Social Psychology

PSY 7607 Advanced Psychopathology

PSY 7608 Theories and Systems

PSY 7609 Perception

PSY 7626 Psychology of Sex and Gender

PSY 7635 Trans theoretical Model Applied to Health Psychology

PSY 7641 Introduction to Psychotherapy  
PSY 7644 Family Therapy  
PSY 7647 Child Therapy  
PSY 7660 Clinical Assessment and Decision Making  
PSY 7661 Psychological Services I: Administration and Interpretation of Cognitive Tests  
PSY 7662 Psychological Services II: Administration and Interpretation of Personality Tests  
PSY 7663 Child and Adolescent Personality Assessment and Intervention  
PSY 7674 Clinical Practices: Therapy  
PSY 7668 School Psychological Consultation  
PSY 7670 Field Experience in Psychological Services  
PSY 7663 Child and Adolescent Personality Assessment and Intervention

Research

CTR 7104 Concept Paper 4  
DIS 7200 Doctoral Comprehensive Examination 4  
DIS 7301 Doctoral Dissertation Research I 4  
DIS 7302 Doctoral Dissertation Research II 4  
DIS 7303 Doctoral Dissertation Research III 4

**11.03.07 - LISTING OF GRADUATE PSYCHOLOGY COURSES**

An asterisk (\*) indicates that the course has a prerequisite.

**Fundamentals and General Psychology Specialization**

- PSY5000 - Theories of Personality
- PSY5001 - Human Communication: Interviewing Skills
- PSY5002 - Counseling Theories and Strategies
- PSY5003 - History and Systems of Psychology<sup>3</sup>
- PSY5004 - Professional Ethics, Law and Psychology
- PSY5005 - Theories of Human Development and Functioning
- PSY5006 - Psychopathology
- PSY5007 - Sexual Issues: Sexuality, Sexual Problems, and Sex Therapy
- \*PSY5008 - Gender and Cultural Diversity
- PSY5009 - Family Systems Theory
- PSY5010 - Child and Adolescent Psychology/ Child Abuse Assessment and Reporting
- PSY5011 - Clinical Survey of Substance Abuse and Dependence
- PSY5012 - Group Therapy
- PSY5014 - Brief Therapy
- PSY5015 - Social Psychology
- PSY5016 - Psychology of Women
- PSY5017 - Psychology of Aging
- PSY5018 - Foundations of Hypnosis
- PSY5019 - Psychology of Trauma
- PSY5023 - Psychology of Education
- PSY5024 - Cognition, Emotion and Motivation
- PSY5025 - Foundations of Play Therapy
- PSY5027 - Psychology of Stress & Stress Related Disorders: Theory, Assessment, & Intervention
- PSY5028 - Psychology of Violence
- PSY5032 - The Psychology of Gender
- PSY5033 - Death and Dying
- \*PSY5034 - Dual Diagnosis
- PSY5036 - Advanced Cognitive Therapy
- \*PSY5038 - The (Advanced) Psychology of Addiction and Compulsive Behaviors
- PSY5039 - Research Design
- PSY5040 - Applied Statistics
- PSY5041 - Qualitative Research Methods
- PSY5050 - Career and Lifestyle Development
- PSY5051 - Positive Psychology
- PSY5052 - Community Psychology
- \*PSY6000 - Research Project in Psychology (1-5 credits)
- \*PSY6005 - Psychological Tests and Measurements
- PSY7001 - Physiological Psychology
- \*PSY7004 - Practicum I
- \*PSY7005 - Practicum II

PSY7010 - Applied Psychology Project (1-5 credits)  
HBM6006 - Psychology of Chronic Illness  
\*HBM6007 - Behavioral Medicine I  
\*HBM6008 - Behavioral Medicine II  
HBM6009 - Pain Management  
HBM6012 - Psychopharmacology  
\*IOP6005 - Psychological Tests and Measurements  
\*IOP6006 - Organizational/Industrial Psychology  
IOP6007 - Consulting in Business, Education and Mental Health  
\*IOP6008 - Survey Research Methods  
\*IOP8015 - Multivariate Statistics

### **Health Psychology/Behavioral Medicine Specialization**

\*HBM6000 - Graduate Research Project in Health Psychology/Behavioral Medicine (1-5 credits)  
HBM6006 - Psychology of Chronic Illness  
\*HBM6007 - Behavioral Medicine I  
\*HBM6008 - Behavioral Medicine II  
HBM6009 - Pain Management  
HBM6012 - Psychopharmacology  
\*HBM7004 - Health Psychology/Behavioral Medicine Practicum  
HBM7010 - Applied Health Psychology/ Behavioral Medicine Project (1-5 credits)  
PSY5009 - Family Systems Theory  
PSY5012 - Group Therapy  
PSY5018 - Foundations of Hypnosis  
PSY5024 - Cognition, Emotion and Motivation  
PSY5027 - Psychology of Stress & Stress Related Disorders  
PSY5052 - Community Psychology  
\*HCA5016 - Health Care Grants  
\*HCA5019 - Managed Health Care Systems  
\*HCA5021 - Comparative Health Care Systems  
\*HCA5022 - Strategic Planning in Health Care

### **Industrial/Organizational Psychology Specialization**

\*IOP6000 - Graduate Research Project in I/O Psychology (1-5 credits)  
\*IOP6005 - Psychological Tests and Measurements  
\*IOP6006 - Organizational/Industrial Psychology  
IOP6007 - Consulting in Business, Education and Mental Health  
\*IOP6008 - Survey Research Methods  
\*IOP7004 - I/O Psychology Practicum  
IOP7010 - Applied I/O Psychology Project (1-5 credits)  
\*IOP8015 - Multivariate Statistics  
HRM5000 - Human Resources Management  
\*HRM5005 - Quality Concepts in Human Resources  
HRM5007 - Human and Cultural Issues in Technology Management  
MGT5000 - Business Organization and Management

MGT5006 - Organizational Behavior  
\*MGT5010 - Leadership in Organizations  
MGT5015 - Interpersonal Dynamics  
MGT5022 - Organizational Development

**Marriage and Family Therapy Specialization**

MFT5004 - Professional Ethics and Family Law  
MFT5005 - Individual and Family Development: A Life Cycle Approach  
MFT5006 - Psychopathology and the Family  
MFT5014 - Brief Marriage and Family Therapy  
MFT5025 - Theory and Techniques in Marriage and Family Therapy  
MFT5026 - Advanced Techniques in Marriage and Family Therapy  
MFT5039 - Research Design in MFT  
MFT5055 - Special Issues: Domestic Violence, Spousal Abuse, Child Assessment and Reporting  
MFT5060 - Couples Therapy  
MFT5061 - Therapy with Children and Adolescents  
PSY5000 - Theories of Personality  
PSY5002 - Counseling Theories and Strategies  
PSY5007 - Sexual Issues: Sexuality, Sexual Problems, and Sex Therapy  
PSY5008 - Gender and Cultural Diversity  
PSY5009 - Family Systems Theory  
PSY5011 - Clinical Survey of Substance Abuse and Dependence  
PSY5012 - Group Therapy  
HBM6012 - Psychopharmacology  
\*IOP6005 - Psychological Tests and Measurements

**Other Graduate Courses**

LS5001 - Research Writing  
LS5050 Graduate Writing Review  
LS6010P - Information Research Strategies

## 12 - School of Engineering

**AUSTC Engineering's Mission:** The School of Engineering is a diverse community of scholars, learners, and professional staff dedicated to the development and application of advanced technologies, and working together to enhance the quality of life for all.

We are creative problem solvers, innovators, inventors, and entrepreneurs, applying our skills for the advancement of knowledge, service to our community, and the economic development of the state of California and beyond.

We prepare our graduates to be global leaders in a wide range of engineering disciplines and to create new knowledge, products, and services.

Targeted students' population: Due to the applied method of education at AUSTC, and to assure that students have received the required fundamental engineering studies and hands on training, only graduates of accredited or recognized engineering associate degree programs are accepted for admission to engineering bachelor's degree programs.

**Expected Student Outcomes:** As designed to meet market requirement and professional measures, graduates receiving baccalaureate degrees in all engineering disciplines will demonstrate:

- a) Ability to apply knowledge of mathematics, science, and engineering
- b) Ability to design and conduct experiments, as well as to analyze and interpret data
- c) Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- d) Ability to function on multi-disciplinary teams
- e) Ability to identify, formulate, and solve engineering problems
- f) Understanding of professional and ethical responsibility
- g) Ability to communicate effectively
- h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- i) Recognition of the need for, and an ability to engage in, life-long learning
- j) Knowledge of contemporary issues
- k) Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Engineers from all fields are heavily involved in the solution of technological and socio-technological problems; industry's needs are for balanced teams of both men and women from different engineering areas. Therefore, the school's goal is to stimulate our students to become creative, responsible engineers, aware of the social implications of their work, and flexible enough to adjust to the rapid changes taking place in the world and, consequently, in all branches of engineering.

The School of Engineering offers undergraduate majors in civil, architectural, electrical, mechanical engineering and computer science.

Based on the fact that all accepted students to engineering undergraduate programs are primarily graduates of accredited or recognized engineering associated degree programs, fundamental engineering subjects are transferred from the associate degree after an in-depth review of each associate degree program. Usually, associate degree graduates qualify for transfer of up to 60 semester units, and may expand to 88 semester units for those who attended superior diploma after associate degree graduation. Because the same fundamental concepts underlie all branches of engineering, all applicants transcripts are reviewed against the listing of fundamental engineering subjects that are usually included in freshman-year and first year's courses, and the choice of a specific engineering major is specified in comparison to associate degree specialty to admit new students directly to third year's program unless certain associate degree graduates miss a number of fundamental engineering subjects, then may be delayed until the required subjects are taken at AUSTC. All of the engineering curricula are based on an intense study of mathematics and the basic sciences supporting the fundamentals of each engineering discipline. These principles are applied to the understanding and solution of problems of current interest and importance in the field. Each curriculum is designed to provide the knowledge and ability necessary for practice as a professional engineer, or for successful graduate study, which may include law, business administration, or medicine, as well as engineering and science disciplines.

### **Curriculum Requirements**

Entering engineering students who have chosen a specific major should follow the particular program listed in this section.

To meet graduation requirements, students enrolled in the School of Engineering (SOE) must satisfactorily complete all courses of the degree program in which they are enrolled and obtain a grade point average of 2.00 or better in all required science, mathematics, and engineering courses (including professional electives). At the discretion of the dean, students who do not demonstrate satisfactory progress may be required to leave the SOE.

**Student Advisement:** Engineering students are advised by engineering faculty members. While the student is in University School, advising takes place at AUSTC; once the student is transferred to the SOE, advising takes place at the departmental level. The office of the Associate Dean of Engineering provides non-routine advising, while faculty mentors are the main contact and advisory panel.

## **12.01 - Civil and Constructional Engineering**

The Department of Civil and Constructional Engineering offers a curriculum leading to the Bachelor of Engineering (BE.) degree in civil engineering or Architectural Engineering. The department also offers the Master of Engineering (ME.)

**Department Mission Statement:** Consistent with the missions of the American University for Science and Technology and the School of Engineering (SOE), the Department of Civil and Constructional Engineering: seeks to prepare students to practice professionally in the national and international marketplace in the field of Civil and Constructional Engineering through the provision of high quality undergraduate and graduate educational programs and research opportunities; provides an environment that encourages and supports faculty career development and professional/ community service.

**Program Mission Statement:** Consistent with the mission of the Department of Civil and Constructional Engineering, the BE Program will prepare graduates for successful careers, advanced studies at the graduate level, and lifelong learning based upon a solid foundation of technical ability, high standards of professional ethics, and strong communication skills.

**Program Educational Objectives:** The BE program at AUSTC has four primary objectives:

- 1) Produce graduates who are able to successfully practice civil engineering to serve local, state, regional, national and international industries, and government agencies.
- 2) Produce graduates with the necessary background and technical skills to work professionally in one or more of the following areas: environmental engineering, geotechnical engineering, structural engineering, transportation engineering, water resources engineering.
- 3) Prepare graduates for personal and professional success with awareness of and commitment to their ethical and social responsibilities, and diversity, both as individuals and in team environments.
- 4) Prepare graduates to be interested in, motivated for, and capable of pursuing continued lifelong learning through further graduate education or other training programs in engineering or related fields.

**Program Description:** Civil Engineers and Architects are responsible for researching, developing, planning, designing, constructing, and managing many of the complex systems and facilities essential to modern civilization. These include environmental engineering systems; water supply and pollution control systems; all types of transportation systems, from pipelines to city streets; structural systems from residential buildings to city skyscrapers, power plants, and offshore platforms; and all types of geotechnical systems from foundations to dams. Civil engineers play important roles in planning and administration with government agencies at all levels, especially those dealing with public works, transportation, environmental control, water supply, and renewable energy.

The curriculum provides students with an excellent background to pursue graduate study or to enter directly into professional practice in industry or government after graduation.

As students are all associate engineers who transferred a total of 60 semester units or more from other accredited or recognized postsecondary engineering education facilities, they have completed and obtained the credit equivalent to the freshman and sophomore years including mathematics, chemistry, physics, and engineering science common to all engineering curriculums as well as mechanics of materials and two laboratories.

Students attend the last two years at AUSTC to develop a proficiency in environmental engineering, geotechnical engineering, structural engineering, architectural engineering and transportation engineering. They can also meet their own professional goals through the selection of professional electives in these areas as well as construction management. Professional electives are selected in consultation with the student's advisor.

