



# California

Science and Technology University

## CATALOG

01/01/2023

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## MISSION STATEMENT

California Science and Technology University (CSTU) is an academic institution of higher learning that is committed to providing a quality education to individuals whose goals include the development of rational, systematic, and critical thinking while striving to succeed in their chosen profession. CSTU believes that through acquisition of the knowledge presented in each of its educational programs, students shall learn how to evaluate, analyze, and synthesize information and learn to develop critical thinking and problem-solving skills that can be applied in a career environment. It is the mission of CSTU to fulfill the educational expectations of its students and faculty and to provide the community with professionals capable of meeting the challenges in their respective fields, to learn the cutting edge technologies and skills that are needed in the high-tech industries in Silicon Valley and other areas.

## HISTORY

California Science and Technology University (CSTU) was established in September 2011 by Silicon Valley technology leaders who saw the need for a university focusing on teaching practical cutting-edge technologies not taught at traditional colleges. Silicon Valley is the center of innovation and where many of the latest technologies originate. The fast-paced development of new technologies also created a strong need for professionals to learn new skills to support these developments without giving up current jobs. CSTU sought to fill this need.

In May 2017, two entrepreneurs joined the CSTU, and brought in additional funding to support CSTU to expand further. Over the years, the institution retired several non-degree programs but retained its focus as a provider of technology-related education. Currently, CSTU offers three (3) programs, the Master of Business Administration (MBA), the Master of Science in Computer Systems and Engineering (MSCSE), and the Emerging Technology Training Program. More programs are planned to offer in 2023.

CSTU was accredited by Accrediting Commission of Careers Schools and Colleges (ACCSC) in 2022. CSTU was also approved for accepting international students in 2022. Due to its practical curriculum and convenient location at the center of Silicon Valley, CSTU has attracted students from different countries all over the world.

## OBJECTIVES

To accomplish the mission of training students in the latest technologies, CSTU is committed to enhance student competencies by:



- Providing working professionals with higher educational opportunities that are flexible and accessible;
- Providing students professional training and preparation for careers;
- Providing higher educational opportunities that are current with technology and career demands;
- Providing faculty members that have demonstrated expertise in, their respective domain, both professionally and academically;
- Integrating into the educational process a better understanding of cultural diversity needs;
- Delivering educational support services that meet student life demands and schedules;
- Building within students a value for life-long learning and education;
- Providing educational resources in a manner that effectively uses current technology.

CSTU is committed to the highest ethical standards in the pursuit of the mission. The policies, procedures, and standards guide CSTU core values set forth below. These values are honored in our daily structure and activities. We are committed to respect the rights and dignity of others while conducting ourselves with integrity in our dealings with and on behalf of all individuals in our environment and are accountable as individuals for the ethical conduct and for compliance with applicable laws, university policies, and directives while conscientiously striving for excellence in our work.

## NON-DISCRIMINATION POLICIES

CSTU does not discriminate on the basis of race, religion, color, national origin, sex, handicap or disability, or age in any of its policies, procedures or practices. The University's nondiscrimination policies comply with Title VI of the Civil Rights Act of 1964 (pertaining to race, color, and national origin), Title IX of the Education Amendments of 1972 (pertaining to sex), Vietnam Era Veterans Readjustment Assistance Act of 1974 (pertaining to veterans), and Section 504 of the Rehabilitation Act of 1973 (pertaining to age).

## NO FALSE ADVERTISING POLICIES

CSTU does not use erroneous, deceptive, or misleading information for recruiting students. Published data are collected in the manner required by internal policy and governing agencies. Verification of data is through CSTU or an independent third-party employment data verification company.

## FACILITIES

Classes are held at 1601 McCarthy Blvd., Milpitas, CA 95035. The campus is located in a high-technology R&D and business development area, situated three blocks north of the Montague Expressway just west of where Interstate 880, the Nimitz Freeway. The fully landscaped and abundant parking areas provide smooth traffic flow and easy building access; the peaceful neighborhood provides an appropriate learning environment for the students. The building is accessible to people using wheelchairs. The campus provides enough space for lecturing and activities and can be expanded easily if needed. Public transportation is available to the campus. Students can take the Valley Transportation Authority (VAT) light rail to reach the campus. Once get off the VAT light rail stop, it only takes a few minutes to walk into the classroom.

CSTU adopts small classroom strategy to ensure the best learning environment. The maximum student to instructor ratios for classroom instruction is 25:1. The building provides high speed Wi-Fi internet services to all students and faculties. The facilities have adequate lighting, are air-conditioned and wheelchair accessible. Free student parking (including handicapped) is available around the building.

The building is equipped with central heating/air conditioning systems. All classrooms have a temperature control unit and is equipped with a large TV screen connected to an instructor's demo computer with access to the campus networks system and Internet, and a white board in addition to other standard classroom provisions.

## OFFICE HOURS

Business office hours are Monday through Friday from 9:30 AM to 5:30 PM. Class sessions vary and are described in the course information section that accompanies each program. CSTU observes most major holidays and closes for a winter break between Christmas and New Year's Day. A complete listing is provided at the back of this catalog.

## DISCLOSURE STATEMENTS

This institution is a private institution approved to operate by the California Bureau for Private Postsecondary Education. Approval to operate means the institution is compliant with the state standards as set forth in the CEC and 5, CCR.

California Science and Technology University offers scholarships to students accepted into the Emerging Technology Training program or the degree programs. The scholarship for accepted students referred by career organizations is to cover the gap between the tuition and the funds provided by the career organizations. For those students who are not referred by career

organizations and qualify for admission, CSTU will also provide a similar level scholarship to them for enrolling in the Emerging Technology Training Program or the degree programs. CSTU also provides a scholarship to promising students based on students' experience at a minimum of one year in the high-tech industry or who have completed courses in math and engineering with a GPA of 3.5 or above from a postsecondary institution approved by a state and/or accredited by an agency recognized by the U.S. Department of Education. For international students, the transcripts need to be evaluated by a third-party evaluation agency. CSTU recommends using an agency that is a member of the National Association of Credential Evaluation Services (NACES).

CSTU's degree programs are not intended to prepare graduates for any position that requires California State Licensure. This means our graduates are not eligible to sit for applicable licensure in California or other states.

A student or any member of the public may file a complaint about this institution with the Bureau for Private Postsecondary Education by calling (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)).

If a student obtains a loan to pay for an educational program, the student will have the responsibility of repaying the full amount of the loan plus interest, less the amount of any refund. If the student receives federal student financial aid funds, the student is entitled to a refund of the money not paid from federal student financial aid program funds.

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

Any questions a student may have regarding this catalog that have not been satisfactorily answered by the institution may be directed to the Bureau for Private Postsecondary Education at 1747 N. Market Blvd, Suite 225, Sacramento, CA 95834, [www.bppe.ca.gov](http://www.bppe.ca.gov), toll-free telephone number (888) 370-7589 or by fax (916) 263-1897.

This institution is committed to providing a work environment that is free of discrimination, intimidation and harassment. In keeping with this commitment, we believe that it is necessary to affirmatively address this subject and express our strong disapproval of sexual harassment. No one associated with this institution may engage in verbal abuse of a sexual nature; use sexually degrading or graphic words to describe an individual or an individual's body; or display sexually suggestive objects or pictures at any facility or other venue associated with this institution. Students are responsible for conducting themselves in a manner consistent with the spirit and intent of this policy.



CSTU does not assume responsibility for student housing, does not have dormitory facilities under its control or ownership, and is not affiliated with any dormitory or housing facilities.

The average cost for a room or apartment rental varies from between \$550 for a room per month to \$2,500 per month for a two-bedroom apartment. Student Services will provide students information on accommodation in the area.

CSTU does not provide housing assistance services to the students. CSTU has no responsibility to find or assist a student in finding housing.

California Science and Technology University lectures are offered in both distance learning and onsite learning. The lectures received through distance learning are conducted in real time utilizing Zoom software. Students attend lectures in a classroom on weekends and distance learning during weekdays. The instructor or teaching assistant assist students either onsite or through Zoom. Students' projects, assignments, etc., are evaluated and feedback to students within 7 (seven) days after the projects, assignments are submitted to the instructor or teaching assistant.

It is the policy of the institution to always provide a copy of the latest catalog either in print or electronically on the institution's website to all prospective students. This catalog pursuant to section 94909 of the Code, shall be updated annually. Annual updates may be made by the use of supplements or inserts accompanying the catalog. If changes in educational programs, educational services, procedures, or policies required to be included in the catalog by statute or regulation are implemented before the issuance of the annually updated catalog, those changes shall be reflected at the time they are made in supplements or inserts accompanying the catalog.

Prior to signing an enrollment agreement, you must be given this catalog and a School Performance Fact Sheet, which you are encouraged to review prior to signing any agreement with the institution. These documents contain important policies and performance data for this institution. This institution is required to have you sign and date the information included in the School Performance Fact Sheet relating to completion rates, placement rates, license examination passage rates, and salaries or wages, prior to signing an enrollment agreement.

The president is responsible for monitoring new policies and procedures and maintaining the school in compliance with the California Private Postsecondary Education Act of 2009.

CSTU does not have a pending petition in bankruptcy, and is not operating as a debtor in possession, has not filed a petition within the preceding five years, or 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.). CSTU is in the process of being approved to participate in State or Federal Student Aid programs.

## EDUCATIONAL PROGRAMS OFFERED

Program Title	Credential Awarded
Master of Business Administration (MBA)	Master of Business Administration
Master of Science in Computer Systems and Engineering (MSCSE)	Master of Science
Emerging Technology Training Program	Certificate of Completion

## ADMISSIONS POLICIES

Interested applicants may contact CSTU by visiting the institution's main website or by phone. In response to an inquiry from a prospective student, an information package is normally sent to the individual. A prospective student is encouraged to call the school and make an appointment to discuss the program they are interested in and arrange to see the school's facilities.