### **GRADUATION COMPETENCY REQUIREMENTS (BE, Civil / Architectural):**

**In general, all undergraduate engineering students are required to complete the following**

Required = 124 Semester Units

Maximum Credit Transfer from Recognized Facilities = 88 Semester Units

Minimum Taken at AUSTC = 36 Semester Units

ALS 1007 (Required),

40 Credits in General Knowledge Subjects

20 Credits in Basic Engineering Subjects

20 Credits of Core Subjects

36 Credits Civil Engineering Concentration Subjects

Remaining Credits if Any from Elective List

### **Basic Engineering Subjects**

GE 1105 Engineering Graphics

GE 1111 General Chemistry I

GE 1113 General Chemistry II

GE 1152 Calculus I

GE 1153 Calculus II

GE 1201 Engineering Mechanics

GE 1207 Applied Mechanics of Solids

GE 1208 Thermodynamics

GE 1221 Electric Power Distribution System Engineering

GE 1260 Differential Equations with Linear Algebra

### **Core Subjects**

ARCE 1100 Introduction to Architectural Engineering

ARCE 1231 Building Construction Materials

ARCE 1310 Construction Drawings and Details for Interiors

ARCE 1312 Introduction to Building Information Modeling

ARCE 2011 Mechanics of Materials  
ARCE 2121 Fundamentals of Engineering Thermodynamics  
ARCE 2212 Building Construction Methods  
ARCE 3011 Fundamentals of Structural Analysis  
ARCE 3012 Design of Concrete Structures  
ARCE 3303 Soil Mechanics and Foundations  
ARCE 3304 Structural Steel Drafting and Design  
CE 1011 Introduction to Geometrics  
CE 3464 Engineering Ethics and Professional Practice  
CS 4006 Professional and Technical Writing  
CS 4101 Introduction to Computers  
EE 3110 Mathematics for Engineers  
EE 4112 Principles of Electricity

#### **Civil Engineering Concentration Subjects**

CE 2302 Surveying  
CE 2325 Hydraulics and Hydrology  
CE 2332 Principles of Geotechnical Engineering  
CE 2335 Design of Structures  
CE 2442 Water Resources Engineering  
CE 3435 Foundation Design  
CE 3475 Construction Planning and Scheduling  
CE 4475 Project Planning and Scheduling

#### **Architectural Engineering Concentration Subjects**

ARCE 2215 Building Specifications and Contracts  
ARCE 2224 Construction Estimating  
ARCE 3112 Fundamentals of HVAC  
ARCE 3121 Plumbing: Design and Installation  
ARCE 3210 Construction Scheduling  
ARCE 3312 Building Construction Methods and Site Engineering  
ARCE 3417 Construction Equipment Management  
ARCE 4002 Sustainable Construction and Design  
ARCE 4121 Environmental Science in Building Construction  
ARCE 4212 Surveying  
ARCE 4311 Architectural Drafting and Design  
ARCE 4312 Construction Project Management  
ARCE 4401 Formwork for Concrete Structures  
ARCE 4407 Wood and Masonry Design  
ARCE 4511 Construction Safety Management  
ARCE 4711 Architectural Engineering and Construction Project

#### **Civil and Constructional Engineering Elective List:**

ARCE 1100 Introduction to Architectural Engineering  
ARCE 1231 Building Construction Materials  
ARCE 1310 Construction Drawings and Details for Interiors  
ARCE 1312 Introduction to Building Information Modeling  
ARCE 2011 Mechanics of Materials  
ARCE 2121 Fundamentals of Engineering Thermodynamics  
ARCE 2212 Building Construction Methods  
ARCE 2215 Building Specifications and Contracts

ARCE 2224 Construction Estimating  
ARCE 3011 Fundamentals of Structural Analysis  
ARCE 3012 Design of Concrete Structures  
ARCE 3112 Fundamentals of HVAC  
ARCE 3121 Plumbing: Design and Installation  
ARCE 3210 Construction Scheduling  
ARCE 3303 Soil Mechanics and Foundations  
ARCE 3304 Structural Steel Drafting and Design  
ARCE 3312 Building Construction Methods and Site Engineering  
ARCE 3417 Construction Equipment Management  
ARCE 4002 Sustainable Construction and Design  
ARCE 4121 Environmental Science in Building Construction  
ARCE 4212 Surveying  
ARCE 4311 Architectural Drafting and Design  
ARCE 4312 Construction Project Management  
ARCE 4401 Formwork for Concrete Structures  
ARCE 4407 Wood and Masonry Design  
ARCE 4511 Construction Safety Management  
ARCE 4711 Architectural Engineering and Construction Project  
CE 1011 Introduction to Geometrics  
CE 2302 Surveying  
CE 2325 Hydraulics and Hydrology  
CE 2332 Principles of Geotechnical Engineering  
CE 2335 Design of Structures  
CE 2442 Water Resources Engineering  
CE 3435 Foundation Design  
CE 3464 Engineering Ethics and Professional Practice  
CE 3475 Construction Planning and Scheduling  
CE 4417 Matrix Method of Structural Analysis  
CE 4418 Dynamics of Structure  
CE 4419 Design of Concrete Structure  
CE 4424 Construction Plan Reading  
CE 4436 Design of Wood Structure  
CE 4449 Environmental Engineering  
CE 4451 Intelligent Transportation Systems  
CE 4463 Construction Materials  
CE 4475 Project Planning and Scheduling  
CE 4484 Construction Equipment and Safety  
CE 4486 Estimating in Building Construction  
CE 4487 Construction Specifications Writing

Students gain professional training by working at an engineering consulting firm or governmental agency. They also carry out research working closely with a faculty mentor. For admission into the program, students must have junior standing in civil engineering (minimum of 62 credits) and cumulative GPA of 3.00. Students must also maintain a cumulative GPA of 3.00 while in the program and pass the FE (Fundamentals of Engineering) examination.

**12.02 - ME, Architectural Engineering - Construction Management**

This degree program targets Architectural Engineers who are interested in obtaining Pragmatic skills and knowledge across functional business areas including marketing, organizational behavior, human resource, management, strategic management, accounting/finance, operations, and information technology.

**Program's Educational Objectives:**

It focuses on improving student's ability to

- 1) Recognize and use modern management techniques, skills and tools;
- 2) The ability to lead and contribute in cross-functional teams in global and multicultural environments;
- 3) A thorough understanding of professional, ethical, and social responsibility;
- 4) Ability to use an array of tools to communicate effectively in relevant venues;
- 5) Recognition of the need for and the desire to engage in lifelong learning;
- 6) Hold positions of leadership in a rapidly-changing, technologically-driven business climate;
- 7) Develop and execute strategic as well as tactical plans;
- 8) Be starting entrepreneurial companies, managing programs, driving; focused change, and creating value; and
- 9) Drive collaborative communication and relationship building across organizational, cultural and social lines and stimulate innovation for sustained success.

**FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS  
ME, Architectural Engineering - Construction Management**

To graduate with a Master of Engineering, Architectural Engineering – Construction Management, students are required to complete 44 credits as described below.

Students who attended engineering programs beyond bachelor's degree at an accredited or recognized facility may qualify for credit transfer up to 8 semester units as a maximum.

Minimum credit that may be taken at AUSTC to qualify for graduation must be 32 semester units or more.

- ALS 6010 Information Search (Required as the first taken subject at AUSTC)
- 20 Credits from Core Subjects
- 20 Credits from Architectural Engineering - Construction Management Subjects
- Remaining Required Credit, from Elective List

Basic Studies

ALS 6010 Information Research Strategies

Core Subjects

ARCE 5421 Risk Assessment Engineering  
ARCE 5471 Construction Planning & Scheduling  
ARCE 5521 Building Illumination Design  
ARCE 5527 Control of Building Environmental Systems  
ARCE 5529 Probability Concepts in Civil Engineering Design  
ARCE 5530 Finite Element Methods of Analysis  
ARCE 5531 Physical Performance of Buildings  
ARCE 5574 Statistical Analysis of Engineering Data  
ARCE 5575 Systems Analysis in Civil Engineering

Architectural Engineering - Construction Management - Specialty Subjects

ARCE 5470 Construction Methods and Cost Estimating  
ARCE 5472 Construction Site Operation  
ARCE 5473 Construction Project Administration  
ARCE 5486 Soil and Site Improvement  
ARCE 5570 Legal Issues in Civil Engineering  
ARCE 5571 Advanced Construction Scheduling and Control  
ARCE 5572 Construction Cost Accounting and Control  
ARCE 5573 Computer Applications in Construction  
ARCE 5577 Construction Equipment Management

Elective List Semester

ARCE 5420 Introduction to Dynamics of Structures  
ARCE 5421 Risk Assessment Engineering  
ARCE 5435 Experimental Analysis of Structures  
ARCE 5436 Design of Masonry & Timber Structures  
ARCE 5442 Finite Element Methods in Framed Structures  
ARCE 5457 Geotechnical Foundation Design  
ARCE 5461 Plumbing and Fire Protection Design  
ARCE 5463 Building Enclosure Design  
ARCE 5464 HVAC Systems Design  
ARCE 5470 Construction Methods and Cost Estimating  
ARCE 5471 Construction Planning & Scheduling  
ARCE 5472 Construction Site Operation  
ARCE 5473 Construction Project Administration  
ARCE 5486 Soil and Site Improvement  
ARCE 5503 Advanced Structural Theory & Design  
ARCE 5504 Seismic Retrofit & Earthquake Hazard Reduction  
ARCE 5506 Building Envelope Rehabilitation Engineering  
ARCE 5510 Dynamics of Fire  
ARCE 5511 Fire Protection of Buildings  
ARCE 5512 Computer Modeling of Fire  
ARCE 5518 Advanced Reinforced Concrete  
ARCE 5520 Buckling of Structures  
ARCE 5521 Building Illumination Design  
ARCE 5522 Structural Model Analysis  
ARCE 5525 Advanced Steel and Composite Structures  
ARCE 5526 Energy Conservation Design in Buildings  
ARCE 5527 Control of Building Environmental Systems  
ARCE 5528 Communication and Electrical Systems in Buildings  
ARCE 5529 Probability Concepts in Civil Engineering Design

ARCE 5530 Finite Element Methods of Analysis  
ARCE 5531 Physical Performance of Buildings  
ARCE 5532 Analysis of Plates and Shells  
ARCE 5533 Theory & Analysis of Thin Shells  
ARCE 5534 Computational Techniques in Finite Element Analysis  
ARCE 5542 Acoustics and Lighting  
ARCE 5542 Acoustics and Lighting  
ARCE 5551 Pre-stressed Concrete  
ARCE 5552 Heating and Refrigeration  
ARCE 5553 Measurement and Instrumentation in Architectural Engineering  
ARCE 5560 Plastic Methods  
ARCE 5561 Structural Probability & Probabilistic Bases of Design  
ARCE 5564 Design of Foundations, Embankments & Earth Structures  
ARCE 5570 Legal Issues in Civil Engineering  
ARCE 5571 Advanced Construction Scheduling and Control  
ARCE 5572 Construction Cost Accounting and Control  
ARCE 5573 Computer Applications in Construction  
ARCE 5574 Statistical Analysis of Engineering Data  
ARCE 5574 Economic Decision Analysis in Civil Engineering  
ARCE 5575 Systems Analysis in Civil Engineering  
ARCE 5576 Indoor Air Pollution  
ARCE 5576 Advanced Construction Accounting and Finance  
ARCE 5577 Construction Equipment Management  
ARCE 5582 Structural Wind & Earthquake Engineering  
CE 5105 Surveying with Construction and Applications  
CE 5115 Structural Analysis  
CE 5117 Foundation Analysis and Design  
CE 5119 Soil Mechanics and Foundations  
CE 5125 Open Channel Hydraulics  
CE 5127 Hydro-systems engineering and Management  
CE 5128 Traffic and Highway Engineering  
CE 5130 Engineering Fluid Mechanics  
CE 5137 Design of Wood Structure ASD/LRFD  
CE 5140 Seismic Design of Buildings and Bridges  
CE 5145 Introduction to Optimum Design  
CE 5151 Advanced Engineering Mathematics  
CE 5153 Steel Structure Design and Behavior  
CE 5155 Subsurface Hydrology  
CE 5156 Contaminant Hydrogeology  
CE 5157 Water Resources Engineering  
CE 5159 Reinforced Concrete Mechanics and Design  
CE 5160 Engineering Economy  
CE 5163 Construction Management Fundamentals  
CE 5165 Engineering Ethics  
CE 5171 Research Methods for Construction

### **12.03 - ME, Architectural Engineering - Building Systems**

This program focuses on building systems in structural design topics such as Plumbing and Fire Protection Design, Building Enclosure Design, HVAC Systems Design, Building Envelope Rehabilitation Engineering, Dynamics of Fire, Fire Protection of Buildings, Computer Modeling of Fire, Energy Conservation Design in Buildings, Communication and Electrical Systems in Buildings, Acoustics and Lighting, Heating and Refrigeration, Measurement and Instrumentation in Architectural Engineering, Structural Probability & Probabilistic Bases of Design and Indoor Air Pollution.

#### **Program's Educational Objectives:**

It focuses on improving student's ability to

- 1) Recognize and use modern building systems science, techniques, skills and tools;
- 2) Perform building systems analysis on structures comprised of many types of materials and structural components and subjected to gravity, wind and/or seismic loads.
- 3) Design building system members and connections using many types of materials and structural components in accordance with current building codes and specifications.
- 4) Complete a structural engineering project satisfying the complex requirements of modern structures, safety, health and environmental requirement.
- 5) Become a professional engineers (if so desired)
- 6) Full qualification in structural engineering (if so desired)
- 7) Ability to confidently meet responsibilities of a professional architectural engineer

### **FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS ME, Architectural Engineering - Building Systems**

To graduate with a Master of Engineering, Architectural Engineering – Building Systems, students are required to complete 44 credits as described below.