An admission representative will discuss the applicant's qualifications and assist him/her in determining the best way to meet his/her educational and/or career goals. The application and enrollment process begin with the completion of a general questionnaire and an initial interview with the admissions representative. The interview usually lasts approximately half an hour and may be conducted by phone or in person. During that time, the admissions representative will discuss the various aspects of the graduate program offered, tuition, a payment plan, and explain entrance requirements. This catalog detailing CSTU's method of instruction, programs, policies, admission standards, applicant's qualifications, and financial planning information will be provided. The institution's main website, [www.cstu.edu](http://www.cstu.edu) also provides the same information as published in this catalog.

When the applicant is accepted, a Degree Plan generally referred to as an Individual Academic Plan (IAP) will be prepared to list the academic requirements that must be met for the successful completion of the selected program.

Admission to a master's degree program requires a Bachelor's degree completed at an appropriately accredited postsecondary institution.

The Master's degree programs require 30 graduate semester credits completed beyond the Bachelor's degree. CSTU will consider the credit transfer and may accept a maximum of 6

graduate semester credits in transfer toward a Master's degree program, earned in graduate courses for which a grade of "B" or higher was earned.

To enable the evaluation of prior college work, official transcripts must be provided. Appropriately accredited postsecondary institutions are defined as those accredited by an accrediting agency recognized by the United States Department of Education, or by an accrediting agency recognized by the Council for Higher Education Accreditation (CHEA) or, for non-United States institutions, an educational institution approved by an equivalent authority.

Applicants with an undergraduate degree at the baccalaureate level from a school outside the United States must have their undergraduate transcripts evaluated by an independent credential evaluation service agency. CSTU recommends using an agency that is approved by National Association of Credential Evaluation Services (NACES). The evaluation findings will be accepted as the satisfaction of the degree requirement when indicating that an applicant's degree is the equivalent of one received from a regionally or nationally accredited or approved college in the United States.

## **ADMISSIONS PROCEDURES**

To apply for admission, the prospective student must complete the following:

### *1. Educational History:*

Applicants must also submit their educational history as part of their application. The history must include names, locations, and colleges and/or universities' enrollment information.

### *2. Proof of Undergraduate Degree Completion:*

Applicants must present proof of their undergraduate degree and transcript in one of the following formats.

- (a) Official copies sent directly to CSTU from an official authority (Ministry of Education, the school itself, etc.); the copies must be received unopened.
- (b) Photocopies of the original degree and transcript approved by an official authority or by a notary.
- (c) Original Diploma and transcript. Diplomas and transcripts that are not in English need to be submitted together with an official translation. In certain cases, the Admissions Office may require an applicant to present additional documentation.

California Science and Technology University does not accept hours or credit earned through challenge examinations, achievement tests, or experiential learning.

California Science and Technology University does not admit ability-to-benefit students.

California Science and Technology University has not entered into any transfer or articulation agreements with any other college or university.

California Science and Technology University does not offer English as a Second Language instruction. All instruction occurs in English.

## INTERNATIONAL STUDENTS AND VERIFYING ENGLISH PROFICIENCY

Applicants whose native language is not English and have not completed their studies at an accredited U.S. college or university must submit evidence of English proficiency through one of the following sources:

- Test of English as a Foreign Language (TOEFL) with a minimum score (master's degree) of 500 for paper-based, or 60 for iBT Internet-based, or 6.0 for IELTS Score, or 85 for Duolingo, or any other English test score that is comparable to the above scores.
- A transcript verifying completion of at least 30 semester hours of credit with an average grade of "C" or higher at an appropriately accredited college or university where the language of instruction was English; "B" or higher for a master's degree.
- A transcript verifying a grade of "C" or higher in an English composition course from an appropriately accredited/recognized college or university; "B" or higher for a master's degree.

Students who have completed their undergraduate degrees at a nationally or regionally accredited U.S. college or university, students who have been working in the United States for more than two (2) years, or who have studied at other universities for more than one (1) years are not required to submit an English testing score.

## REVIEW OF DOCUMENTATION

Any document sent by an applicant in support of his or her application may be reviewed by relevant institutions, including the institution issuing the documentation and/or by an established foreign evaluation service that can establish degree comparability.

Three credible providers of credential evaluations are World Education Services (WES [www.wes.org](http://www.wes.org)); International Education Research Foundation (IERF [www.ierf.org](http://www.ierf.org)); and SpanTran: the Evaluation Company, CSTU, however, accepts evaluations from all other credible sources..

## TRANSFER CREDIT

The transfer credit toward a degree may be awarded for postsecondary courses completed by students at other institutions if such courses are found to meet the standards of CSTU and the requirements of the specific program of interest. The registrar evaluates transcripts based on the following criteria and policies:

- ✓ Transfer institutions are regionally or nationally accredited in the U.S. to grant graduate degrees.
- ✓ Courses are graded at least a 3.0 (B) on a 4.0 grading scale.
- ✓ Courses are graduate level at the transfer institution and constitute a fair and reasonable equivalent to current CSTU course work at the graduate level.
- ✓ Courses logically fit into the program for the degree.

A maximum of 20% of the total credits (6 semester credits) required to complete the program may be applied from credits transferred into the program.

## NOTICE CONCERNING TRANSFERABILITY OF CREDITS AND CREDENTIALS EARNED AT OUR INSTITUTION

The transferability of credits you earn at California Science and Technology University is at the complete discretion of an institution to which you may seek to transfer. Acceptance of the degree or certificate you earn in the educational program is also at the complete discretion of the institution to which you may seek to transfer. If the degree or certificate 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 California Science and Technology University to determine if your credits or certificate will transfer.

## COMPLETING THE REQUIRED COURSES

Students are advised and individually guided through courses by direct contact with their professors. With assistance from their professors, students proceed from course to course in a steady, organized manner. This enables educational objectives to be achieved in the shortest possible time frame.

Upon enrolling in a course, the student receives a course syllabus and information about how to contact his/her professor assigned for that course. CSTU works with an online supplier to

provide textbooks for students. Students are encouraged to use the services; however, textbooks may be purchased from local bookstores, from publishers, or from other suppliers.

The faculty and staff of CSTU are available to assist students in achieving their educational objectives. CSTU is especially sensitive to the special needs of adult students returning to college after a long absence from the classroom.

## ATTENDANCE

A student is considered tardy if they are more than 15 minutes late for class. Students with excessive tardiness must meet with Student Services for advisement. Excessive tardiness is defined as the accumulation of six (6) or more tardies. Six (6) tardies equal one (1) absence.

Any absence (also known as a class cut) needs to be made up by watching the class recording video if it is available and read the class materials. Excessive absenteeism will be placed on attendance probation. Excessive absences are defined as absence from three (3) or more lectures without make-ups in a course. Students will be dismissed from the school if they are on attendance probation for two (2) consecutive courses unless they provide reasonable justification to the Department of Student Services.

Satisfactory attendance rate is defined as at least 67% attendance under Satisfactory Academic Progress standards and attendance ten (10) lectures in a three (3) unit course or five (5) lectures in an one point five (1.5) unit course.

## LEAVE OF ABSENCE (LOA)

A leave of absence (LOA) is a temporary interruption of educational studies for a specified period of time. A leave of absence period may not exceed 180 days within any 12-month period. CSTU may grant more than one leave of absence in the event that unforeseen circumstances arise, such as medical reasons affecting the student or a member of the student's immediate family, military service requirements, or jury duty, provided that the combined leaves of absence do not exceed 180 days within the 12-month period.

If the student does not return following the leave of absence, CSTU will terminate the student and apply the refund policy in accordance with applicable and published requirements. All leave of absence requests must be submitted in writing and then approved by CSTU. Students must complete an LOA request form from the Student Services Office, sign & date it. The period of the leave of absence may not begin until the student has submitted and CSTU has approved a written and signed request for an approved leave of absence.



### **SATISFACTORY ACADEMIC PROGRESS**

A student must maintain satisfactory academic progress (SAP) in order to remain in training. SAP is cumulative in that it includes all periods of attendance; and all periods of attendance are counted toward the maximum time frame allotted. SAP is applied to all students equally and measured weekly in all programs. In order to comply with the California Science and Technology University's satisfactory academic progress policy, the student must:

1. Be enrolled in a program of study with a valid enrollment agreement
2. Complete his/her program within the maximum time allowed. Maximum time allowed is 150% of the published program length.
3. Maintain satisfactory attendance.

For a credit hour program, the credit hours attempted cannot exceed 1.5 times the credit hours required to complete the program. The school is not required to terminate the enrollment of a student who is unable to complete the program within the maximum time frame unless the school has determined that the student has failed to meet school policies that would otherwise warrant termination (e.g., academic progress or attendance policies). For the purposes of reporting student achievement, the school may not classify students who do not complete the program within the maximum time frame as graduates.

At CSTU all the students' grades and evaluations are based on demonstrated performance during each course and the level of academic knowledge gained during the course. The grading will consist of letter grades of A through F with grade points as indicated in this catalog. Additional elements of essays, problems, projects and case studies will receive letter grades from the faculty based on the grading rubric established by the CSTU. Each course is based on a total of 100 maximum points.

#### **Grade Point Average**

A student's grade point average (GPA) is obtained by dividing the total number of points earned by the total credit hours attempted. Grades and symbols used to record academic progress are listed in the grading system table below. GPA is based on a maximum of 4.0. Grade points are assigned to all grades as follows:

Grade	GPA	Indicator
A+	4.00	Excellent
A	4.00	Excellent
A-	3.67	Excellent
B+	3.33	Above Average
B	3.00	Very Good
B-	2.67	Good
C+	2.33	Average
C	2.00	Satisfactory
C-	1.67	Need to Repeat
D+	1.33	Need to Repeat
D	1.00	Need to Repeat
D-	0.67	Need to Repeat
F	0	Need to Repeat
P	0	Pass
I	N/A	Incomplete
T	N/A	Transfer Credit
W	N/A	Withdrawal

The grade points stated above will be used to calculate the GPA. Students must maintain a 3.0 cumulative GPA to be in good standing.