Students who attended engineering programs beyond bachelor's degree at an accredited or recognized facility may qualify for credit transfer up to 8 semester units as a maximum.

Minimum credit that may be taken at AUSTC to qualify for graduation must be 32 semester units or more.

- ALS 6010 Information Search (Required as the first taken subject at AUSTC)
- 20 Credits or less from Core Subjects
- 20 Credits or more from Architectural Engineering - Construction Management Subjects
- Remaining Required Credit, from Elective List

#### Basic Studies

ALS 6010 Information Research Strategies

#### Core Subjects

ARCE 5421 Risk Assessment Engineering  
ARCE 5471 Construction Planning & Scheduling  
ARCE 5521 Building Illumination Design  
ARCE 5527 Control of Building Environmental Systems  
ARCE 5529 Probability Concepts in Civil Engineering Design  
ARCE 5530 Finite Element Methods of Analysis  
ARCE 5531 Physical Performance of Buildings  
ARCE 5574 Statistical Analysis of Engineering Data  
ARCE 5575 Systems Analysis in Civil Engineering

Architectural Engineering - Building Systems Specialty Subjects

ARCE 5461 Plumbing and Fire Protection Design  
ARCE 5463 Building Enclosure Design  
ARCE 5464 HVAC Systems Design  
ARCE 5506 Building Envelope Rehabilitation Engineering  
ARCE 5510 Dynamics of Fire  
ARCE 5511 Fire Protection of Buildings  
ARCE 5512 Computer Modeling of Fire  
ARCE 5526 Energy Conservation Design in Buildings  
ARCE 5528 Communication and Electrical Systems in Buildings  
ARCE 5542 Acoustics and Lighting  
ARCE 5552 Heating and Refrigeration  
ARCE 5553 Measurement and Instrumentation in Architectural Engineering  
ARCE 5561 Structural Probability & Probabilistic Bases of Design  
ARCE 5576 Advanced Construction Accounting and Finance  
ARCE 5576 Indoor Air Pollution

Elective List Semester

ARCE 5420 Introduction to Dynamics of Structures  
ARCE 5421 Risk Assessment Engineering  
ARCE 5435 Experimental Analysis of Structures  
ARCE 5436 Design of Masonry & Timber Structures  
ARCE 5442 Finite Element Methods in Framed Structures  
ARCE 5457 Geotechnical Foundation Design  
ARCE 5461 Plumbing and Fire Protection Design  
ARCE 5463 Building Enclosure Design  
ARCE 5464 HVAC Systems Design  
ARCE 5470 Construction Methods and Cost Estimating  
ARCE 5471 Construction Planning & Scheduling  
ARCE 5472 Construction Site Operation  
ARCE 5473 Construction Project Administration  
ARCE 5486 Soil and Site Improvement  
ARCE 5503 Advanced Structural Theory & Design  
ARCE 5504 Seismic Retrofit & Earthquake Hazard Reduction  
ARCE 5506 Building Envelope Rehabilitation Engineering  
ARCE 5510 Dynamics of Fire  
ARCE 5511 Fire Protection of Buildings  
ARCE 5512 Computer Modeling of Fire  
ARCE 5518 Advanced Reinforced Concrete  
ARCE 5520 Buckling of Structures  
ARCE 5521 Building Illumination Design  
ARCE 5522 Structural Model Analysis  
ARCE 5525 Advanced Steel and Composite Structures  
ARCE 5526 Energy Conservation Design in Buildings  
ARCE 5527 Control of Building Environmental Systems  
ARCE 5528 Communication and Electrical Systems in Buildings  
ARCE 5529 Probability Concepts in Civil Engineering Design  
ARCE 5530 Finite Element Methods of Analysis  
ARCE 5531 Physical Performance of Buildings  
ARCE 5532 Analysis of Plates and Shells  
ARCE 5533 Theory & Analysis of Thin Shells  
ARCE 5534 Computational Techniques in Finite Element Analysis  
ARCE 5542 Acoustics and Lighting  
ARCE 5542 Acoustics and Lighting  
ARCE 5551 Pre-stressed Concrete

ARCE 5552 Heating and Refrigeration  
ARCE 5553 Measurement and Instrumentation in Architectural Engineering  
ARCE 5560 Plastic Methods  
ARCE 5561 Structural Probability & Probabilistic Bases of Design  
ARCE 5564 Design of Foundations, Embankments & Earth Structures  
ARCE 5570 Legal Issues in Civil Engineering  
ARCE 5571 Advanced Construction Scheduling and Control  
ARCE 5572 Construction Cost Accounting and Control  
ARCE 5573 Computer Applications in Construction  
ARCE 5574 Statistical Analysis of Engineering Data  
ARCE 5574 Economic Decision Analysis in Civil Engineering  
ARCE 5575 Systems Analysis in Civil Engineering  
ARCE 5576 Indoor Air Pollution  
ARCE 5576 Advanced Construction Accounting and Finance  
ARCE 5577 Construction Equipment Management  
ARCE 5582 Structural Wind & Earthquake Engineering  
CE 5105 Surveying with Construction and Applications  
CE 5115 Structural Analysis  
CE 5117 Foundation Analysis and Design  
CE 5119 Soil Mechanics and Foundations  
CE 5125 Open Channel Hydraulics  
CE 5127 Hydro-systems engineering and Management  
CE 5128 Traffic and Highway Engineering  
CE 5130 Engineering Fluid Mechanics  
CE 5137 Design of Wood Structure ASD/LRFD 4  
CE 5140 Seismic Design of Buildings and Bridges 4  
CE 5145 Introduction to Optimum Design 4  
CE 5151 Advanced Engineering Mathematics  
CE 5153 Steel Structure Design and Behavior  
CE 5155 Subsurface Hydrology  
CE 5156 Contaminant Hydrogeology  
CE 5157 Water Resources Engineering  
CE 5159 Reinforced Concrete Mechanics and Design  
CE 5160 Engineering Economy  
CE 5163 Construction Management Fundamentals  
CE 5165 Engineering Ethics  
CE 5171 Research Methods for Construction

### **12.04 - ME, Architectural Engineering - Construction**

This degree program Courses focus on structural design topics such as advanced design of structural steel-members and systems; design of light gage-metal members and structures, reinforced concrete-members and structures, wood structures, masonry structures, foundations; and selection of structural systems. Courses on advanced structural, analysis including applications of the finite element-method, structural dynamics, and structural stability, also are presented to provide a broader theoretical background for structural design.

#### **Program's Educational Objectives:**

It focuses on improving student's ability to

- 1) Recognize and use modern construction science, techniques, skills and tools;
- 2) Perform structural analysis on structures comprised of many types of materials and structural components and subjected to gravity, wind and/or seismic loads.
- 3) Design structural members and connections using many types of materials and structural components in accordance with current building codes and specifications.
- 4) Complete a structural engineering project satisfying the complex requirements of modern structures.
- 5) Become a professional engineers (if so desired);
- 6) Full qualification in structural engineering (if so desired); and
- 7) Ability to confidently meet responsibilities of a professional structural engineer

### **FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS**

#### **ME, Architectural Engineering - Construction**

To graduate with a Master of Engineering, Architectural Engineering – Construction, students are required to complete 44 credits as described below.

Students who attended engineering programs beyond bachelor's degree at an accredited or recognized facility may qualify for credit transfer up to 8 semester units as a maximum.

Minimum credit that may be taken at AUSTC to qualify for graduation must be 32 semester units or more.

- ALS 6010 Information Search (Required as the first taken subject at AUSTC)
- 20 Credits from Core Subjects
- 20 Credits from Architectural Engineering - Construction Management Subjects
- Remaining Required Credit, from Elective List

#### Basic Studies

ALS 6010 Information Research Strategies

#### Core Subjects

ARCE 5421 Risk Assessment Engineering  
ARCE 5471 Construction Planning & Scheduling  
ARCE 5521 Building Illumination Design  
ARCE 5527 Control of Building Environmental Systems  
ARCE 5529 Probability Concepts in Civil Engineering Design  
ARCE 5530 Finite Element Methods of Analysis  
ARCE 5531 Physical Performance of Buildings  
ARCE 5574 Statistical Analysis of Engineering Data  
ARCE 5575 Systems Analysis in Civil Engineering

Architectural Engineering - Construction Specialty Subjects

ARCE 5420 Introduction to Dynamics of Structures  
ARCE 5435 Experimental Analysis of Structures  
ARCE 5436 Design of Masonry & Timber Structures  
ARCE 5442 Finite Element Methods in Framed Structures  
ARCE 5457 Geotechnical Foundation Design  
ARCE 5503 Advanced Structural Theory & Design  
ARCE 5504 Seismic Retrofit & Earthquake Hazard Reduction  
ARCE 5518 Advanced Reinforced Concrete  
ARCE 5520 Buckling of Structures  
ARCE 5525 Advanced Steel and Composite Structures  
ARCE 5532 Analysis of Plates and Shells  
ARCE 5533 Theory & Analysis of Thin Shells  
ARCE 5534 Computational Techniques in Finite Element Analysis  
ARCE 5551 Pre-stressed Concrete  
ARCE 5560 Plastic Methods  
ARCE 5564 Design of Foundations, Embankments & Earth Structures  
ARCE 5582 Structural Wind & Earthquake Engineering

Elective List Semester

ARCE 5420 Introduction to Dynamics of Structures  
ARCE 5421 Risk Assessment Engineering  
ARCE 5435 Experimental Analysis of Structures  
ARCE 5436 Design of Masonry & Timber Structures  
ARCE 5442 Finite Element Methods in Framed Structures  
ARCE 5457 Geotechnical Foundation Design  
ARCE 5461 Plumbing and Fire Protection Design  
ARCE 5463 Building Enclosure Design  
ARCE 5464 HVAC Systems Design  
ARCE 5470 Construction Methods and Cost Estimating  
ARCE 5471 Construction Planning & Scheduling  
ARCE 5472 Construction Site Operation  
ARCE 5473 Construction Project Administration  
ARCE 5486 Soil and Site Improvement  
ARCE 5503 Advanced Structural Theory & Design  
ARCE 5504 Seismic Retrofit & Earthquake Hazard Reduction  
ARCE 5506 Building Envelope Rehabilitation Engineering  
ARCE 5510 Dynamics of Fire  
ARCE 5511 Fire Protection of Buildings  
ARCE 5512 Computer Modeling of Fire  
ARCE 5518 Advanced Reinforced Concrete  
ARCE 5520 Buckling of Structures  
ARCE 5521 Building Illumination Design  
ARCE 5522 Structural Model Analysis  
ARCE 5525 Advanced Steel and Composite Structures  
ARCE 5526 Energy Conservation Design in Buildings  
ARCE 5527 Control of Building Environmental Systems  
ARCE 5528 Communication and Electrical Systems in Buildings  
ARCE 5529 Probability Concepts in Civil Engineering Design  
ARCE 5530 Finite Element Methods of Analysis  
ARCE 5531 Physical Performance of Buildings  
ARCE 5532 Analysis of Plates and Shells  
ARCE 5533 Theory & Analysis of Thin Shells  
ARCE 5534 Computational Techniques in Finite Element Analysis

ARCE 5542 Acoustics and Lighting  
ARCE 5542 Acoustics and Lighting  
ARCE 5551 Pre-stressed Concrete  
ARCE 5552 Heating and Refrigeration  
ARCE 5553 Measurement and Instrumentation in Architectural Engineering  
ARCE 5560 Plastic Methods  
ARCE 5561 Structural Probability & Probabilistic Bases of Design  
ARCE 5564 Design of Foundations, Embankments & Earth Structures  
ARCE 5570 Legal Issues in Civil Engineering  
ARCE 5571 Advanced Construction Scheduling and Control  
ARCE 5572 Construction Cost Accounting and Control  
ARCE 5573 Computer Applications in Construction  
ARCE 5574 Statistical Analysis of Engineering Data  
ARCE 5574 Economic Decision Analysis in Civil Engineering  
ARCE 5575 Systems Analysis in Civil Engineering  
ARCE 5576 Indoor Air Pollution  
ARCE 5576 Advanced Construction Accounting and Finance  
ARCE 5577 Construction Equipment Management  
ARCE 5582 Structural Wind & Earthquake Engineering  
CE 5105 Surveying with Construction and Applications  
CE 5115 Structural Analysis  
CE 5117 Foundation Analysis and Design  
CE 5119 Soil Mechanics and Foundations  
CE 5125 Open Channel Hydraulics  
CE 5127 Hydro-systems engineering and Management  
CE 5128 Traffic and Highway Engineering  
CE 5130 Engineering Fluid Mechanics  
CE 5137 Design of Wood Structure ASD/LRFD  
CE 5140 Seismic Design of Buildings and Bridges  
CE 5145 Introduction to Optimum Design  
CE 5151 Advanced Engineering Mathematics  
CE 5153 Steel Structure Design and Behavior  
CE 5155 Subsurface Hydrology  
CE 5156 Contaminant Hydrogeology  
CE 5157 Water Resources Engineering  
CE 5159 Reinforced Concrete Mechanics and Design  
CE 5160 Engineering Economy  
CE 5163 Construction Management Fundamentals  
CE 5165 Engineering Ethics  
CE 5171 Research Methods for Construction

### **12.05 - ME, CIVIL ENGINEERING**

This degree program focuses on foundation design topics such as Surveying with Construction and Applications, Structural Analysis, Foundation Analysis and Design, Soil Mechanics and Foundations, Open Channel Hydraulics, Hydro-systems engineering and Management, Traffic and Highway Engineering, Engineering Fluid Mechanics, Design of Wood Structure ASD/LRFD, Seismic Design of Buildings and Bridges, Introduction to Optimum Design, Steel Structure Design and Behavior, CE 5155 Subsurface Hydrology, Contaminant Hydrogeology, Water Resources Engineering

#### **Program's Educational Objectives:**

It focuses on improving student's ability to

- 1) Recognize and use advanced civil engineering science, techniques, skills and tools;
- 2) Perform foundation analysis on structures comprised of many types of backbone, resources, landscape, materials, and structural components.
- 3) Design foundation and structural members and connections using many types of materials and structural components in accordance with current building codes and specifications.
- 4) Complete a civil engineering project satisfying the complex requirements of modern structures.
- 5) Become professional engineers (if so desired);
- 6) Full qualification in structural engineering (if so desired); and
- 7) Ability to confidently meet responsibilities of a professional structural engineer

### **FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS ME, CIVIL ENGINEERING**

To graduate with a Master of Engineering, Civil Engineering – Construction, students are required to complete 44 credits as described below.

Students who attended engineering programs beyond bachelor's degree at an accredited or recognized facility may qualify for credit transfer up to 8 semester units as a maximum.

Minimum credit that may be taken at AUSTC to qualify for graduation must be 32 semester units or more.

- ALS 6010 Information Search (Required as the first taken subject at AUSTC)
- 20 Credits from Core Subjects
- 20 Credits from Architectural Engineering - Construction Management Subjects
- Remaining Required Credit, from Elective List

#### Basic Studies

ALS 6010 Information Research Strategies

#### Core Subjects

ARCE 5421 Risk Assessment Engineering  
ARCE 5471 Construction Planning & Scheduling  
ARCE 5521 Building Illumination Design  
ARCE 5527 Control of Building Environmental Systems  
ARCE 5529 Probability Concepts in Civil Engineering Design  
ARCE 5530 Finite Element Methods of Analysis  
ARCE 5531 Physical Performance of Buildings  
ARCE 5574 Statistical Analysis of Engineering Data  
ARCE 5575 Systems Analysis in Civil Engineering

#### Civil Engineering Specialty Subjects

CE 5105 Surveying with Construction and Applications  
CE 5115 Structural Analysis  
CE 5117 Foundation Analysis and Design  
CE 5119 Soil Mechanics and Foundations

CE 5125 Open Channel Hydraulics  
CE 5127 Hydro-systems engineering and Management  
CE 5128 Traffic and Highway Engineering  
CE 5130 Engineering Fluid Mechanics  
CE 5137 Design of Wood Structure ASD/LRFD  
CE 5140 Seismic Design of Buildings and Bridges  
CE 5145 Introduction to Optimum Design  
CE 5151 Advanced Engineering Mathematics  
CE 5153 Steel Structure Design and Behavior  
CE 5155 Subsurface Hydrology  
CE 5156 Contaminant Hydrogeology  
CE 5157 Water Resources Engineering  
CE 5159 Reinforced Concrete Mechanics and Design

Elective List Semester

ARCE 5420 Introduction to Dynamics of Structures  
ARCE 5421 Risk Assessment Engineering  
ARCE 5435 Experimental Analysis of Structures  
ARCE 5436 Design of Masonry & Timber Structures  
ARCE 5442 Finite Element Methods in Framed Structures  
ARCE 5457 Geotechnical Foundation Design  
ARCE 5461 Plumbing and Fire Protection Design  
ARCE 5463 Building Enclosure Design  
ARCE 5464 HVAC Systems Design  
ARCE 5470 Construction Methods and Cost Estimating  
ARCE 5471 Construction Planning & Scheduling  
ARCE 5472 Construction Site Operation  
ARCE 5473 Construction Project Administration  
ARCE 5486 Soil and Site Improvement  
ARCE 5503 Advanced Structural Theory & Design  
ARCE 5504 Seismic Retrofit & Earthquake Hazard Reduction  
ARCE 5506 Building Envelope Rehabilitation Engineering  
ARCE 5510 Dynamics of Fire  
ARCE 5511 Fire Protection of Buildings  
ARCE 5512 Computer Modeling of Fire  
ARCE 5518 Advanced Reinforced Concrete  
ARCE 5520 Buckling of Structures  
ARCE 5521 Building Illumination Design  
ARCE 5522 Structural Model Analysis  
ARCE 5525 Advanced Steel and Composite Structures  
ARCE 5526 Energy Conservation Design in Buildings  
ARCE 5527 Control of Building Environmental Systems  
ARCE 5528 Communication and Electrical Systems in Buildings  
ARCE 5529 Probability Concepts in Civil Engineering Design  
ARCE 5530 Finite Element Methods of Analysis  
ARCE 5531 Physical Performance of Buildings  
ARCE 5532 Analysis of Plates and Shells  
ARCE 5533 Theory & Analysis of Thin Shells  
ARCE 5534 Computational Techniques in Finite Element Analysis  
ARCE 5542 Acoustics and Lighting  
ARCE 5542 Acoustics and Lighting  
ARCE 5551 Pre-stressed Concrete  
ARCE 5552 Heating and Refrigeration  
ARCE 5553 Measurement and Instrumentation in Architectural Engineering  
ARCE 5560 Plastic Methods

ARCE 5561 Structural Probability & Probabilistic Bases of Design  
ARCE 5564 Design of Foundations, Embankments & Earth Structures  
ARCE 5570 Legal Issues in Civil Engineering  
ARCE 5571 Advanced Construction Scheduling and Control  
ARCE 5572 Construction Cost Accounting and Control  
ARCE 5573 Computer Applications in Construction  
ARCE 5574 Statistical Analysis of Engineering Data  
ARCE 5574 Economic Decision Analysis in Civil Engineering  
ARCE 5575 Systems Analysis in Civil Engineering  
ARCE 5576 Indoor Air Pollution  
ARCE 5576 Advanced Construction Accounting and Finance  
ARCE 5577 Construction Equipment Management  
ARCE 5582 Structural Wind & Earthquake Engineering  
CE 5105 Surveying with Construction and Applications  
CE 5115 Structural Analysis  
CE 5117 Foundation Analysis and Design  
CE 5119 Soil Mechanics and Foundations  
CE 5125 Open Channel Hydraulics  
CE 5127 Hydro-systems engineering and Management  
CE 5128 Traffic and Highway Engineering  
CE 5130 Engineering Fluid Mechanics  
CE 5137 Design of Wood Structure ASD/LRFD  
CE 5140 Seismic Design of Buildings and Bridges  
CE 5145 Introduction to Optimum Design  
CE 5151 Advanced Engineering Mathematics  
CE 5153 Steel Structure Design and Behavior  
CE 5155 Subsurface Hydrology  
CE 5156 Contaminant Hydrogeology  
CE 5157 Water Resources Engineering  
CE 5159 Reinforced Concrete Mechanics and Design  
CE 5160 Engineering Economy  
CE 5163 Construction Management Fundamentals  
CE 5165 Engineering Ethics  
CE 5171 Research Methods for Construction

## **12.06 Computer Engineering**

The Bachelor of Engineering (BE) degree in computer science is offered by the Department of Electrical and Computer Engineering (ECE). Specialization in computer science is also available within the Master of Engineering (ME) and Doctor of Philosophy (Ph.D.) programs.

### **Program Educational Objectives:**

The objectives of the computer-engineering program at AUSTC are the following:

- a) Produce graduates who are able to practice computer engineering to serve state and regional industries, government agencies, or national and international industries.
- b) Produce graduates with the necessary background and technical skills to work professionally in one or more of the following areas: computer hardware and software design, embedded systems, computer network design, system integration, electronic design automation.
- c) Prepare graduates for personal and professional success with awareness and commitment to their ethical and social responsibilities, both as individuals and in team environments.
- d) Prepare graduates who are capable of maintaining and improving their technical competence through lifelong learning, including entering and succeeding in an advanced degree program in a field such as engineering, science, or business.

**Program Description:** Digital computer and communication systems have transformed society in a profound way. The examples range from super powerful scientific computers, the Internet and the World Wide Web, to cell phones and smart cards. Traditionally, computer engineering has been a discipline that combines both electrical engineering and computer science. The AUSTC computer engineering program is thus designed so the students will have a strong foundation in the relevant fields of electrical engineering and computer science, while establishing themselves with the latest computer engineering topics, such as advanced computer system architecture, design and programming, computer communication, electronic design automation, and high-level digital design methodologies.

The computer engineering program has two computer engineering electives and one free elective in the senior year so students can further expand into areas such as signals and systems, digital control, electronics, and computer software.

The computer engineering program culminates in the senior year with two major design experiences. First, ELE 408/409 is where all the skills accumulated through the curriculum will be employed in a group senior design project. Second, ELE 480 and 481 provide each student with the opportunity to work in a multi-disciplinary team in a senior capstone design project.

Graduates from the program go on to positions in both government agencies and the private sector, or enter graduate school for further study. Many computer engineering undergraduate students work with faculty on research projects before entering graduate school.

The major requires 120–124 credits.

### **GRADUATION COMPETENCY REQUIREMENTS (BE, Computer Science):**

ALS 1007 Information Search (Required as first subject taken at AUSTC),

40 Credits in general Knowledge Subjects

20 Credits of Basic Engineering Subjects

20 Credits of Core Subjects

36 Credits Computer Science Concentration Subjects

Remaining Credits if Any from Elective List

Basic Engineering Subjects

GE 1105 Engineering Graphics  
GE 1111 General Chemistry I  
GE 1113 General Chemistry II  
GE 1152 Calculus I  
GE 1153 Calculus II  
GE 1201 Engineering Mechanics  
GE 1207 Applied Mechanics of Solids  
GE 1208 Thermodynamics  
GE 1221 Electric Power Distribution System Engineering  
GE 1260 Differential Equations with Linear Algebra

Core Subjects

CE 1011 Introduction to Geometrics  
CE 3464 Engineering Ethics and Professional Practice  
CS 4006 Professional and Technical Writing  
CS 4101 Introduction to Computers  
EE 3110 Mathematics for Engineers  
EE 4112 Principles of Electricity

Computer Science Concentration Subjects

CS 4111 C++ Programming Language  
CS 4113 Data Structure and Algorithms in C++/ Part I  
CS 4114 Data Structure and Algorithms in C++/ Part II  
CS 4121 Comparative Programming Languages  
CS 4134 Computer Networks  
CS 4138 Internetworking with TCP/IP  
CS 4141 Introduction, Software/hardware Interfacing  
CS 4142 Integrated Web Design  
CS 4199 Graduation Project

Elective List

CS 4006 Professional and Technical Writing  
CS 4108 Operating System Fundamentals  
CS 4109 Visual Basic Programming  
CS 4110 Advanced Visual Basic Programming, ASP.NET  
CS 4111 C++ Programming Language  
CS 4112 Application of C++  
CS 4113 Data Structure and Algorithms in C++/ Part I  
CS 4114 Data Structure and Algorithms in C++/ Part II  
CS 4116 Data Abstraction and Problem Solving with C++  
CS 4118 JAVA Programming  
CS 4120 C++ programming Language  
CS 4121 Comparative Programming Languages  
CS 4122 System Analysis and Design  
CS 4125 Computer Organization and Design  
CS 4126 Visual Basic Programming  
CS 4128 ASP.Net (Select C or Visual Basic)  
CS 4129 Information Technology Project Management  
CS 4130 Hardware, firmware and Software Design

CS 4131 Computer Architecture  
CS 4133 Software Engineering Theory and Practice  
CS 4134 Computer Networks  
CS 4135 Analysis and Design of Information Systems  
CS 4137 Operating Systems Design and Implementation  
CS 4138 Internetworking with TCP/IP  
CS 4141 Introduction, Software/hardware Interfacing  
CS 4142 Integrated Web Design  
CS 4161 Logic and Computer Design Fundamentals  
CS 4168 Artificial Intelligence  
EE 3110 Mathematics for Engineers  
EE 4100 Introduction to Electric Circuits  
EE 4112 Principles of Electricity  
EE 4113 Principles of Electrical Engineering  
EE 4118 Advanced Engineering Mathematics  
EE 4123 Electrical Power: Control, Generator and Transformers  
EE 4124 Physics of Semiconductor Devices  
EE 4135 Power Systems Analysis and Design  
EE 4141 Transformer Design  
EE 4144 Logic Synthesis and Verification Algorithms  
EE 4152 Phase Locked Loops Design and Application  
EE 4155 Signal Integrity and Printed Circuit Board Design  
EE 4170 Electronic Devices & Circuits Theory  
EE 4172 Fundamentals of DSL Systems  
EE 4173 Telecommunications  
EE 4175 Data and Computer Communications  
EE 4181 Introduction to Micro-electro-mechanical Microwave Systems  
EE 4183 Microelectronic Circuit Design

### **12.07 - ME, COMPUTER SCIENCE**

Courses focus on computer engineering in specialty level including related electrical engineering and communication theories, Operating System design and concepts, Network Security Assessment, Data Structure, Robotics, Data Mining Techniques, Algorithms and software engineering with an optional exposure to design of microprocessor based control systems.

#### **Program's Educational Objectives:**

It focuses on improving student's ability to

- 1) Recognize computer systems structural analysis on software comprised of many types of methods and structural components and subjected to logic based on engineering theories.
- 2) Be able to build, rebuild, review and assess network systems including local, wide and vast area structures
- 3) Design technical and business applications and connections using many types of techniques and protocols in accordance with state of art practices, methods and tools.
- 4) Complete a software engineering project satisfying the complex requirements of latest concepts and techniques.
- 5) Become a professional software engineer.
- 6) Confidently meet the responsibilities of a professional computer engineer

## FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS ME, COMPUTER SCIENCE

To graduate with a Master of Engineering in Computer Science, students are required to complete 44 credits as described below.