#### *Latin Honors*

The CSTU uses the Latin Honors Distinctions outlined below:

- 3.50 to 3.69 -Cum Laude – with honors
- 3.70 to 3.89 -Magna Cum Laude – with high honors
- 3.90 to 4.00 -Summa Cum Laude – with highest honors

- Grading Period: The grading period for each course is eight (8) weeks in length.
- Progress Reports: Updates to progress are made after each lecture, homework, midterm and final exam. Online progress reports are available for each program. Students can login into the school learning system, Campus Administration and Management System (CAMS), and monitor their academic progress, which will give a predicted final score on the course. The CSTU Chief Academic Officer will contact students if the system predicts the student will fail the course. Besides the progress report for each course, the satisfactory progress for a program will be evaluated at 25%, 50%, 75% and 100% time of the program. Students need to maintain an average GPA of B to meet SAP standards. Students not meeting SAP standards will meet with the Chief Academic Officer to establish a written plan for improvement.
- Failure to Meet SAP Standards: A student who is making unsatisfactory progress at the end of a grading period or at the program evaluation time will be placed on academic probation for the next grading period. If the student on academic probation achieves satisfactory progress for the subsequent period but has not achieved the required grades for overall satisfactory progress, the student may be continued on probation for one more grading period. If the student on probation fails to achieve satisfactory progress for the first probationary grading period, the student's enrollment will be terminated. If a student on probation fails to achieve satisfactory progress for the program at the end of two successive probationary grading periods, the student will be terminated. When a student is placed on academic probation, the student will be required to communicate with the Office of the Registrar prior to returning to class. The Office of the Registrar will inform the student of the date, action taken, and terms of the probation. This information will be clearly indicated in the appropriate permanent student's record.

#### *Academic Dismissal*

Any student who fails to achieve overall satisfactory progress for the program at the end of two successive probationary grading periods will be suspended from enrollment.

#### *Academic Suspension Reinstatement*

A student whose enrollment is suspended for unsatisfactory progress may reapply for admission after a minimum of one grading period. A student who returns after the enrollment was suspended for unsatisfactory progress will be placed on probation for the next grading period. The student will be advised of this action, and the student's file documented accordingly.

#### *Academic Dismissal/Termination*

If the student does not maintain satisfactory progress during or by the end of this final probationary period, then the student's enrollment will be terminated. Application of Standards: Satisfactory academic progress standards apply to all students and include all periods of the student's enrollment.

- Appeals: Re-admission after termination for failing to meet SAP standards may be granted to an individual if a written appeal is made to the CSTU and the individual substantiates that mitigating circumstances were involved and corrective measures have been taken to prevent a recurrence. Appeals must be made within one month of the date of SAP notification.
- Reinstatement: Students who have been dismissed for failure to maintain satisfactory academic progress may apply to be re-admitted after six (6) months. Such students may be re-admitted under a probation status. Such students can re-establish SAP good standing by successfully completing failed courses with a grade of "C" / 2.00 or better.

Students who are placed on Academic may apply to be reinstated as "active students." To change the status to active, students must submit a completed application for reinstatement along with a fee of \$400.00. Additional tuition fees will apply to uncompleted coursework.

- Transferred or Re-admitted Students' Maximum Time Frame: Transferred or re-admitted students will be allowed a maximum time frame of 150% of the portion of the program remaining at the point of re-entry.
- Incomplete Grades: Students receiving, at the discretion of the faculty member, a grade of "I" will be evaluated according to the minimum standard for academic progress and will be re-evaluated at the end of the first two weeks of the following course during which time the student may complete missing work. Courses indicating an "I" at the end of the two-week period will become an "F" with a "0" added to the GPA.

A student who withdraws during the last quarter of his/her program will receive a grade of "incomplete" if the student requests the grade at the time of withdrawal and the student withdraws for an appropriate reason unrelated to the student's academic status. A student who receives a grade of incomplete may reenroll in the program during the 12-month period following the date the student withdraws and completes those incomplete subjects without payment of additional tuition.

- Make-Up Work: Make-up work requirements are determined by instructors and may be described on the course syllabus. Any class absence can be make-up by watching class recording video.

- Course Withdrawals: If a student withdraws prior to the midpoint in a course, the student receives a “W” and the GPA is not affected but will be counted as work attempted. The student who receives a “W” grade will have a 12-month period following the date the student withdraws to complete the course at no additional tuition.
- Transfer Credits: Transfer of credit courses does not affect the GPA and are not calculated in SAP. They are reflected on the transcript as “T”.
- Repeating a Course: Students must repeat courses in which they have received an “F” grade or from which they withdraw. Students will be charged the regular tuition fees for each course they repeat in which they received an “F” grade. Students must earn a cumulative GPA of 3.0 or higher on a 4.0 scale on all courses that carry a graduate credit. At CSTU, no grade below C is acceptable for credit toward a certificate or degree and if a student receives a grade below C in any graduate course, that course must be repeated. The new grade will replace the old grade for grade point average calculation, but the old grade will remain in the transcript. For students who wish to improve their grade, the fee for repeating a course is the same as the regular tuition.
- Remedial Work: Remedial work is neither provided nor required.

## STUDENT SERVICES

Student Services furnishes information on public transportation, general costs in the area of childcare, and points of interest.

The Department of Student Services will oversee the management of the career placement services offered to students and graduates via the CSTU Online Service Center on the institution’s website which shall always be accessible to students using their university password to log into the career placement services section of the school’s website.

## NON-ACADEMIC COUNSELING

The Department of Student Services offers assistance with personal and interpersonal issues such as relationships, cultural differences, assertiveness, and self-esteem. If a student needs a professional counselor, the Department of Student Services will help the student find a suitable counselor. Additionally, the Student Services Office helps students with educational/vocational concerns such as coping with University life, academic performance, test anxiety, reentry adjustment, and determining life goals. Students are encouraged to seek assistance from a counselor in dealing with any problems that might affect their success at CSTU.

## STUDENT INTERACTION AND STUDY GROUPS

Group study will be incorporated when feasible. Students coming together, sharing ideas, and preparing is a delightful part of the college environment be it direct or virtual. Group study is a helpful way to re-enforce the personal first-time study and expand the range of learning. Interaction will be the essence of the instructor's facilitative tasks.

## LIBRARY SERVICES AND LEARNING RESOURCES

CSTU's library is open during normal business hours, Monday-Saturday 9:30AM- 5:30PM. Staff is available to assist students and faculty during this time. Students can check out textbooks, and other class materials from the on-site library.

The institution also provides its students with access to online library services via the Library and Information Resources Network (LIRN) Portal. This allows students to perform research on topics covered in each program. The school provides research databases that contain the most thorough and up-to-date research materials available. Students are encouraged not only to learn from classes but also to pursue independent research by using resources organized by the Director of Library Services. Students receive a 30 minute orientation to LIRN.

The Director of Library Services is available on-campus up to 40 hours per week and is on-call for at least 40 hours per week to provide assistance to students. Support is also provided via email inquiries within 10 hours of receipt. This individual is available to assist with resources for up to two (2) hours post lecture each day and by appointment.

Students may use their mobile device, or a computer located at the school to access LIRN.

The MBA and MSCSE students are provided access to Gale resources, where the students can research for scholarly and peer reviewed journals, unlimited, full-text access to the entire Computer Science Collection, Computer and Information Systems Abstracts, Computer Science Journals, etc. The students are expected to fully utilize the Gale library database: Gale foundation, when addressing discussion questions, written assignments, course research projects (CRPs), and the capstone projects.

## ACADEMIC ADVISING



Academic advising is an essential element of the educational process. Faculty members serve as academic advisors and counselors to the students.

Although online registration is available to students, they are welcome to meet with a faculty member before and during the course registration period each semester. During the meeting, the faculty member will examine the student's study plan, academic records, and choose suitable courses to enroll. Academic advising is also available to students throughout the school year. In addition to helping students plan course schedules, academic advisors may also encourage students to explore their academic options and personal goals in preparation for entering the professional world.

To ensure satisfactory progress of each student, the administrative staff including the Chief Academic Officer and the Director of Student Services maintain close contact with the faculty to monitor those students who may need extra help. Class attendance records, available online to the staff, are used as one input for student advising. The student is to be contacted for advising when either of the following occurs: (1) The staff is informed by any faculty member who is concerned about the student's performance in the class at any checkpoint during the semester, (2) the student has a poor attendance record, (3) the student is placed in academic-probation status. Student records will be maintained at the school site for five years from the last date of attendance. Transcripts are maintained permanently.

## CAREER PLACEMENT SERVICES

CSTU does not guarantee employment to any student upon graduation. CSTU does provide all graduates with assistance regarding placement opportunities, resume preparation, job search assistance and interview advising and advising concerning job search and job interview techniques. Placement assistance is available to all graduates of the institution. Additionally, CSTU is required under California law to track placement of its graduates for a period of up to 6 months upon completion of their program and to verify placement 2 months after employment.

As a key component of Student Services, career placement services help the students in the following areas: (1) Prepare resumes and sharpen interview skills, (2) Conduct career seminars and job fairs, (3) Identify the students' strengths and interests and provide career advice, (4) Provide internship opportunities to the students, and (5) Provide library materials and an online tool for the students to gain access to various sources of job related information. The Student Services in collaboration with the library, provides the students with access to a collection of books, articles, magazines, and brochures about employment opportunities. Employment information can be found on the online job posting board through the eCareer Center on the CSTU Online Service Center site. The service provides career planning and job search assistance prior to and after students' graduation.

## RETENTION OF STUDENT RECORDS

The records for students, including a transcript of academic progress, shall be kept in files maintained in cabinets in such a way that adequate information is maintained by the institution for a period of 5 years from the student's date of completion or withdrawal to show student advancement, grades, and that satisfactory standard are enforced relating to progress and performance. All student files are kept in the Department of Student Services office and electronic copies in a secure server. A daily backup is made and stored “in the cloud” off-site by a professional provider with a secure file repository, backup, and recovery system.