Students who attended engineering or computer science educational programs beyond bachelor's degree at an accredited or recognized facility may qualify for credit transfer up to 8 semester units as a maximum.

Minimum credit that may be taken at AUSTC to qualify for graduation must be 32 semester units or more.

- ALS 6010 Information Search (Required as the first taken subject at AUSTC)
- 20 Credits from Core Subjects
- 20 Credits from Architectural Engineering - Construction Management Subjects
- Remaining Required Credit, from Elective List

### Basic Studies

ALS 6010 Information Research Strategies

### Core Subjects

CS 5000 Decision Support and Expert Systems  
EE 5112 Optical Fiber Communications  
EE 5113 Microelectronic Devices  
EE 5114 Digital Filters  
EE 5115 Microelectronics  
EE 5116 Fundamentals of DSL Systems  
EE 5119 Planar Microwaves Engineering  
TLM 5130 Satellite Communications Systems  
TLM 5141 Network Management and Design  
TLM 5143 Wireless Telecommunication Systems  
RCS 6010 Applied Computer Science Research Project

### Computer Science Specialty Subjects

CS 5101 Operating System Concepts  
CS 5109 Network Security Assessment  
CS 5112 Data Structure  
CS 5119 Introduction to Robotics  
CS 5122 Network Flaws, Theory and Application  
CS 5128 Data Mining Concepts and Techniques  
CS 5131 Introduction to Algorithms  
CS 5133 Computer Networks and Internets  
CS 5134 Software Engineering  
CS 5151 Robotics

### Elective List Subjects

CS 5101 Operating System Concepts  
CS 5103 Fundamentals of Database Systems  
CS 5109 Network Security Assessment  
CS 5112 Data Structure  
CS 5113 Modern Database Management  
CS 5118 Web Database Applications with PHP & MYSQL  
CS 5119 Introduction to Robotics  
CS 5122 Network Flaws, Theory and Application  
CS 5124 Advanced Concepts in Operating Systems  
CS 5128 Data Mining Concepts and Techniques  
CS 5131 Introduction to Algorithms

CS 5133 Computer Networks and Internets  
CS 5134 Software Engineering  
CS 5139 Statistics for Engineers And Computer Scientists  
CS 5141 UNIX Operating System  
CS 5146 Internetworking with TCP/IP  
CS 5151 Robotics  
CS 5167 Digital Image Processing  
CS 5419 Advanced Software Engineering  
EE 5112 Optical Fiber Communications  
EE 5113 Microelectronic Devices  
EE 5114 Digital Filters  
EE 5115 Microelectronics  
EE 5116 Fundamentals of DSL Systems  
EE 5119 Planar Microwaves Engineering  
EE 5139 Renewable and Efficient Power Systems  
EE 5140 Iron Dominated Electromagnets  
EE 5142 Electromechanical Motion  
EE 5144 Digital Communication  
EE 5148 Antennas  
EE 5150 Operational Amplifiers  
EE 5152 Introduction to Radar Systems  
EE 5154 Technology VLSI  
TLM 5102 Telecommunications Industry Structure and Environment  
TLM 5120 Project Management for Telecommunication Managers  
TLM 5123 Modeling and Analysis of Telecommunications Networks  
TLM 5126 Data Scheduling and Transmission Strategies  
TLM 5130 Satellite Communications Systems  
TLM 5141 Network Management and Design  
TLM 5143 Wireless Telecommunication Systems

## **12.08 - Electrical Engineering**

The Bachelor of Engineering (BE) degree in electrical engineering is offered by the Department of Electrical and Computer Engineering (ECE). The department also offers Master's degree (ME) and Doctor of Philosophy (Ph.D.) degree.

### **Program Educational Objectives:**

The objectives of AUSTC's electrical engineering program are the following:

- 1) Produce graduates who are able to practice electrical engineering to serve state and regional industries, government agencies, or national and international industries.
- 2) Produce graduates with the necessary background and technical skills to work professionally in one or more of the following areas: analog electronics, digital electronics, communication systems, computer-based systems, control systems.
- 3) Prepare graduates for personal and professional success with awareness of and commitment to their ethical and social responsibilities, both as individuals and in team environments.

- 4) Prepare graduates who are capable of maintaining and improving their technical competence through lifelong learning, including entering and succeeding in an advanced degree program in a field such as engineering, science, or business.

**Program Description:** Since instrumentation is at the heart of modern science and technology, electrical engineers are employed not only in the computer, electronics, communications, and power industries, but also in diverse enterprises such as transportation, the chemical industry, large hospitals, and government laboratories.

The curriculum emphasizes the scientific basis of electrical engineering and the application of mathematical analysis to engineering problems. Work is required in network and systems theory, atomic physics and solid state, electromagnetic theory, and electronics. Creative use of scientific principles in problems of engineering design is stressed, particularly in the senior year. The development of computer hardware and software is a part of many electrical engineering courses.

Capstone Design Courses provide the opportunity to work on a multidisciplinary team in a senior capstone design project.

## **GRADUATION COMPETENCY REQUIREMENTS BE, ELECTRICAL ENGINEERING**

The major requires 120–124 credits.

ALS 1007 Information Search (Required as first subject taken at AUSTC),

40 Credits if General Knowledge Subjects

20 Credits of Basic Engineering Subjects

20 Credits of Core Subjects

36 Credits Electrical Engineering Concentration Subjects

Remaining Credits if Any from Elective List

### Basic Engineering Subjects

GE 1105 Engineering Graphics

GE 1111 General Chemistry I

GE 1113 General Chemistry II

GE 1152 Calculus I

GE 1153 Calculus II

GE 1201 Engineering Mechanics

GE 1207 Applied Mechanics of Solids

GE 1208 Thermodynamics

GE 1221 Electric Power Distribution System Engineering

GE 1260 Differential Equations with Linear Algebra

### Core Subjects

CE 1011 Introduction to Geometrics

CE 3464 Engineering Ethics and Professional Practice

CS 4006 Professional and Technical Writing

CS 4101 Introduction to Computers

EE 3110 Mathematics for Engineers

EE 4112 Principles of Electricity

### Electrical Engineering Concentration Subjects

EE 4113 Principles of Electrical Engineering  
EE 4123 Electric Power: Control, Generator and Transformers  
EE 4124 Physics of Semiconductor Devices  
EE 4135 Power Systems Analysis and Design  
EE 4141 Transformer Design  
EE 4144 Logic Synthesis and Verification Algorithms  
EE 4152 Phase Locked Loops Design and Application  
EE 4172 Fundamentals of DSL Systems  
EE 4199 Graduation Project

### Elective List

CS 4006 Professional and Technical Writing  
CS 4108 Operating System Fundamentals  
CS 4109 Visual Basic Programming  
CS 4110 Advanced Visual Basic Programming, ASP.NET  
CS 4111 C++ Programming Language  
CS 4112 Application of C++  
CS 4113 Data Structure and Algorithms in C++/ Part I  
CS 4114 Data Structure and Algorithms in C++/ Part II  
CS 4116 Data Abstraction and Problem Solving with C++  
CS 4118 JAVA Programming  
CS 4120 C++ programming Language  
CS 4121 Comparative Programming Languages  
CS 4122 System Analysis and Design  
CS 4125 Computer Organization and Design  
CS 4126 Visual Basic Programming  
CS 4128 ASP.Net (Select C or Visual Basic)  
CS 4129 Information Technology Project Management  
CS 4130 Hardware, firmware and Software Design  
CS 4131 Computer Architecture  
CS 4133 Software Engineering Theory and Practice  
CS 4134 Computer Networks  
CS 4135 Analysis and Design of Information Systems  
CS 4137 Operating Systems Design and Implementation  
CS 4138 Internetworking with TCP/IP  
CS 4141 Introduction, Software/hardware Interfacing  
CS 4142 Integrated Web Design  
CS 4161 Logic and Computer Design Fundamentals  
CS 4168 Artificial Intelligence  
EE 3110 Mathematics for Engineers  
EE 4100 Introduction to Electric Circuits  
EE 4112 Principles of Electricity  
EE 4113 Principles of Electrical Engineering  
EE 4118 Advanced Engineering Mathematics  
EE 4123 Electrical Power: Control, Generator and Transformers  
EE 4124 Physics of Semiconductor Devices  
EE 4135 Power Systems Analysis and Design  
EE 4141 Transformer Design  
EE 4144 Logic Synthesis and Verification Algorithms  
EE 4152 Phase Locked Loops Design and Application  
EE 4155 Signal Integrity and Printed Circuit Board Design

EE 4170 Electronic Devices & Circuits Theory  
EE 4172 Fundamentals of DSL Systems  
EE 4173 Telecommunications  
EE 4175 Data and Computer Communications  
EE 4181 Introduction to Micro-electro-mechanical Microwave Systems  
EE 4183 Microelectronic Circuit Design

**Minor in Electrical Engineering:** Students interested in pursuing a minor in electrical engineering should speak with the department chairperson to discuss course requirements.

### **12.09 - ME, ELECTRICAL ENGINEERING**

Courses focus on Power Systems, Electromagnets, Electromechanical Motion, Digital Communication, Antennas, Operational Amplifiers, Introduction to Radar Systems, Telecommunications and Data Scheduling and Transmission Strategies.

#### **Program's Educational Objectives:**

**It focuses on improving student's ability to :**

- 1) Be able to solve an original research problem at the field of electrical engineering.
- 2) Be able to solve an original research problem at the field of electrical engineering. (six major areas in department including communications, digital systems, electronics, electromagnetics, power systems, and controls)
- 3) Be able to use experimental and computational skills to solve electrical engineering research problems.
- 4) Be able to use mathematical skills to solve electrical engineering problems.
- 5) Become a professional electrical engineer.
- 6) Ability to confidently meet the responsibilities of a professional electrical engineer.

### **FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS ME, ELECTRICAL ENGINEERING**

To graduate with a Master of Engineering in Electrical Engineering, students are required to complete 44 credits as described below.

Students who attended engineering educational programs beyond bachelor's degree at an accredited or recognized facility may qualify for credit transfer up to 8 semester units as a maximum.

Minimum credit that may be taken at AUSTC to qualify for graduation must be 32 semester units or more.

- ALS 6010 Information Search (Required as the first taken subject at AUSTC)
- 20 Credits from Core Subjects
- 20 Credits from Electrical Engineering Subjects
- Remaining Required Credit, from Elective List

#### **Basic Studies**

ALS 6010 Information Research Strategies

#### **Core Subjects**

CS 5000 Decision Support and Expert Systems  
EE 5112 Optical Fiber Communications  
EE 5113 Microelectronic Devices  
EE 5114 Digital Filters  
EE 5115 Microelectronics

EE 5116 Fundamentals of DSL Systems  
EE 5119 Planar Microwaves Engineering  
TLM 5130 Satellite Communications Systems  
TLM 5141 Network Management and Design  
TLM 5143 Wireless Telecommunication Systems  
RCS 6010 Applied Computer Science Research Project

Electrical Engineering Specialty Subjects

EE 5139 Renewable and Efficient Power Systems  
EE 5140 Iron Dominated Electromagnets  
EE 5142 Electromechanical Motion  
EE 5144 Digital Communication  
EE 5148 Antennas  
EE 5150 Operational Amplifiers  
EE 5152 Introduction to Radar Systems  
EE 5154 Technology VLSI  
TLM 5102 Telecommunications Industry Structure and Environment  
TLM 5120 Project Management for Telecommunication Managers  
TLM 5123 Modeling and Analysis of Telecommunications Networks  
TLM 5126 Data Scheduling and Transmission Strategies  
EE 5199 Master's Thesis

Elective List Subjects

CS 5101 Operating System Concepts  
CS 5103 Fundamentals of Database Systems  
CS 5109 Network Security Assessment  
CS 5112 Data Structure  
CS 5113 Modern Database Management  
CS 5118 Web Database Applications with PHP & MYSQL  
CS 5119 Introduction to Robotics  
CS 5122 Network Flaws, Theory and Application  
CS 5124 Advanced Concepts in Operating Systems  
CS 5128 Data Mining Concepts and Techniques  
CS 5131 Introduction to Algorithms  
CS 5133 Computer Networks and Internets  
CS 5134 Software Engineering  
CS 5139 Statistics for Engineers And Computer Scientists  
CS 5141 UNIX Operating System  
CS 5146 Internetworking with TCP/IP  
CS 5151 Robotics  
CS 5167 Digital Image Processing  
CS 5419 Advanced Software Engineering  
EE 5112 Optical Fiber Communications  
EE 5113 Microelectronic Devices  
EE 5114 Digital Filters  
EE 5115 Microelectronics  
EE 5116 Fundamentals of DSL Systems  
EE 5119 Planar Microwaves Engineering  
EE 5139 Renewable and Efficient Power Systems  
EE 5140 Iron Dominated Electromagnets  
EE 5142 Electromechanical Motion  
EE 5144 Digital Communication  
EE 5148 Antennas  
EE 5150 Operational Amplifiers

EE 5152 Introduction to Radar Systems  
EE 5154 Technology VLSI  
TLM 5102 Telecommunications Industry Structure and Environment  
TLM 5120 Project Management for Telecommunication Managers  
TLM 5123 Modeling and Analysis of Telecommunications Networks  
TLM 5126 Data Scheduling and Transmission Strategies  
TLM 5130 Satellite Communications Systems  
TLM 5141 Network Management and Design  
TLM 5143 Wireless Telecommunication Systems

## **12.10 Mechanical Engineering**

The Bachelor of Engineering (BE) degree in mechanical engineering is offered by the Department of Mechanical, Industrial, and Systems Engineering (MCISE). The department also offers the Master of Engineering (ME) and Doctor of Philosophy (Ph.D.)

**Program Mission Statement:** Provide high quality undergraduate and graduate education that will prepare our students for careers as accomplished, productive, and responsible engineers. Conduct high quality research that supports our educational goals, state and national needs, and advances the state of knowledge in our fields of study. Provide professional expertise, service, and outreach to local and national industries and agencies. Promote the intellectual and economic vitality through rigorous academic programs, highly competitive and collaborative research, and a lasting commitment to community outreach activities.

### **Program Educational Objectives:**

The objectives of AUSTC's mechanical engineering program are the following:

- 1) Produce graduates who are able to successfully practice mechanical engineering to serve state, local, national, and international industries and government agencies.
- 2) Produce graduates with the necessary background and technical skills to work professionally as individuals or in teams in the two major stems of mechanical engineering including mechanical and thermal systems.
- 3) Prepare graduates for personal and professional success with an understanding and appreciation of ethical behavior, social responsibility, and diversity, both as individuals and in team environments.
- 4) Prepare graduates to be interested, motivated, and capable of pursuing continued lifelong learning through further graduate education, short courses, or other training programs in engineering or related fields.

**Program Description:** The curriculum provides a thorough and well-rounded foundation in basic science, mathematics, engineering science, and general education to prepare the graduate for a professional engineering career. The curriculum is also excellent preparation for graduate school. The program is strong in providing a background in design, solid and fluid mechanics, systems engineering, and the thermal sciences, including energy and energy transfer. Computer applications are stressed throughout

the curriculum. All undergraduates are invited and encouraged to join the student section of the American Society of Mechanical Engineers, which sponsors industrial plant visits, special lectures, and other activities. Students may also join chapters of the Society of Automotive Engineers (SAE) and the Society for Experimental Mechanics (SEM).

The work in the first two years consists of basic courses in science (math, physics, and chemistry), applied science (mechanics, electricity and magnetism, basic computer literacy and computer-aided problem solving), manufacturing processes, and general education requirements (humanities, social sciences, English communication). As AUSTC accepts mechanical engineering associate degree holders to this program, those subjects are usually transferred from another facility and students proceed to third year's program directly after taking (ALS 1007) which is information searching methods.

The junior year concentrates on fundamental mechanical engineering courses (thermodynamics, fluid mechanics, systems engineering, engineering analysis, and heat transfer), materials sciences, and design of machines. Further general education studies are also covered.

The senior year includes the capstone design sequence, mechanical engineering experimentation, and a wide variety of professional electives such as mechanical control systems, advanced fluid mechanics, advanced mechanics of materials, mechatronics, internal combustion engines, applied energy conversion, tribology, product design for manufacture, air conditioning, heating and ventilation, vibrations, finite element method, and experimental stress analysis. Computer techniques are integrated throughout the curriculum.

### **GRADUATION COMPETENCY REQUIREMENTS - BE, Mechanical**

The major requires 120-124 credits.

Maximum Credit Transfer = 88 Semester Units

Minimum Taken at AUSTC = 32 Semester Units

ALS 1007 (Required as first subject taken at AUSTC),

40 Credits in General Knowledge Subjects

20 Credits in Basic Engineering Subjects

20 Credits in Core Subjects

36 Credits Mechanical Engineering Concentration Subjects

Remaining Credits if Any from Elective List

#### Basic Engineering Subjects

GE 1105 Engineering Graphics

GE 1111 General Chemistry I

GE 1113 General Chemistry II

GE 1152 Calculus I

GE 1153 Calculus II

GE 1201 Engineering Mechanics

GE 1207 Applied Mechanics of Solids

GE 1208 Thermodynamics

GE 1221 Electric Power Distribution System Engineering

GE 1260 Differential Equations with Linear Algebra

#### Engineering Core subjects

CE 1011 Introduction to Geometrics

CE 3464 Engineering Ethics and Professional Practice

CS 4006 Professional and Technical Writing

CS 4101 Introduction to Computers

EE 3110 Mathematics for Engineers

EE 4112 Principles of Electricity

Mechanical Engineering Concentration Subjects

ME 4112 Introduction to Mechanical Engineering  
ME 4117 Kinematics and Dynamics of Machines  
ME 4119 Mechanical Engineering  
ME 4123 Fundamental of Heat and Mass Transfer  
ME 4124 Fundamentals of Engineering Thermodynamics  
ME 4126 Fluid Mechanics  
ME 4171 Modal Testing: Theory, Practice and Application  
ME 4198 Graduation Project

Elective List

CS 4122 System Analysis and Design  
CS 4129 Information Technology Project Management  
CS 4130 Hardware, firmware and Software Design  
CS 4131 Computer Architecture  
CS 4133 Software Engineering Theory and Practice  
CS 4134 Computer Networks  
CS 4135 Analysis and Design of Information Systems  
CS 4141 Introduction, Software/hardware Interfacing  
CS 4161 Logic and Computer Design Fundamentals  
CS 4168 Artificial Intelligence  
EE 3110 Mathematics for Engineers  
EE 4100 Introduction to Electric Circuits  
EE 4112 Principles of Electricity  
EE 4113 Principles of Electrical Engineering  
EE 4118 Advanced Engineering Mathematics  
EE 4124 Physics of Semiconductor Devices  
EE 4135 Power Systems Analysis and Design  
EE 4141 Transformer Design  
EE 4144 Logic Synthesis and Verification Algorithms  
EE 4152 Phase Locked Loops Design and Application  
EE 4155 Signal Integrity and Printed Circuit Board Design  
EE 4170 Electronic Devices & Circuits Theory  
EE 4172 Fundamentals of DSL Systems  
EE 4173 Telecommunications  
EE 4175 Data and Computer Communications  
EE 4181 Introduction to Micro-electromechanical Microwave Systems  
EE 4183 Microelectronic Circuit Design  
ME 4112 Introduction to Mechanical Engineering  
ME 4117 Kinematics and Dynamics of Machines  
ME 4119 Mechanical Engineering  
ME 4123 Fundamental of Heat and Mass Transfer  
ME 4124 Fundamentals of Engineering Thermodynamics  
ME 4126 Fluid Mechanics  
ME 4129 Control Systems Engineering  
ME 4137 Automotive Technology  
ME 4171 Modal Testing: Theory, Practice and Application

### **12.11 - ME, MECHANICAL ENGINEERING**

This program targets mechanical engineers to upgrade fundamental knowledge in a broad area of Mechanical Engineering disciplines in solving engineering problems (three major areas in the department: thermal/fluids, dynamics/control, and mechanics/materials), Independent Learning & Research, Professional and Career Development, Communication Skills, Societal/Cultural/Global Perspectives and demonstrate an understanding of his/her professional responsibilities in increasingly more diverse societal and global environments..

#### **Program's Educational Objectives:**

It focuses on improving student's ability to :

- 1) Apply fundamental knowledge in a broad area of Mechanical Engineering disciplines in solving engineering problems (three major areas in the department: thermal/fluids, dynamics/control, and mechanics/materials).
- 2) Demonstrate independent self-learning and research capabilities, which enable students to grow throughout his/her career after graduation.
- 3) Function effectively as an engineering professional.
- 4) Communicate effectively with written, oral, and visual means.
- 5) Understanding professional responsibilities in increasingly more diverse societal and global environments.

### **FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS ME, ELECTRICAL ENGINEERING**

To graduate with a Master of Engineering in Mechanical Engineering, students are required to complete 44 credits as described below.

Students who attended engineering educational programs beyond bachelor's degree at an accredited or recognized facility may qualify for credit transfer up to 8 semester units as a maximum.

Minimum credit that may be taken at AUSTC to qualify for graduation must be 32 semester units or more.

- ALS 6010 Information Search (Required as the first taken subject at AUSTC)
- 20 Credits from Core Subjects
- 20 Credits from Electrical Engineering Subjects
- Remaining Required Credit, from Elective List

#### **Basic Studies**

ALS 6010 Information Research Strategies

#### **Core Subjects**

ME 5111 Statics and Strength of Materials  
ME 5119 Fundamentals of Thermodynamics  
ME 5131 Applied Fluid Mechanics  
ME 5133 Kinematics and Dynamics of Machinery  
ME 5137 Mechanics of Composite Materials  
ME 5142 Mechanical Metallurgy  
ME 5147 Automatic Control Engineering  
ME 5150 Theory of Electro-mechanics

#### **Mechanical Engineering Specialty Subjects**

ME 5127 Mechanical Engineering Design  
ME 5139 Evaluation and Control of Engineering  
ME 5143 Technology of Machine Tools  
ME 5145 Reliability in Design

ME 5152 Nondestructive Inspection  
ME 5154 Solar Thermal Energy  
ME 5156 Modern Compressible Flow  
ME 5158 Power-plant Technology  
ME 5159 Advanced Engineering Mathematics  
ME 5160 Design of Thermal Systems  
ME 5162 Experimental Methods  
ME 5164 Momentum, Heat Mass Transfer  
ME 5170 Refrigeration and Air Conditioning  
ME 5172 Computer Integrated Design

Elective List Subjects

ME 5111 Statics and Strength of Materials  
ME 5119 Fundamentals of Thermodynamics  
ME 5131 Applied Fluid Mechanics  
ME 5133 Kinematics and Dynamics of Machinery  
ME 5137 Mechanics of Composite Materials  
ME 5142 Mechanical Metallurgy  
ME 5147 Automatic Control Engineering  
ME 5150 Theory of Electro-mechanics  
ME 5154 Solar Thermal Energy  
EE 5112 Optical Fiber Communications  
EE 5113 Microelectronic Devices  
EE 5114 Digital Filters  
EE 5115 Microelectronics  
EE 5116 Fundamentals of DSL Systems  
EE 5119 Planar Microwaves Engineering  
EE 5139 Renewable and Efficient Power Systems  
EE 5140 Iron Dominated Electromagnets  
EE 5142 Electromechanical Motion  
EE 5144 Digital Communication  
EE 5148 Antennas  
EE 5150 Operational Amplifiers  
EE 5152 Introduction to Radar Systems  
EE 5154 Technology VLSI  
TLM 5102 Telecommunications Industry Structure and Environment  
TLM 5120 Project Management for Telecommunication Managers  
TLM 5123 Modeling and Analysis of Telecommunications Networks  
TLM 5126 Data Scheduling and Transmission Strategies  
TLM 5130 Satellite Communications Systems

## 12.12 - Ph.D., Engineering Program

The Ph.D. in Engineering Program is committed to providing a high-quality, advanced doctoral level engineering education to students through tailored course work that uniquely transcends the boundaries of traditional engineering disciplines and provides outstanding opportunities for collaborative research. As a result, the educational experience that students receive serves as a strong foundation for exciting and rewarding research and development careers in industry and academia.

The Ph.D. in Engineering Program is a collaborative program that is shared between all engineering departments as focus areas. All program students attend the same fundamental engineering subjects, after which, every student may select focusing on a specific area based on previously obtained educational, research and work experience to continue taking the related subjects and then proceed with research activities to include comprehensive conceptual paper and dissertation.

### Objectives for the programs are:

1. To enable students to develop as successful professionals for highly competitive positions in industry, government, and academic departments
2. To prepare students to be effective researchers in civil, architectural, mechanical electrical or computer engineering
3. To enhance visibility of the doctoral programs in civil, architectural, mechanical electrical or computer engineering

### Outcomes for each of the program objectives are:

1. To enable students to develop as successful professionals for highly competitive positions in industry, government, and academic departments, the programs aim to provide a variety of experiences that help students to:
  - a. Achieve the highest level of expertise in civil, architectural, mechanical electrical or computer engineering, mastery of the knowledge in their fields and the ability to apply associated technologies to novel and emerging problems
  - b. Present research to local, regional, national, and international audiences through publications in professional journals and conference papers given in a range of venues, from graduate seminars to professional meetings
  - c. Participate in professional organizations, becoming members and attending meetings
  - d. Broaden their professional foundations through activities such as teaching, internships, fellowships, and grant applications

2. To prepare students to be effective researchers in the fields of civil, architectural, mechanical electrical or computer engineering , the programs aim to provide a variety of experiences that help students to:
  - a. Become independent researchers in an area of study, developing a substantial expertise in that area that allows them to make an original contribution to it
  - b. State a research problem in such a way that it clearly fits within the context of the literature in an area of study and demonstrate the value of the solution to the research problem in advancing knowledge within that area
  - c. Apply sound research methods/tools to problems in an area of study and describe the methods/tools effectively
  - d. Analyze/interpret research data
  - e. Communicate their research clearly and professionally in both written and oral forms appropriate to the field
3. To enhance visibility of the doctoral programs in civil, architectural, mechanical electrical or computer engineering nationally, the programs aim to:
  - a. Attract, secure, and retain high-quality students
  - b. Enhance doctoral education by creating advanced courses, providing more supportive resources for fellowships, research, travel to conferences, etc. for doctoral students, and providing special mentoring for doctoral students interested in pursuing academic careers
  - c. Place more graduates in academic positions in the U.S. or internationally
  - d. Attract, retain, and support research-active faculty
  - e. Provide more support for research-active faculty, such as reduced undergraduate teaching and increased research space

### Admission Requirements

To be considered for admission into the Ph.D. in Engineering Program, a student must first satisfy the admission requirements of the School of Graduate Studies. The student is expected to meet the requirements for admission into the Program as described below:

- M.S. degree from an accredited or recognized engineering program, with a minimum 3.5 grade point average GRE scores (analytical + quantitative = 1300). The average GRE

scores among the students enrolled in the Program are 738 (quantitative) and 640 (analytical). Expected score on analytical writing portion of GRE is 4.5

- Statement of Objectives
- Three letters of recommendation
- International students must have a minimum TOEFL (Test of English as a Foreign Language) score of at least 550 (old system) or 213 (new system) or an IELTS (International English Language Testing System) score of 6
- Note: Students who possess an undergraduate degree outside of engineering will be considered on a case-by-case basis. These students are required to successfully complete the equivalent of the relevant math and science sequences required for an undergraduate engineering degree appropriate for their focus area.