CSTU is required to maintain student records for a minimum of 5 years while student transcripts will be maintained indefinitely and made immediately available during normal business hours, and for inspection by officials from the State of California Bureau of Private Postsecondary Education, or the State of California Attorney General's office showing the following:

- The names and addresses, both local and home, of each of its students;
- The courses of study offered by the institution;
- The names and addresses of its instructional staff, together with a record of the educational qualifications of each, and;
- The degrees or diplomas and honorary degrees and diplomas granted, the date of granting, together with the curricula upon which the diplomas and degrees were based.

## TRANSCRIPTS

The CSTU will supply one official transcript upon graduation. Requests for additional transcripts must be made in writing and signed by the student. There is a \$15.00 charge for each transcript requested. For transcripts mailed outside of the U.S., there is an additional shipping fee of \$50.00. Students requesting the release of academic records and transcripts to employers or other groups or agencies must sign an authorization request and follow the procedures outlined in this section. In addition, students are informed that they may file complaints with the Family Educational Rights and Privacy Act Office of the United States Department of Education (FERPA) concerning alleged failures by the school to comply with the Family Rights and Privacy Act of 1974 (the 'Buckley amendment'), as amended, in relation to the procedures and decisions involved with any such matters.

## STUDENT POLICIES AND PROCEDURES

The following paragraphs detail the standards of conduct that California Science and Technology University expects all of its members, students, staff, and faculty alike. Students are subject to disciplinary action, including suspension or dismissal from the academic program, for violations of the University's policies regarding personal conduct.

## ACADEMIC INTEGRITY POLICY

CSTU expects that all academic work submitted by students be original, or in the case of cited material, properly acknowledged as the work, ideas, or language of another. Further, all acts of academic dishonesty are strictly prohibited. These include, but are not limited to, cheating, plagiarism, fabrication, unauthorized collaboration, misappropriation of resource material, or any other violation of university regulations.

## SEXUAL HARASSMENT POLICY

Whether verbal or physical, in person or by telephone, sexual harassment is an act of aggression. It is a violation of federal law under (section 703 of the Civil Rights Act of 1964 and under Title IX Education Amendments of 1972). CSTU encourages students and employees to confront sexual harassment, to report incidents and/or to seek advice and assistance. CSTU has both a moral and legal obligation to investigate all complaints of sexual harassment and to pursue sanctions when warranted.

It is the policy of the University that all persons, regardless of their sex, should enjoy freedom from discrimination of any kind. "Sexual harassment" means any unwelcomed sexual advances, request for sexual favors, and other verbal, visual, or physical conduct of a sexual nature made by someone from or in the work or educational setting, under any of the following conditions:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or status in a course, program, or activity.
- Submission to or rejection of such conduct is used as the basis for employment or educational decisions affecting that individual. Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or educational experience, or creates an intimidating, hostile, or offensive environment for working or learning.
- Such conduct has the purpose or effect of unreasonably interfering with an individual's academic performance, or of creating an intimidating, hostile, or offensive educational or working environment.

CSTU is committed to taking appropriate action against those who violate the policy prohibiting sexual harassment. CSTU is committed to protecting victims of harassment from retaliation.

## DRUG AND ALCOHOL POLICY

The University recognizes the health risks associated with the use of illicit drugs and the abuse of alcohol and is committed to providing a drug-free educational environment and workplace. The University prohibits the unlawful manufacture, distribution, dispensation, possession, or use of any controlled substance and the abuse of alcohol by students and employees on university property or as part of any of its activities. Individuals found to be in violation or engaged in serious misconduct are subject to legal sanctions under local, State, or Federal law, as well as any administrative sanctions that the University may impose.

CSTU complies with the Drug-Free School and Communities Act Amendments of 1989, Public Law 101-226, and the Drug-Free Workplace Act of 1988, Public Law 100-690. The University supports the purpose of this legislation and provides copies of the school policies governing drug and alcohol abuse to all employees and students.

## COMPLAINT AND GRIEVANCE POLICY

From time to time, differences in interpretation of university policies will arise among students, faculty, and/or the administration. When such differences arise, we urge students and staff to communicate any problems that arise directly to the individual(s) involved. If the problem cannot be resolved in this manner, the University administration should be contacted. Normally, the informal procedure of discussing the difference will resolve the problem.

Any student who feels that he or she has been subjected to unfair treatment by the University by any of its employees, entities, policies, procedures or programs may report the matter in writing to the President for review and action. The President is located in the administrative location of CSTU and is open Monday through Friday 9:30 AM to 5:30 PM. On making the complaint, the student will be advised of the next step, depending on the nature of the complaint.

The first step would be to attempt to resolve the complaint informally. If the complaint is resolved satisfactorily to all parties concerned the case shall be closed, with a written notice to that effect sent to the complainant and the respondent. If no informal resolution is possible, and the student wishes to pursue the complaint, the grievance may be referred to the Bureau of Private Postsecondary Education (BPPE) State of California, P.O. Box 980818, W. Sacramento, CA, 95798-0818, [www.bppe.ca.gov](http://www.bppe.ca.gov), 916-431-6959

## ARBITRATION AT CSTU

Alternative Dispute Resolution: While no one expects disputes and conflicts, sometimes they do occur; and it is in the best interests of the parties to resolve the dispute in the simplest, fastest, and least expensive manner. Students at CSTU, therefore, agree to follow the three steps below:

Step One: Any and all disputes, conflicts, problems, controversies, or claims of any kind, without exception, arising from or connected to enrollment and attendance at the University (“dispute”) should first be taken up with the President. If the dispute is not then resolved, a written statement should be made of each party’s position and submitted to the Office of the President for a final decision. The parties may proceed to Step Two if the dispute is not resolved in Step One.

Step Two: The parties agree that any dispute should be resolved through mediation. Any such mediation will be held in the city in which the student resides. The parties agree to attend and make a sincere and good faith effort to resolve the dispute through this mediation.

Step Three: The parties agree that any dispute arising from enrollment, no matter how described, pleaded or styled, shall be resolved by binding arbitration under the substantive and procedural requirements of the Federal Arbitration Act conducted by the Better Business Bureau (BBB).

All determinations as to the scope, enforceability and effect of this arbitration agreement shall be decided by the arbitrator, and not by a court. The award rendered by the arbitrator may be entered in any court having jurisdiction.

### I: Terms of Arbitration:

- A. Both Student and the University irrevocably agree that any dispute between them shall be submitted to binding Arbitration.
- B. Neither the Student nor the University shall file or maintain any lawsuit in any court against the other and agree that any suit filed in violation of this Agreement shall be dismissed by the court in favor of an arbitration conducted pursuant to this Agreement.
- C. The costs of the arbitration fee, filing fee, arbitrator’s compensation, and facilities fees will be paid by the University, to the extent these fees are greater than a district court filing fee.
- D. The arbitrator’s decision shall be set forth in writing and shall set forth the essential findings and conclusions upon which the decision is based.
- E. Any remedy available from a court under the law shall be available in the arbitration.

## II: Procedure for Filing Arbitration:

1. Students are strongly encouraged, but not required, to utilize the first two steps of the grievance procedure described above, prior to filing arbitration.
2. A student desiring to file arbitration should first contact the Chief Executive Officer of Student Affairs, who will provide the student with a copy of the BBB rules at no cost. A student desiring to file arbitration should then contact the BBB, which will provide the appropriate forms and detailed instructions. The student should bring this form to the BBB.
3. A student may, but need not to, be represented by an attorney at the Arbitration.

Acknowledgment of Waiver of Jury Trial and Availability BBB Rules: By signing the Enrollment Agreement, each party understands the nature of arbitration; that arbitration is final and binding, and each party is waiving certain rights, including, but not limited to, its right to litigate its dispute in court, including its right to a jury trial. Both parties understand that the award of the arbitrator will be binding and not merely advisory.

## STUDENTS WITH DISABILITIES

The university complies with the Americans with Disabilities Act of 1990 and Section 504 of the Federal Rehabilitation Act of 1973. Accordingly, qualified persons with disabilities cannot, on the basis of disability, be denied admission or subjected to discrimination in admission decisions. Further, no qualified disabled student may be excluded from any academic, research, counseling, financial aid, or other post-secondary education program or activity that the University provides to all students on the basis of that student's disability.

## STUDENT DISCIPLINE

Students are expected to conduct themselves in a responsible manner that reflects generally accepted moral standards, honor, and good citizenship. They are also expected to abide by the regulations of the University. It is the student's responsibility to maintain academic honesty and integrity and to manifest a commitment to the goals of the University through proper conduct and behavior. Any form of academic dishonesty, or inappropriate conduct by students or applicants, may result in penalties ranging from a warning to dismissal as deemed by CSTU. Any such disciplinary action will be taken following the procedures of due process. Due process mandates that students be given notice and an opportunity to be heard, that is, informed in writing of the nature of the charges against them and provided with an administrative hearing on the issues and provisions for appeal.

## REASONS FOR PROBATION, SUSPENSION, AND DISMISSAL OF STUDENTS



Following the procedures consistent with due process, students may be placed on probation, suspended, dismissed, or given a lesser sanction for any of the following reasons:

**Plagiarism:** Plagiarism is the presentation of someone else's ideas or work as one's own. An obvious form of plagiarism is intentionally stealing someone else's work. Using another person's sentence, phrase, or even a word that a person coined requires students to acknowledge the source of the sentence, phrase or coined word. To acknowledge the source, students can either use quotation marks or paraphrase the author. In both cases, students must cite the source of the quotation or paraphrased ideas properly.

#### *Cheating or Other Academic Dishonesty*

Any form of academic dishonesty reveals a serious lack of personal integrity and detracts from the quality of a student's education. As such, cheating is a violation of University policy because it diminishes the quality of student scholarship and defrauds those who rely on the integrity of the University's academic programs.

Academic dishonesty is considered to be any form of cheating or plagiarism (see above), or an attempt to obtain credit for academic work through fraudulent, deceptive or dishonest means. The following are examples of academic dishonesty, but are not intended to be inclusive:

- Using or attempting to use, unauthorized materials, information, or study aids in any academic exercise, such as copying from another student's test
- Submitting work previously presented in another course
- Using sources or materials not authorized by the instructor in an examination
- Altering grading materials
- Sitting for an examination by a surrogate or acting as a surrogate
- Conducting any act which defrauds the results of the academic process
- Violating software copyrights

A faculty member has two options to resolve issues of cheating or plagiarism. The first option is to take care of the matter himself or herself and the second option is to refer the matter to the University for appropriate Action.

When an instructor has adequate evidence of academic dishonesty on the part of a student, the instructor can take action against the student under the first option. Variables affecting the severity of student penalties include whether the dishonesty was premeditated, the extent of the dishonesty (one answer or an entire project), the relative importance of the academic exercise (e.g., quiz or final examination), and whether the dishonesty was active or passive. Specific penalties that are considered are:

- Review with no action

- Warning
- Requirement that the work be repeated
- Reduction of grade on specific work in question
- A failing grade for the work in question, or for the entire course
- Any other penalty appropriate under the circumstances

The guidelines for appropriate penalties include an oral reprimand in cases where there is a reasonable doubt that the student knew that the action constituted academic dishonesty, an “F” on the particular paper, project or examination when the act was not premeditated or there were significant mitigating circumstances or an “F” in the course where the dishonesty was premeditated or planned. The instructor will document and report his or her action to the Chief Academic Officer.

If the instructor utilizes the second option, he or she will notify the University of the type of academic dishonesty observed, provide a written statement regarding the matter, and provide the University with the names of all witnesses and all information and documentation necessary to prepare a disciplinary hearing or other appropriate action by the University. Any of the specific penalties and guidelines for appropriate penalties above may be considered by the University. In the case of repeated infractions by a student, the University may exercise the option of dismissal. Action by both the instructor and the University can be appealed through the appeal procedures set forth below.

## NON-ACADEMIC REASONS FOR STUDENT DISCIPLINE

In addition to the reasons noted above, students may be disciplined for any of the following reasons:

- Forgery, altering university documents, or knowingly providing false information;
- Disruption of the educational or administrative process of the University, by acts or expression;
- Physical abuse or destruction of University property;
- Physical abuse or threat of abuse to students, University employees, or their families;
- Verbal abuse or intimidation of students or University employees including shouting, use of profanity or other displays of hostility;
- Theft of University property;
- Sale or knowing possession of illegal drugs or narcotics;
- Possession or use or threats of use of explosives or deadly weapons on University property;
- Lewd, indecent, or obscene behavior on University property or by telephone;
- Soliciting or assisting another in an act which would subject students to a serious University sanction;

- Any action which would grossly violate the purpose of the University or the rights of those who comprise the University;
- Any act, omission to act or conduct which would be considered a crime under federal/state/local law.

Disciplinary action may include probation, suspension, and dismissal from the University and/or notification to the Department of Homeland Security. Students suspected of committing any violation of university policy are accorded procedures consistent with due process typically before disciplinary action is imposed. However, inappropriate students may be suspended prior to a due process hearing.

Any violation of university policy (including all forms of academic dishonesty) can result in a student being barred from graduate or professional schools at this or other universities. In addition, violating University policy can make a student ineligible for government commissions or other employment.

## STUDENT RIGHTS

CSTU has adopted policies with regard to student rights and grievances that are maintained in the University's policy manuals. The University's policy seeks to treat all students with respect and fairness. All students may request access to or release of, at reasonable times, his or her education records as maintained by the University. Such a request must be in writing and addressed to the registrar. The written request must specify the records that the student desires to access or to be released, and to whom released. A student may request any special letters or copies of documents pertaining to his/her student file but must pay the cost of producing or reproducing such documents.

A student may request changes in his or her records. If, on proper showing of evidence, a material error in the record is proved, a change or correction will be made. The University has adopted a policy whereby all students have the right to appeal decisions of faculty and staff based upon university policy.

Any questions a student may have regarding this catalog that have not been satisfactorily answered by the institution may be directed to the Bureau for Private Postsecondary Education at 1747 N. Market Blvd, Suite 225, Sacramento, CA 95834 or P.O. Box 980818, West Sacramento, CA 95798-0818, [www.bppe.ca.gov](http://www.bppe.ca.gov), (888) 370-7589 or by fax (916) 263-1897.

A student or any member of the public may file a complaint about this institution with the Bureau for Private Postsecondary Education by calling (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))

## COURSE MATERIAL ISBN AND PURCHASING INFORMATION

CSTU does not have a student bookstore. Students are required to purchase textbooks required for their courses on the open market. In accordance with the current HEOA requirements, CSTU will provide the ISBN and retail price of our texts along with information on various purchasing options and buyback programs. The ISBN and price information are provided in the syllabus. Course materials can be purchased from any source, the CSTU website offers a convenient means of obtaining required course materials. CSTU cautions students about obtaining course materials from overseas sources because of the risk of delivery time and quality of the materials. Purchase decisions should not be based on the purchase price alone.

## SCHEDULE OF CHARGES

Program of Study	Registration Non refundable	Tuition Refundable	STRF * Non Refundable	**Total Cost	***Tuition By Period of Attendance
Master of Business Administration (MBA)	\$90.00	\$21,000.00	\$52.50	\$21,142.50	\$6,300.00
Master of Science in Computer Systems and Engineering (MSCSE)	\$90.00	\$21,000.00	\$52.50	\$21,142.50	\$6,300.00
Emerging Technology Training Program (Certificate)	90.00	\$8,400.00	\$20.00	\$8,510.00	\$6,300.00

\*Since April 1, 2022, the *Student Tuition Recovery Fund (STRF)* fee has been changed from fifty cents (\$0.50) per one thousand dollars (\$1,000) of institutional charges to two dollars and fifty cents (\$2.50) per one thousand dollars (\$1,000) of institutional charges, rounded to the nearest thousand dollars, from each student in an educational program who is a California resident or is enrolled in a residency program. For institutional charges of one thousand dollars (\$1,000) or less, the assessment is zero dollars (\$0).

Note: Authority cited: Sections 94877, 94923 and 94924, Education Code. Reference: Sections 94843, 94911(b), 94923 and 94924, Education Code.

\*\*The estimated schedule of total charges for the entire educational program.

\*\*\*The schedule of total charges for a period of attendance.

The cost per credit is \$700.00

Students must purchase the textbook required for their course before class at the student's own cost. The estimated costs are as follows:

- Master of Business Administration (MBA): \$500.00
- Master of Science in Computer Systems and Engineering (MSCSE): \$500.00
- Emerging Technology Training Program (Certificate): \$200.00

## ADDITIONAL FEES

The following fees and charges are costs that students may incur beyond the basic tuition cost for specific degree programs. Fees are charged when services are rendered.

International Transcripts Evaluation Fee	\$150.00
Student Transfer Out Fee	\$250.00
Late Registration Fee	\$50.00
Master Level Graduation Fee	\$250.00
Additional Transcript Fee	\$15.00
Change of Program Fee	\$50.00
Leave of Absence Fee	\$50.00
Returned Check Fee	\$50.00

### Return Check and Credit Card Declines Policy

Students are responsible for all fees relating to checks returned from the bank due to nonpayment. The CSTU charges a fee of \$50.00 for any returned check or credit card declined.

## STUDENT TUITION RECOVERY FUND

The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss.

Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program.

It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 1747 N. Market Blvd, Suite 225, Sacramento, CA 95834, (916) 431-6959 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau or did not complete a chosen teach-out plan approved by the Bureau.
2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution or were enrolled in an educational program within the 120 day period before the program was discontinued.
3. You were enrolled at an institution or a location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.
6. You have been awarded restitution, a refund, or other monetary award by an arbitrator or court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
7. You sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.



A student whose loan is revived by a loan holder or debt collector after a period of non-collection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law.

However, no claim can be paid to any student without a social security number or a taxpayer identification number.

## **CANCELLATION AND REFUND POLICY**

### **STUDENT'S RIGHT TO CANCEL**

1. You have the right to cancel your agreement for a program of instruction, without any penalty or obligations, through attendance at the first class session or the seventh calendar day after enrollment, whichever is later. Applicants who have not visited the school prior to enrollment will have the opportunity to withdraw without penalty within three business days following either the regularly scheduled orientation procedures or following a tour of the school facilities and inspection of equipment where training and services are provided. After the end of the cancellation period, you also have the right to stop school at any time; and you have the right to receive a pro rata refund if you have completed 60 percent or less of the scheduled days in the current payment period in your program through the last day of attendance.
2. Cancellation may occur when the student provides a written notice of cancellation at the following address: 1601 McCarthy Boulevard, Milpitas, CA 95035
3. This can be done by mail or by hand delivery.
3. The written notice of cancellation, if sent by mail, is effective when deposited in the mail properly addressed with proper postage.
4. The written notice of cancellation need not take any particular form and, however expressed, it is effective if it shows that the student no longer wishes to be bound by the Enrollment Agreement.
5. If the Enrollment Agreement is canceled after attendance of the second class session or the seventh calendar day after enrollment, whichever is later, the school will refund the student any money he/she paid, less a registration fee, and less any deduction for equipment not returned in good condition, within 35 days after the notice of cancellation is received.

### **WITHDRAWAL FROM THE PROGRAM**

The institutional refund policy for students who have completed 60 percent or less of the course of instruction shall be a pro rata refund. After the end of the cancellation period, you have a right to terminate your studies at this school at any time, and you have the right to receive a refund for the part of the course or program you have paid for and did not receive. You have the

right to withdraw from the course of instruction at any time. If you withdraw from the course of instruction after the period allowed for cancellation, the school will remit a refund, less a registration fee \$90.00, within 35 days following your withdrawal. You are obligated to pay only for educational services rendered and for unreturned books or equipment.