Students can help to expedite the admission process by including the following information in their Statement of Objectives: the research focus area of interest; the research that was performed during undergraduate or graduate study; and the name of the WSU faculty with whom the student would like to do research, but only if this has been mutually agreed upon.

#### Program Requirements:

- To graduate, students are required to take 60 credits at AUSTC and research work
- Each student may qualify for transfer of 8 semester units from previously obtained education and/or training at an accredited or recognized engineering school.

Minimum credit taken at AUSTC may not be less than 52 Semester Units as follows:

- Up to 20 Credits of fundamental subjects
- 32 or more Credits of advanced specialty subjects
- Submission of Concept Paper,
- Comprehensive Exam
- Dissertation

#### Fundamental Subjects (Up to 20 Semester Units Including Information Research Strategies)

ALS 6010 Information Research Strategies (Required)

RSE 7102 Research methods and design (Required)

RSE 7103 Dissertation planning and defending (Required)

DSC 7274 Statistical Modeling and Analysis

OSUST 7515 Design of Experiments

Math 7513 Introduction to (Real) Analysis

Math 7555 Mathematical Modeling

Math 7556 Networks and Combinatory

Math 7564 Mathematical Statistics

#### Advanced Specialty Subjects

CE 7687 Geotechnical Earthquake Engineering

CE 7677 Stream and Estuarine Analysis

CE 7672 Water Pollution Control and Treatment of Wastewater

CE 7667 Structural Reliability  
CE 7657 Structural Stability  
CE 7652 Advanced Topics in Bridge Engineering  
CE 7651 Design of Highway Bridges  
CS 7586 Topics in Network Forensics  
CS 7585 Topics in Computer Forensics  
CS 7583 Computer Vision  
CS 7581 Special Topics in Artificial Intelligence  
CS 7550 Computer Algebra  
CS 7548 Graph Theory  
CS 7547 Combinatory and Graph Theory  
CS 7544 Theory of Computation  
CS 7542 Mathematical Analysis of Algorithms  
CS 7541 Advanced Topics in Algorithms  
CS 7536 Topics in Data Management Systems  
CS 7525 Systems Simulation  
CS 7522 Bioinformatics  
CS 7519 Computer Networks  
CS 7512 Topics in Distributed Systems  
CS 7511 Advanced Computer Organization  
CS 7509 Object-Oriented System Design  
CS 7505 Advanced Topics in Software Engineering  
CS 7502 Theory of Compilers  
CS 7501 Programming Language Semantics  
EE 7677 Statistical Sonar Signal Processing  
EE 7672 Underwater Acoustics II  
EE 7670 Advanced Topics in Signal Processing  
EE 7665 Modulation and Detection  
EE 7661 Estimation Theory  
EE 7648 Advanced Topics in Computer Architecture  
EE 7610 Applications of Information Theory  
EE 7606 Digital Filter Synthesis  
ME 7680 Advanced Topics in Solid Mechanics  
ME 7679 Theory of Plasticity  
ME 7678 Micromechanics  
ME 7671 Theory of Elasticity II  
ME 7663 Nonlinear Dynamics

#### Research

CTR 7104 Concept Paper  
DIS 7200 Doctoral Comprehensive Examination  
DIS 7301 Doctoral Dissertation Research I  
DIS 7302 Doctoral Dissertation Research II  
DIS 7303 Doctoral Dissertation Research III

## **13.0 School of Sciences**

School of sciences at the American University for Science and Technology offers two programs:

- Graduate Medical Informatics program grants Master's and Doctor of Philosophy in Medical informatics.
- Graduate Nutritional Sciences program grants Master's and Doctor of Philosophy in Nutritional Sciences

## **13.1 M.S. in Medical Informatics**

With increased attention on reducing healthcare costs, expanding access to quality care and improving the quality of services, the role of health informatics is recognized as a critical component of healthcare reform. The American University for Science and Technology provides innovative and relevant programs and has demonstrated expertise in health informatics management and technology through a faculty of Information Technology leaders with solid medical informatics and health technology background, Medical Doctors, Pharmacists, Nurses and information technologists with special interest in health and medical information practice.

The Master of Science in Medical Informatics (MSMI) program emphasizes the applied aspect of using informatics (information science) in the health care setting. This is somewhat different than other medical informatics programs where there is a stronger emphasis on theory. We strive to provide a practical education that prepares students to effectively participate in development, implementation and management teams charged with producing information technology solutions that improve patient care and reduce the cost of care.

Through The American University for Science and Technology's M.S. in Medical Informatics program, students can gain the tools and skills they need to integrate advanced digital technologies into the field of healthcare and use electronic data to improve the effectiveness and efficiency of healthcare delivery. Learn how new technologies can improve the diagnosis, treatment, and outcomes of disease, as well as reduce the occurrences of medical errors.

### **Objectives:**

Through AUSTC master's in health informatics program, graduates of this program will:

- Gain an in-depth understanding of new and existing digital technology and health information management systems within the context of the U.S. health care system.
- Prepare to lead in the development, implementation, evaluation and management of information technology solutions to improve patient health and the health care delivery process.
- Use health informatics to reduce the occurrence of medical errors.

- Utilize health information technology for decision making support, knowledge management, strategic planning, and outcomes assessment and management to optimize cost efficiencies in the health care system.
- Effectively interface between the data systems developers and the user community.
- Facilitate the development and advancement of e-Health initiatives and other emerging information technologies to improve health care delivery and cost efficiencies.
- Analyze data to identify early patterns of diseases, illness, and injury and review prevention and treatment options.

## Program Features

The M.S. in Health Informatics program was designed to provide students with:

- A curriculum that reflects the current industry standards and principles
- Timely perspectives from a team of subject-matter experts, including current best thinking by industry thought leaders, health management experts, national policy makers, and researchers.
- Current texts, articles, and interactive media along with experience with emerging technologies.
- Opportunities to apply theory to practice through a practicum, which enables students to integrate the knowledge and skills acquired throughout the program.
- A scholarly project in which students synthesize the practicum experience and complete a professional portfolio based on their field experience.

## Admission Requirements

1. Minimum undergraduate degree GPA of 3.00 (on a 4.00 scale)
2. GRE or GMAT general test scores having percentiles that average 60% or better, or an MCAT average of nine on the individual scores. This requirement is waived if applicant already has a graduate degree.
3. Transcripts should show proof of undergraduate course work in college algebra, statistics, and introduction to computers, computer programming and medical terminology.
4. A personal essay stating why applicant wishes to pursue this degree
5. If applicant's native language is not English, a score of 100 or better must be achieved on the Test of English as a Foreign Language (TOEFL). There shall be additional application filing requirements for international students.

**FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS****M.S. in Medical Informatics**

To graduate with a master's degree in medical informatics, student must take a total of 40 semester units at AUSTC. All students are eligible for credit transfer from attended graduate education at a recognized facility up to 8 semester units.

Minimum taken at AUSTC is 32 semester units.

**Basic Studies**

4 semester units of Information research strategies must be the first subject to be taken at AUSTC or transferred from another recognized facility

ALS 6010      Information Research Strategies

**Core Subjects**

20 semester units of core subjects from the listed below must be taken at AUSTC. Student may transfer up to 8 semester units of core subjects based on submission of an acceptable evidence of taking such subjects at a recognized graduate facility not to exceed the allowed credit transfer limit of the degree program.

HCA 5012      Health Care Financial Management  
HCA 5014      Health Care Politics, Policy and Services  
HCA 5015      Healthcare Strategic Planning  
HCA 5016      Health Care Grants  
HCA 5017      Implementing Continuous Quality Improvement In Health Care  
HCA 5019      Essentials Of Managed Health Care  
HCA 5020      Health Care Ethics  
HCA 5021      Comparative Health Care Systems  
HCA 5022      Assessment And Planning In Health Programs  
HCA 6010      Health Care Administration Research Project

**Specialty Subjects**

20 semester units of specialty subjects from the listed below must be taken at AUSTC. Student may not transfer any specialty subject.

MI 5301      Introduction to Medical Informatics  
MI 5302      Ethical, Legal and Social Issues in Biotechnology  
MI 5324      Information Systems Project Management  
MI 5398      Comparative Health Information Management  
MI 5720      Lean Six-Sigma  
MI 5743      Essentials of Health Information Management  
MI 5783      Knowledge Management and Data Mining in Biomedicine  
MI 5787      Performance Improvement for Healthcare

MI 5885	Fundamentals of Healthcare Programming
MI 5886	Informatics in Medical Imaging
MI 5963	Probabilistic Modeling in Medical Informatics

**Elective List Subjects**

Program's director is allowed at planning time to select a subject replacement from the following list without exceeding the required 40 semester units in total.

CS 5000	Decision Support and Expert Systems
CS 5001	C Programming
CS 5002	C++ Programming Language
CS 5003	Computer Graphics
CS 5005	Concepts of Database Management
CS 5009	Integrated Business Processes with ERP Systems
ECM 5002	Monitoring Web-Based Applications and Infrastructure
ECM 5004	Managerial Electronic Commerce
ECM 5005	Electronic Payment Systems
ECM 5006	Supply Chain Logistics Management
ECM 5007	E-Commerce Marketing for Internet
ECM 6010	E-Commerce research Project
HCA 5012	Health Care Financial Management
HCA 5014	Health Care Politics, Policy and Services
HCA 5015	Healthcare Strategic Planning
HCA 5016	Health Care Grants
HCA 5017	Implementing Continuous Quality Improvement In Health Care
HCA 5019	Essentials Of Managed Health Care
HCA 5020	Health Care Ethics
HCA 5021	Comparative Health Care Systems
HCA 5022	Assessment And Planning In Health Programs
HCA 6010	Health Care Administration Research Project
IOP 6006	Organizational Industrial Psychology
MET 5000	Principles of Productivity and Operation Management
MET 5003	Applied Decision Theory
MET 5006	Operations Research
MET 5010	Quality Management for Organizational Excellence
MET 5011	Occupational Safety and Health
MET 5015	Process Technology Equipment and Systems
MET 5017	Technology, Management, and Society
MET 5018	Industrial Organization: Theory and Practice
MET 5020	Technology Management: Activities and Tools
MET 5023	Managing Research and Development Organizations

MET 5029	Project Management
MGT 5006	Organizational Behavior
MGT 5007	Strategic Management Theory : An Integrated Approach
MGT 5008	Operations Management
MGT 5009	International Business
MGT 5010	Leadership in Organizations
MGT 5011	Managerial Communication : Strategies and Applications
MGT 5015	Mediated Interpersonal Communication
MGT 5016	Managing Networks of Creativity
MGT 5017	Dynamic Issues in Commercial Policy Analysis
MGT 5019	Business Ethics
MGT 5021	Organizational Behavior Management
MGT 5022	Organizational Development
MGT 5023	Crisis Intervention Strategies
MGT 5026	Effective Managerial Communications
MGT 5029	Strategic Leadership
MGT 7010	Applied Management Project
MI 5323	Healthcare Decision Support
MIS 5000	Management Information Systems
MIS 5000	Management Information Systems
MIS 5001	Information Systems Project Management
MIS 5002	Fundamentals of Database Management Systems
MIS 5003	Decision Support and Business Intelligence Systems
MIS 5004	Telecommunications and Business Strategy
MIS 5005	Local Area Networks Switching and Wireless
MIS 5005	Local Area Networks Switching and Wireless
MIS 5006	Systems Analysis and Design
MIS 5007	Wide Area Networks (WAN)
MIS 5007	Wide Area Networks (WAN)
MIS 5011	IT Systems Management

## **13.2 Ph.D. in Medical Informatics**

The PhD degree allows graduates to lead research in academic or industry positions. Our faculty and students pursue research across the spectrum of medical informatics, from bioinformatics through translational and clinical informatics. All prospective applicants should note that the program in Biomedical Informatics emphasizes research in novel computational methods aimed at advancing biology and medicine. Student may want to investigate degree programs from other computational and quantitative graduate programs (Bioengineering, Computer Science, and Statistics) and other programs in the Biosciences Programs (such as Genetics, Chemical Systems Biology, or Structural Biology). In contrast to the other computational/quantitative programs, AUSTC focuses more on informatics issues of knowledge representation and reasoning, data mining and analysis, and machine learning, while in contrast to the Biosciences program, AUSTC places greater emphasis on method development and evaluation than on basic science.

Faculty from many departments have research projects of a computational nature, and in some cases there is considerable overlap, but our applications committee evaluates the fit of students' application to our program, so the choice of a home program is an important one as befits an interdisciplinary program, our students come from diverse backgrounds and training experiences.

Some enter straight from baccalaureate training, while others have pursued advanced degrees, such as an MS, MPH, or MD, or worked in clinical medicine, bioengineering, biotechnology, or software engineering.

### **Admission Requirements**

Graduates of M.S. in Medical Informatics qualify for admission.

Or

- One year of calculus. Further coursework in multivariate calculus is strongly recommended.
- Coursework in probability and statistics, and linear algebra.
- One year of computer programming/computer science coursework. The focus should be fundamentals of computer science and software engineering principles, including abstraction, modularity, and object-oriented programming, not merely the syntax of a programming language, scripting, or web programming.

- One year of college biology at the level required of biology majors.