If you obtain books or equipment, as specified in the enrollment agreement and return them in good condition within 30 days following the date of their withdrawal, the school shall refund the charge for the books or equipment paid by you. If you fail to return books or equipment in good condition within the 30 day period, the school may offset against the refund the documented cost for books or equipment exceeding the prorated refund amount.

You may withdraw from the school at any time after the cancellation period (described above) and receive a pro rata refund if you have completed 60 percent or less of the scheduled days in the current payment period in your program through the last day of attendance. The refund will be less a registration fee, and less any deduction for equipment not returned in good condition, within 35 days of withdrawal. If the student has completed more than 60% of the period of attendance for which the student was charged, the tuition is considered earned and the student will receive no refund.

For the purpose of determining a refund under this section, a student shall be deemed to have withdrawn from a program of instruction when any of the following occurs:

- The student notifies the institution of the student's withdrawal or as of the date of the student's withdrawal, whichever is later.
- The institution terminates the student's enrollment for failure to maintain satisfactory progress; failure to abide by the rules and regulations of the institution; absences in excess of maximum set forth by the institution; and/or failure to meet financial obligations to the School.
- The student fails to return from a leave of absence.

For the purpose of determining the amount of the refund, the date of the student's withdrawal shall be deemed the last date of recorded attendance. The amount owed equals the daily charge for the program (total institutional charge, minus non-refundable fees, divided by the number of days in the program), multiplied by the number of days scheduled to attend, prior to withdrawal.

If the student has completed more than 60% of the period of attendance for which the student was charged, the tuition is considered earned and the student will receive no refund.

If any portion of the tuition was paid from the proceeds of a loan or third party, the refund shall be sent to the lender, third party or, if appropriate, to the state or federal agency that guaranteed or reinsured the loan. Any amount of the refund in excess of the unpaid balance of the loan shall

be first used to repay any student financial aid programs from which the student received benefits, in proportion to the amount of the benefits received, and any remaining amount shall be paid to the student. If the student has received federal student financial aid funds, the student is entitled to a refund of monies not paid from federal student financial aid program funds.

## TUITION PAYMENT METHODS

California Science and Technology University is in the process of participating in federal and state financial aid programs. CSTU accepts payment for tuition, books, equipment and other fees through cash payment, Zelle, PayPal, or personal or third-party checks. Payment in full is required prior to beginning each course.

Students assume the responsibility for payment of the tuition costs in full, either through direct payment or through a third party financial plan. All financial arrangements must be made before the beginning of each course.

## EDUCATIONAL PROGRAMS

<b>Program Name</b>	<b>Credit Hours</b>	<b>Normal Completion Time</b>
Master of Business Administration (MBA)	30	24 months
Master of Science in Computer Systems and Engineering (MSCSE)	30	24 months
Emerging Technology Training Program (Certificate)	12	8 months

## CREDIT HOUR DEFINITION

California Science and Technology University measures its programs in semester credit hours. A credit hour is defined as an amount of work represented in intended learning outcomes and verified by evidence of student achievement for academic activities as established by the institution comprising the following units: didactic learning environment; supervised laboratory setting of instruction; externship; and/or out-of-class work/preparation. A clock hour is defined as 50 minutes of instruction in a 60-minute period of time. Generally, a clock hour begins at the top of the hour and ends at the fifty-minute mark.

One semester credit hour equals 45 units comprised of the following academic activities:

- One clock hour in a didactic learning environment = 2 units
- One clock hour in a supervised laboratory setting of instruction = 1.5 units
- One hour of externship = 1 unit
- One hour of out-of-class work and/or preparation for the didactic learning environment or supervised laboratory setting of instruction that are designed to measure the student's achieved competency relative to the required subject matter objectives = 0.5 unit

## MASTER OF BUSINESS ADMINISTRATION (MBA)

The objective of the master's degree programs is to provide advanced training to those who wish to practice their profession with increased competence in the global business industries. The program emphasizes both mastery of the subject matter and an understanding of related research and research methodology. This emphasis implies the development of the student's ability to integrate and apply the subject matter.

Program Length: 24 months

Semester Credit Hours (Credits): 30

Program Objectives:

- ✓ Students will demonstrate an understanding of business knowledge (principles, concepts, theories, perspectives) and skills (procedures, methods, strategies, approaches) for each business function/discipline, and of the interrelationships among business functions/disciplines.
- ✓ Students will demonstrate the capacity to identify problems, define objectives, gather and analyze information, evaluate risks and alternatives, make decisions that are ethical and responsible, and communicate clearly defensible ideas and plans. The decisions need to be based on the available data and data analysis, especially, based on the latest business analytics skills.
- ✓ Students will demonstrate the capacity to acquire information, and technologies of the high-tech industries, especially Artificial Intelligence and Data Science, so that they can make good planning based on the trend in technologies and leveraging on the data science to make better decisions.
- ✓ Students will demonstrate the capacity to work effectively and communicate with others as a colleague and as a manager.
- ✓ Students will demonstrate the capacity for continual self-managed learning for professional and career development.

A minimum of 30 semester credit hours of graduate study are required for the MBA program. The MBA curriculum includes coursework in the following categories: Core Requirements, Electives, and a Capstone Course.

Upon clearing background preparation work, students start to take courses to meet the degree requirements, beginning with the Core Requirements courses.

Upon completion of the study, graduates may obtain jobs in marketing analysis, data processing, financial analysis, etc. The following is a list of job classifications the MBA program prepares graduates for using the United States Department of Labor's Standard.

- 15-1199.08 - Business Intelligence Analysts

- 11-2021.00 - Marketing Managers
- 15-1199.10 - Search Marketing Strategists
- 13-1111.00 - Management Analysts
- 13-1161.00 - Market Research Analysts and Marketing Specialists
- 15-2031.00 - Operations Research Analysts
- 13-2099.01 - Financial Quantitative Analysts
- 11-3021.00 - Computer and Information Systems Managers
- 11-2022.00 - Sales Managers
- 43-4051.00 - Customer Service Representatives
- 11-1011.00 - Chief Executives

#### **I. Core Requirements (21 credits)**

The following required courses provide a knowledge base of interdisciplinary business theories and techniques for the students who would like to pursue a career in business management with the concentration in Data Science. The students can select courses total of 24 credits from the following list to fulfill the core requirements.

- MB500 Financial Management
- MB530 Statistics for data analysis
- MB550 Project Management
- MB554 Leadership
- MB558 Financial Accounting and Analysis
- MB560 Marketing Management
- MB562 Digital Marketing
- MB572 Organizational Behavior
- MB580 Business Analytics and Strategy
- MB590 Special Topics
- MB591 Seminars
- MB592 Organizational Leadership
- MB593 Digital Transformation
- MB594 Effective Business Communication
- MB600 Python for AI
- MB602 Practical User Experience
- MB604 Machine Learning Fundamental
- MB606 AI for Business
- MB610 Cloud Computing and Security
- MB614 Practical Project Management
- MB616 Business Analytics
- MB620 Deep Learning with PyTorch
- MB624 Practical Digital Marketing
- MB626 Data visualization for Machine Learning

- MB628 Machine Learning for NLP
- MB630 Data Engineering with SQL and NoSQL
- MB632 Introduction to Cloud Computing
- MB636 DevOps
- MB638 Deep Learning with TensorFlow
- MB640 Data Collection and Multivariate Analysis

## **II. Electives (6 credits)**

The students may elect any graduate-level courses to meet the electives requirement. The following are additional options for the elective courses:

Curricular Practical Training (CPT): When applicable, the student may take curricular practicum courses and engage in practical training to work on company projects that are directly related to the student's course of study. The student must observe the rules required for taking the practicum courses. No more than 6 credits of practicum coursework may be counted towards graduation. Part-time CPT is 1 credit, and full-time CPT is 2 credits. Part-time CPT together with 9 concurrent credits, or full-time CPT together with 6 concurrent course credits are considered full-time study. Each 1 credit of a practicum course requires at least 45 hours of practical experience related to the student's program curriculum.

MB598 Business Administration Internship

## **III. Capstone Course (3 credits) (A required subject)**

Students are required to start the capstone project as early as possible and under the guidance of the school adviser, integrate the knowledge and skills learned from the courses taken during the program.

MB599 Business Administration Capstone

## **IV. Graduation Requirements**

The Master of Business Administration degree program requires a minimum of 30 credits of graduate-level courses. The MBA degree program requires coursework in the following categories:

1. Core Requirements,
2. Electives, and
3. A Capstone Course.

The following are required for graduation:

- Maintain a grade of C- or better for all courses taken to clear deficiencies or towards the degree requirements,
- Maintain an overall G.P.A. of 3.0 or better,
- Maintain good standing with the University – with clear financial, library, and other school records,

- The student is approved to graduate after filing a petition for graduation.

## MASTER OF SCIENCE IN COMPUTER SYSTEMS AND ENGINEERING (MSCSE)

The MSCSE program is designed for students who intend to become professional engineers in the high-technology industry, as well as for those who desire a modern, general education based on the problems and the promises of a technological society. CSTU offers a friendly atmosphere and a variety of academic programs that have made CSTU engineering graduates highly valued in high-tech firms in the Silicon Valley.

Program Length: 24 months

Semester Credit Hours (Credits): 30

Program Objectives:

- ✓ To provide each student the education by tailoring each student's study plan based on the student's background and interests.
- ✓ To provide in-depth professional training in the latest technologies.
- ✓ To provide relevant laboratory experience throughout each program as an integral part of the education.
- ✓ To nurture a learning environment which leads to professional values recognizing high quality and integrity in a true engineer.
- ✓ To provide graduate students an opportunity to pursue advanced training and professional development to practice their profession with increased competence.

A minimum of 30 semester credits of graduate study are required for the Master of Science in Computer Systems and Engineering program (MSCSE). They include a few required core courses, a number of elective courses based on the student's selection of technical pursuit, and a required capstone course. The computer systems engineering coursework will develop technical skills beneficial to the student for career planning. The student also has the opportunity to take elective courses outside of computer systems engineering to broaden the student's skillset. Upon clearing background preparation work, the student starts to take courses to meet the degree requirements. The student must begin his/her graduate study with the subjects listed in the Core Course section.

Graduates may gain entry-level employment or higher-level positions that may include such position titles as software engineer, data analyst, data engineer, machine learning engineer and artificial intelligence engineer. The following is a list of job classifications the MSCSE program prepares the graduates for using the United States Department of Labor's Standard.

- 15-1132.00 - Software Developers, Applications
- 15-1152.00 - Computer Network Support Specialists
- 41-9031.00 - Sales Engineers



- 15-1131.00 - Computer Programmers
- 15-1199.01 - Software Quality Assurance Engineers and Testers
- 15-1134.00 - Web Developers
- 15-1111.00 - Computer and Information Research Scientists
- 15-1199.07 - Data Warehousing Specialists

## **I. Core Requirements (21 credits)**

- CSE520 Advanced Operating System
- CSE540 Advanced Data Structure and Algorithms
- CSE550 Advanced Java Programming for Internet Application
- CSE552 Full Stack Development
- CSE554 Internet and Network Security
- CSE556 Database System
- CSE558 Machine Learning
- CSE572 Artificial Intelligence application using TensorFlow
- CSE574 Deep Learning
- CSE590 Special Topics
- CSE591 Seminars
- CSE600 Python for AI
- CSE604 Machine Learning Fundamental
- CSE606 AI Application with GAN
- CSE608 AI Application with Reinforcement Learning
- CSE610 Cloud Computing and Security
- CSE612 AI Application in Computer Vision
- CSE618 Algorithm in Python
- CSE620 Deep Learning with PyTorch
- CSE622 Big Data Analytics with Apache Spark
- CSE624 Network Security
- CSE628 Machine Learning for NLP
- CSE630 Data Engineering with SQL and NoSQL
- CSE632 Introduction to Cloud Computing
- CSE636 DevOps
- CSE638 Deep Learning with TensorFlow
- CSE650 Digital Integrated Circuit Design using FPGA

## **II. Electives (6 credits)**

The student may take any graduate-level courses to meet the requirements of elective courses, including those outside of computer engineering. When applicable, the student may take Curricular Practicum courses and engage in practical training to work on company projects that are directly related to the student's course of study. No more than 6 credits of practicum

coursework may be counted towards graduation. Part-time CPT is 1 credit and full-time CPT is 2 credits. Part-time CPT together with concurrent 9 course credits and full-time CPT together with 6 concurrent course credits are considered full-time study. Each 1 credit of a practicum course requires at least 45 hours of practical experience related to the student's program curriculum.

CSE598 Computer Systems Engineering Internship

### **III. Capstone Course CSE599 (3 credits) (A required subject)**

Students are required to start the capstone project as early as possible and under the guidance of the school adviser, integrate the knowledge and skills learned from the courses taken during the program.

CSE599 Computer Systems Engineering Capstone

### **IV. Graduation Requirements**

The Master of Science in Computer Systems and Engineering (MSCSE) degree program requires a minimum of 30 credits of graduate-level courses. The MSCSE degree program requires coursework in the following categories:

1. Core Requirements,
2. Electives, and
3. A Capstone Course.

The following are required for graduation:

- A graduate student admitted with undergraduate deficiencies must clear the deficiencies in the early terms. The student may clear a subject by either taking the course and earning a passing grade or passing a proficiency exam on the subject,
- Maintain a grade of C- or better for all courses taken to clear deficiencies or towards the degree requirements,
- Maintain an overall G.P.A. of 3.0 or better,
- Maintain good standing with the University – with a clear financial, library, and other school records,
- The student is approved to graduate after filing a petition for graduation.

Students received a master's degree upon successful completion of the program.

## **EMERGING TECHNOLOGY TRAINING PROGRAM**

The emerging technology training program is designed for students who have some professional experience in the high-tech industry. CSTU offers a friendly atmosphere and a variety of training programs that provide the training for the technologies needed for high-tech firms in Silicon

Valley, especially the latest cutting-edge technologies, hence students can keep up with the advance of the fast-growing high-tech industry.

Program Length: 8 months

Semester Credit Hours (credits): 12

Program Objectives:

- ✓ To provide each student the education by tailoring each student's study plan based on the student's background and interests.
- ✓ To provide in-depth professional training with current industrial learning resources to the student.
- ✓ To provide relevant laboratory experience throughout each program as an integral part of the education.
- ✓ To nurture a learning environment that leads to professional values recognizing high quality and integrity in a true engineer.
- ✓ To provide students an opportunity to pursue advanced training and professional development to practice their profession with increased competence.

The Emerging Technology Training Program requires students to take 12 credits of graduate-level courses from either the MBA program or the MSCSE program.

The coursework will lead graduates to obtain jobs in the field that requires them to apply data analysis or artificial intelligence skills to their jobs. The following is a list of job classifications the Emerging Technology Training program prepares the graduates for using the United States Department of Labor's Standard.

- 11-9199.00 - Managers, All Other
- 15-1133.00 - Software Developers, Systems Software
- 11-2022.00 - Sales Managers
- 41-9031.00 - Sales Engineers
- 15-1199.08 - Business Intelligence Analysts
- 17-2199.00 - Engineers, All Other
- 11-9199.00 - Managers, All Other
- 15-1152.00 - Computer Network Support Specialists
- 15-1132.00 - Software Developers, Applications
- 15-1134.00 - Web Developers
- 13-2099.01 - Financial Quantitative Analysts
- 15-1111.00 - Computer and Information Research Scientists
- 15-1199.07 - Data Warehousing Specialists
- 15-1199.10 - Search Marketing Strategists
- 15-1131.00 - Computer Programmers
- 27-3042.00 - Technical Writers

- 15-1199.08 - Business Intelligence Analysts
- 13-1161.00 - Market Research Analysts and Marketing Specialists
- 11-2021.00 - Marketing Managers
- 13-1111.00 - Management Analysts
- 43-4051.00 - Customer Service Representatives
- 15-2031.00 - Operations Research Analysts
- 11-1011.00 - Chief Executives
- 15-1199.01 - Software Quality Assurance Engineers and Testers

### **Graduation Requirements**

The number of credits required for the Emerging Technology Training Program is 12 credits. A Certificate of Completion will be awarded to students after completing the program. California Science and Technology University does not have a cumulative final test or examination required for the completion of any of its programs.

## **COURSE DESCRIPTIONS**

### **MB500 Financial Management (3 credits)**

This course is designed to introduce modern financial theories, tools, and methods used for the analysis of financial problems, give students a thorough understanding of the essential concepts that need to develop and implement effective financial strategies. The course begins with a presentation of corporate finance fundamentals before progressing to discussions of specific techniques used to maximize the value of a firm. The course also explores the recent financial and economic crises and the role of finance in the business world. The course also includes the access to the same Thomson Reuters Financial database that business professionals use every day. It is packed with additional learning solutions to help the students to become professionals in Finance.

### **MB510 Human Resource Management (3 credits)**

This course is designed for students to learn the concept of HRM, history and current examples to develop advanced HRM skills. It is the most comprehensive way to learn the full spectrum of HRM. The class provides six types of high-quality applications that use concepts to develop students' critical-thinking skills. Including Human resource management strategic planning and the legal issues, Strategy driven human resource management, the legal environment and diversity management, staffing, developing and managing talent. Four types of skill-building exercises develop HR management skills that can be utilized right away. The real cases studies demonstrate HRM practice in the current business world. Students learn to apply the concept through critical thinking and to develop HRM skills they can use in their personal and professional lives.

### **MB530 Statistics for data analysis (3 credits)**

This course teaches students about the statistics for data analysis in the business world. Students will learn the statistics methods for business analysis, such as how random variables are used in statistical models. Students also learn the latest technology, tools and how to best utilize the tool to efficiently process and present data, get the insight from the data and enable business to make the right decision quickly. It provides realistic examples, problem sets and cases for students to internalize the strategy to overcome the real world challenges and equipped with methodology and tools to quickly solve real world problems.

### **MB550 Project Management (3 credits)**

This course learns the Agile Project Management (APM) four focal points: opportunities created by the agile revolution and its impact on product development, the values and principle that drive agile project management, the specific practices that embody and amplify those principles, and practices to help entire organizations. Today, the pace of project management moves faster. Project management needs to become more flexible and far more responsive to customers. Using Agile Project Management (APM), project managers can achieve all these goals without compromising value, quality, or business discipline. This class integrates the practical project management, product management, and software development practices into an overall framework designed to support unprecedented speed and mobility. Special topics include incorporating agile values, scaling agile projects, release planning, portfolio governance, and enhancing organizational agility.

### **MB554 Leadership (3 credits)**

This course teaches the students the awareness of their own strengths and opportunities for improvement while gaining an understanding of the qualities essential to being an extraordinary leader. By the end of the course, the students will have: Increased the understanding of what distinguishes between more and less successful leaders and construct a plan for their own development as a leader; sharpened their ability to diagnose situations and determine how then can add value; gain experience and confidence in leadership situations, such as dealing with difficult people and inspiring others to accomplish shared team and organizational goals; and developed the ability to accept and leverage feedback and offer useful feedback to others.

### **MB558 Financial Accounting and Analysis (3 credits)**

This course covers the material that is essential to understanding a set of financial statements. After taking this course, students will be able to read and understand the material in a financial statement. This course will be organized around how companies run their businesses, especially about financial reporting. The course will concentrate on how financial analysts use financial statement information. This course will articulate the balance sheet, income statement and cash flow statement; explain the effects of accounting changes, restatements, discontinued operations, and extraordinary items. Financial instruments (investments in debt instruments, equities, and

derivatives; cash flow, fair value, and foreign currency hedges; outstanding debt, equity, deferred taxes (reconciliation of taxes paid with tax expense), securitization stock-based compensation, earnings per share (basic and diluted) will be studied.