Through AUSTC Ph.D. in medical informatics program, graduates of this program will:

- Gain a specialized in-depth understanding of new and existing digital technology and health information management systems within the context of the U.S. health care system.
- Prepare to lead in the development, implementation, evaluation and management of information technology solutions to improve patient health and the health care delivery process.
- Use health informatics to reduce the occurrence of medical errors.
- Utilize health information technology for decision making support, knowledge management, strategic planning, and outcomes assessment and management to optimize cost efficiencies in the health care system.
- Effectively interface between the data systems developers and the user community.
- Facilitate the development and advancement of e-Health initiatives and other emerging information technologies to improve health care delivery and cost efficiencies.
- Analyze data to identify early patterns of diseases, illness, and injury and review prevention and treatment options.

## Program Features

The doctoral program is a full-time, residential, research-oriented program. AUSTC does not offer part-time or distance education leading to the PhD in Medical Informatics. However, some students may apply to the part-time distance education program at the master's degree, and then submit a separate application to the PhD program. There is no guarantee that distance learning Master's graduates will be accepted into the PhD full time program, unless all prerequisites shall be satisfied.

PhD students start in the fall quarter. They spend an average of five years at AUSTC and are expected to undertake significant research projects.

Candidates are encouraged to explore the various research interests of the medical informatics core and participating faculty. Practice rotations during the first year expose students to different disciplines and faculty. Prior to being formally admitted to candidacy for the doctoral degree at the end of the second year of study, each student must demonstrate knowledge of informatics fundamentals and a potential for succeeding in research by passing a qualifying oral examination. Students later complete and defend a doctoral dissertation.

MDs interested in the PhD in Medical Informatics should contact us as early as possible, especially if student is coordinating the AUSTC training with further medical residency or fellowship training. It is also important to ensure that appropriate math and computer science prerequisites are completed before applying.

## **FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS PhD. in Medical Informatics**

### Program Requirements:

- To graduate, students are required to take 60 credits at AUSTC and research work
- Each student may qualify for transfer of 8 semester units from previously obtained education and/or training at an accredited or recognized facility.

### Minimum credit taken at AUSTC may not be less than 52 Semester Units as follows:

- Up to 20 Credits of fundamental subjects
- 32 or more Credits of advanced specialty subjects
- Submission of Concept Paper,
- Comprehensive Exam
- Dissertation

### Basic Knowledge Subjects (Up to 20 Semester Units Including Information Research Strategies)

MI 6301	Clinical Information Systems
MI 6302	Fundamentals of Healthcare Programming
MI 6303	Bioinformatics
MI 6305	Essentials of Health Information Management
MI 6324	Health Information Technology & Management
MI 6398	Comparative Health Information Management
MI 6720	Medical Devices Design for Six-Sigma
MI 6783	Knowledge Management and Data Mining in Biomedicine
MI 6787	Probabilistic Modeling in Medical Informatics
MI 6886	Informatics in Medical Imaging

### Fundamental Subjects (Up to 20 Semester Units Including Information Research Strategies)

MI 6963	Ethical, Legal and Social Issues in Biotechnology
DSC 7274	Statistical Modeling and Analysis for Complex Data Problems
MATH 7513	Real Analysis
MATH 7555	Mathematical Modeling
MATH 7556	Combinatorial Optimization in Communication Networks
MATH 7564	Mathematical Statistics
RSE 7102	Research Methods and Design
RSE 7103	Dissertation Planning, Writing, and Defending

**Advanced Specialty Subjects:**Option 1: No Dissertation - Select 5 subjects, to take 20 semester Units

MI 6301	Clinical Information Systems
MI 6302	Fundamentals of Healthcare Programming
MI 6303	Bioinformatics
MI 6305	Essentials of Health Information Management
MI 6324	Health Information Technology & Management
MI 6398	Comparative Health Information Management
MI 6720	Medical Devices Design for Six-Sigma
MI 6783	Knowledge Management and Data Mining in Biomedicine
MI 6787	Probabilistic Modeling in Medical Informatics
MI 6886	Informatics in Medical Imaging
MI 6963	Ethical, Legal and Social Issues in Biotechnology

Option 2: Dissertation - Select All the listed 5 to take 20 Semester Units

CTR 7104	Concept Paper
DIS 7200	Doctoral Comprehensive Examination
DIS 7301	Doctoral Dissertation Research I
DIS 7302	Doctoral Dissertation Research II
DIS 7303	Doctoral Dissertation Research III

### **13.3 – M.S. Nutritional Sciences**

The courses and programs in nutrition and food sciences have emerged from and are integrated with the physical and life sciences. The natural resource of food is studied as it exists in nature, is consumed and utilized, and is made available to consumers. The science of nutrition is concerned with the ingestion and utilization of food for the purposes of survival, prevention of disease, and the promotion of positive health. Courses for non-majors, as well as majors, are offered in order to facilitate optimal lifetime nutritional status.

#### **Program Objectives:**

The MS in Nutritional Science provides an opportunity for students to:

- Obtain full knowledge on Dietetics which is the study of the relationship of food to the health and well-being of individuals and groups. Traditional occupations in clinics, hospitals, educational programs, public health agencies, research, and teaching are increasingly available for Nutrition and Food Science majors.
- Meet The requirements for increased need for dietitians and nutritionists
- Graduates may also work in food service and processing industries, wellness programs, computer systems management, public communication, and product development and promotion. Courses in the Option in General Dietetics meet the requirements of the American Dietetic Association for an approved Didactic Program in Dietetics (DPD).
- Gain knowledge and skills in medical nutrition, sports nutrition, community nutrition, food science, and foodservices administration.
- Present graduates to an area of specialization for exercise physiology, child development, nursing, health and community services, and others. The Minor in Foodservice Administration offers an area of specialization for majors in business administration, management, marketing, recreation, and tourism.
- Provides an opportunity for students to increase competence in food and nutrition subject matter in preparation for college teaching, research, administrative positions in public and private agencies, and graduate study beyond the master's degree. The Option in Nutrition Education is designed specifically to facilitate nutrition professionals in communicating information to promote optimal health and nutritional status.
- Specialize in nutrition, food science, clinical nutrition, or community nutrition.

- Increase competence in food and nutrition subject matter in preparation for college teaching, research, graduate study beyond the master's degree, and administrative positions in public and private agencies.

### **Prerequisites for Admission to Conditionally Classified Status:**

1. An acceptable baccalaureate from a recognized institution, or an equivalent approved by the Office of Graduate Programs, which includes a minimum of 24 upper-division units among the subject areas of biochemistry, chemistry, nutrition and food science, mathematics, microbiology, physiology, and statistics.
2. Computer literacy is also required. Students with deficiencies in undergraduate preparation may be required to take prerequisite course work at the discretion of the Graduate Coordinator after consultation with the student and faculty in the subject matter area(s) considered deficient.
3. Required subjects must have been completed within the five years prior to taking the graduate courses. Outdated prerequisites must be validated either by examination or by registration (credit will not be earned for validating this course work).
4. Approval by the Nutrition and Food Science Graduate Coordinator.

### **Faculty and Facilities**

Faculty members, in addition to teaching and advising, are actively involved in research, and other professional activities. Facilities include collaborative practices for courses and experiments in food science and nutrition. Presented computer activities improve instruction quality with programs for nutrition analyses of diets, food cost control, recipe and menu evaluation, tutorials, and simulations. Internships are coordinated for majors in a variety of community settings.

### **Program Requirements:**

To graduate with a Master of Science in Nutritional Sciences, student must take 40 semester units as described below. Students may transfer up to 8 semester units from other recognized facilities if such credit had been taken within the last five years prior to enrollment. If transferable credit is taken earlier than five years, student shall be required to proof quality through a challenge exam.

Minimum credit taken at AUSTC not to be less than 32 semester

## General Subjects

Information Search Strategy is required

ALS 6010                      Information Research Strategies

## Core Subjects

Student takes up to (20) semester units from the following:

BMS 5101	Human Anatomy and Physiology
BMS 5109	Fundamental Statistics for the Behavioral Sciences
BMS 5632	Metabolic Disorders
FSHN 5520	Advanced Medical Nutrition Therapy
FSHN 5675	Food Intake: Regulation, Assessing and Controlling
FSNH 5670	Laboratory Nutritional Assessment
NTR 5062	Food Biochemistry and Food Processing
NTR 5151	Advanced Nutrition and Human Metabolism

## Specialty Subjects:

Student takes up to (20) semester units from the following:

BMS 5101	Human Anatomy and Physiology
BMS 5109	Fundamental Statistics for the Behavioral Sciences
BMS 5632	Metabolic Disorders
NTR 5061	Nutritional Education Theories and Practice
NTR 5062	Food Biochemistry and Food Processing
NTR 5075	Advanced Community Nutrition
NTR 5151	Advanced Nutrition and Human Metabolism
PSY 5012	Group Therapy
PSY 5038	Addiction
PSY 5051	Positive Psychology

## Elective List

It is possible to select subjects from the following elective list to replace subjects of the specialty list or to complete prerequisites before program starts

FSHN 5520	Advanced Medical Nutrition Therapy
FSHN 5675	Food Intake: Regulation, Assessing and Controlling
FSNH 5670	Laboratory Nutritional Assessment
HCA 5019	Essentials Of Managed Health Care
PSY 5000	Theories of Personality
PSY 5004	Ethics in Counseling and Psychotherapy
PSY 5017	Adult Development and Aging
PSY 5051	Positive Psychology
PSY 5052	Community Psychology
RSE 7102	Research Methods and Design
RSE 7103	Dissertation Planning, Writing, and Defending

## **13.4 – PhD, Nutritional Sciences**

The Department of Nutrition and Food Studies at the school of Sciences offers an interdisciplinary program of advanced study in nutrition and dietetics that prepares graduates for teaching, research, administrative, and leadership positions in academic, public health, industry, and other institutions.

### **ADMISSION Requirements:**

- Undergraduate or master's degree from a recognized institution
- Competitive applicants typically have a combined Graduate Record Examination (GRE) score of at least 1200.
- TOEFL scores (international students only). Successful candidates typically score 600 on the paper-based exam; 250 on the computer-based exam; or 100 on the internet-based exam.
- Current resume or curriculum vitae, including information about:
  - o Previous academic training in nutrition or dietetics and the undergraduate or master's level
  - b Previous work experience in nutrition or dietetics
  - o Potential to make a contribution to the profession
- Statement of Purpose (about 500 words) explaining:
  - o Why you are applying to the doctoral program
  - o Your career goals and how doctoral training will help you achieve these goals
  - c. How doctoral work will help you contribute to the profession
- Three letters of recommendation from employers, former professors, or professional colleagues who have observed applicant's work

### **SELECTION CRITERIA**

In addition to the above requirements, acceptance into Ph.D. Nutrition and Dietetics program requires:

- One prior degree in nutrition or dietetics
- Overall GPA > 3.5 in at least one prior academic degree program
- Prior professional work or research experience related to departmental programs
- Clear focus/goals expressed by applicants through the application and interview process

Extra consideration will be given for peer-reviewed publications and grants by applicants.<sup>3</sup>

**Expectations of Doctoral Students:**

- Departmental participation including FALL and SPRING doctoral seminar
- Engagement in research project development
- Teaching experience and curriculum development
- Candidacy examination and grant proposal in second year
- Work with a primary mentor and secondary advisor

Review by doctoral faculty begins in February, when applications reach the department.

Applicants who pass an initial screening will be invited to interview with specific faculty members in person or by telephone.

## **FUNDAMENTAL GRADUATION COMPETENCY REQUIREMENTS PhD. in Nutrition Sciences**

### Program Requirements:

- To graduate, students are required to take 60 credits at AUSTC and research work
- Each student may qualify for transfer of 8 semester units from previously obtained education and/or training at an accredited or recognized facility.

Minimum credit taken at AUSTC may not be less than 52 Semester Units as follows:

- Up to 20 Credits of fundamental subjects
- 32 or more Credits of advanced specialty subjects, or
- Submission of Concept Paper,
- Comprehensive Exam, and
- Dissertation

## **General Subjects**

Students takes 20 semester units from the following list, ALS 6010 is required.

ALS 6010	Information Research Strategies (Required)
BMS 6101	Human Anatomy and Physiology
HCA 6019	Essentials Of Managed Health Care
NTR 6061	Nutritional Education Theories and Practice
NTR 6062	Food Biochemistry and Food Processing
PSY 6004	Ethics in Counseling and Psychotherapy

## Core Subjects

Students takes 20 semester units from the following list:

DSC 7274	Statistical Modeling and Analysis for Complex Data Problems
MATH 7513	Real Analysis
MATH 7555	Mathematical Modeling
MATH 7556	Combinatorial Optimization in Communication Networks
MATH 7564	Mathematical Statistics
RSE 7102	Research Methods and Design
RSE 7103	Dissertation Planning, Writing, and Defending

Option 1: No Dissertation - Select 5 subjects, to take 20 semester Units

BMS 6632	Metabolic Disorders
FSHN 6520	Advanced Medical Nutrition Therapy
FSHN 6675	Food Intake: Regulation, Assessing and Controlling
FSNH 6670	Laboratory Nutritional Assessment
NTR 6075	Advanced Community Nutrition
NTR 6151	Advanced Nutrition and Human Metabolism
PSY 6000	Theories of Personality
PSY 6012	Group Therapy
PSY 6017	Adult Development and Aging
PSY 6038	Addiction
PSY 6051	Positive Psychology
PSY 6052	Community Psychology

Option 2: Dissertation - Select All the listed 5 to take 20 Semester Units

CTR 7104	Concept Paper
DIS 7200	Doctoral Comprehensive Examination
DIS 7301	Doctoral Dissertation Research I
DIS 7302	Doctoral Dissertation Research II
DIS 7303	Doctoral Dissertation Research III

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