### **MB560 Marketing Management (3 credits)**

This course studies marketing management by analyzing real-world cases. Students will learn to implement and execute the marketing process through situation assessment, strategy formulation, marketing planning, marketing implementation and evaluation. Students will have a chance to explore the cutting-edge marketing management that reflects the latest in marketing theory and practice.

### **MB562 Digital Marketing (3 credits)**

This course studies digital marketing. This includes keyword research, SEO, digital advertising with Google Ad words, social media marketing with Facebook (plus Instagram, LinkedIn, Twitter), email marketing, content marketing, and web analytics with Google Analytics. Students will also learn how to do global digital marketing in multiple languages for multiple countries. After the study of the course, students will be able to do digital marketing for a large company or a startup company using SEO, Google Ad words, Facebook, Instagram, Twitter, and Google Analytics for any product.

### **MB572 Organizational Behavior (3 credits)**

This course explores the complex dimension of organizational behavior including examination of experiential and conceptual approaches to communication, self-awareness, perception, motivation, problem solving and culture. Students apply interpersonal and intrapersonal exploration to the management of change, leadership theories and organizational issues. Real case projects are required.

### **MB580 Business Analytics and Strategy (3 credits)**

This course introduces to you the latest analytical concepts, tools and methods in data mining, statistics and machine learning used to solve critical business problems in an organization. In this course, you will learn to identify, evaluate, and capture business analytic opportunities that create value. You will also learn how to transform data into deep business insights and actionable business strategy. This is a very practical course that focuses on real business cases and examples, based on the actual working experience of the instructor as a marketing data science director.

At the end of the course, you will gain a holistic view of common analytical problems in the key functional areas of an organization, including but not limited to product, operations, finance, sales and marketing management. You will know how to solve these business problems using the most effective tools and methods in data science. This course will position you as an analytical

expert or leader in your organization who understands where and how to apply advanced analytics to create business value.

#### **MB590 Special Topics (0.5 - 1.5 credits)**

Special topics courses include courses that address a current or timely topic, that are in a "pilot" phase before being offered on an ongoing basis, or that are known to be one-time offerings. Special topics course offerings can vary from term to term. Each special topic course should add the keyword on the course title to identify the course content.

#### **MB591 Seminars (1.5 – 3.0 credits)**

This course is meant to give students opportunities to explore topics in broad areas. Students will participate in a series of presentations. The presenters will come from other schools, industries, our faculty, and other students. The topics may be any aspect of the latest technologies or an approach that is interesting to students. Students can take up to two seminar courses. In this course, students will participate in activities that will develop their broad skills and knowledge, also they will have opportunities to explore a special topic in depth.

#### **MB592 Organizational Leadership (3 credits)**

This class is designed for students to understand organizational behavior and learn how to better adapt to the ever-changing corporate world. The class helps students to effectively advance their careers in the corporate environment by aligning their personal mission with the missions of their companies. The course teaches students how to successfully lead a team in a corporate environment, understand others' unique perspectives and motivation, build win-win working relationships. This class elevates students' strategic thinking, defines and aligns goals with their company's most critical priorities and missions. This course enhances students' ability to execute their missions smoothly and add significant value to their organizations. Real-life examples, live practice, simulation projects are included in the course. Students are required to give presentations in the end.

#### **MB593 Digital Transformation (3 credits)**

This course is designed to help students to build strong digital twins – for both company and individual, to become more competitive in the digital age. This class will help students to gain practical experience in building successful brands for their companies and individuals in the digital era. This course teaches students the practice in how to build modern digital brands while utilizing traditional leadership skills to broaden their influence. Social media channels and digital marketing applications are used to expand the presence of corporations and individuals. This class will also cover how to use these digital platforms and tools to build a thriving ecosystem for their work and life. Real-life examples will be analyzed in the classroom, live practice and

simulation projects are included in the course. Students are required to give either group or individual presentations at the end.

#### **MB594 Effective Business Communication (3 credits)**

This course is designed for students to learn the practical ways in the corporate world to communicate effectively. It contains four modules: 1. Managing up, 2 Managing across, 3. Multi-channel communication, 4. Storytelling and Presentation. It provides specific tools and methodology to build effective communication for internal and external channels, enhances our students' ability to convey an idea, convince others, and influence widely. Templates, tools, and practicing sessions are included in this class. This class helps students to become leaders who can effectively communicate their mission, strategy, and innovative ideas, gain support and resources to make a bigger impact. Presentations are required for this course.

#### **MB598 Business Administration Internship (1-2 credits)**

This course is designed for students to gain practical experience from working in industry. Part-time CPT is 1 credit, together with concurrent 9 course credits, and full time CPT is 2 credits, together with 6 concurrent course credits. Each 1 credit of a practicum course requires at least 45 hours of practical experience related to the student's program curriculum.

#### **MB599 Business Administration Capstone (3 credits)**

This course is designed for students to gain the practical experience on integrating the knowledge learned from the program including the core courses, and elective courses, and deliver a final project under the guidance of the course instructor. The final delivery project will vary depending on the need of the industry, and the students' background. The scope of the course is determined by the instructor.

#### **MB600 Python for AI (1.5 credits)**

Python has been used in many technical fields, especially for AI programming. This course will cover the basics and some advanced features of the python programming and prepare students for the AI programming and big data applications. Students do not need prior programming experience to take this course. The class will cover the basic Python, including String, List, Set, Dictionary, Tuple, Concept of mutable and immutable, Sequence, Function, Control flow, File I/O, Module Class, and advanced Python, including Iterators and Generators, Decoration, Class in depth, NumPy, Pandas, etc. The examples and problems used in this course are drawn from diverse areas such as text processing and data processing, so that students will be able to use Python for various applications.

#### **MB602 Practical User Experience (1.5 credits)**

This course teaches students how to drive the product design in effective and iterative cycles to assess what works best for the business and users. This course is for both UX designers who



wish to learn strategy, technique and process of designing UX, and business leaders who wish to understand and improve the UX engagement model in an agile environment, how stakeholders collaborate with the design team, and how to inject design thinking in the product development life cycle. You will learn valuable UX principles, tactics, and techniques and how product teams can easily incorporate design, experimentation, iteration, and continuous learning from real users into their Agile process, how and when to introduce what user research in different phases of product development. This course will position you as a professional UX designer, or pro-UX business leader in fast moving agile process.

#### **MB604 Machine Learning Fundamental (1.5 units)**

The Machine Learning course provides students with the ability to apply machine learning or predictive analytics methods. Machine learning models covered include classifiers, regression and unsupervised learning. Some more advanced topics, such as, deep learning models are introduced. In this course, you will learn how to apply machine learning to creating data driven solutions to business problems, query data sources for both training machine learning models and production models. You will also learn how to construct, evaluate, and cross-validate classification and regression models to predict value in production and how to construct unsupervised learning models to discover and understand structure in unlabeled data sets, develop and understand deep learning models and their relationship to other machine learning models.

#### **MB606 AI for Business (1.5 units)**

The course offers an executable guide for applying AI to business problems. AI-First companies are the only trillion-dollar companies, and soon they will dominate even more industries, more definitively than ever before. These companies succeed by design - they collect valuable data from day one and use it to train predictive models that automate core functions. As a result, they learn faster and outpace the competition in the process.

The course focuses on helping participants understand various aspects of AI as applicable to business including identifying the most valuable data, building the teams that build AI, integrating AI with existing processes and keep it in check, measure and communicate its effectiveness and reinvest the profits from automation to compound competitive advantage. It's not about building the right software - it's about building the right AI.

The pedagogy for the course will include a combination of classroom sessions that cover foundational concepts of AI, case-study discussions of how AI has been used in businesses and student projects. Each student will be involved in a real-life AI business project where they will

work in a team setting, identify a business problem that can be solved using AI, plan and design a prototype/proof-of-concept to address the business problem.

#### **MB610 Cloud Computing and Security (1.5 units)**

This course offers students an introductory understanding and hands-on experience of cloud computing using AWS. It will cover a wide range of topics in Compute, Storage, Networking, Security, Monitoring and Logging, as well as Account and Cost Management. Topics include evolution of cloud computing, AWS global infrastructure, architectural principles, key services and their common use cases, security and compliance model, pricing and account management. Students will do hands-on projects on setting up the AWS account and select needed resources.

#### **MB614 Practical Project Management (1.5 units)**

This course introduces basic concepts, processes, and practices of project management and will be more specific on planning and managing projects in the Information Technology (IT) area. Project management concepts, methodologies, and tools will be explained with real-world examples and cases within the standard Project Management Institute (PMI) framework. Students will learn the skills necessary to define project scope, create workable project plans, and manage projects with quality, budget, and schedule in mind. Typical project management methods, such as Waterfall and Agile, and organization structures will be explained and compared. The course is structured around the key phases of project knowledge areas in mind, ranging from project scope, integration, stakeholder, to communication. In addition, students will be taught critical thinking on identifying and prioritizing potential issues and best practices in industry.

#### **MB616 Business Analytics (1.5 units)**

This course introduces the latest analytical tools and methods in data science, statistics and machine learning used to solve critical business problems in an organization. In this course, you will learn to identify, evaluate, and capture business analytic opportunities that create value. You will also learn how to transform data into deep business insights and actionable business strategy. This is a very practical course that focuses on real business cases and examples, based on industrial practice. At the end of the course, you will gain a holistic view of common analytical problems in the key functional areas of an organization, including but not limited to product, operations, finance, sales and marketing management. You will know how to solve these business problems using the most effective tools and methods in data science.

#### **MB620 Deep Learning with PyTorch (1.5 units)**

This course covers deep learning with a focus on its application in computer vision. Deep learning is a branch of machine learning which mainly uses the technology of neural networks. We will discuss the basics of computer vision, machine learning and venture into deep learning

theories and applications. We will also learn a variety of machine learning and deep learning frameworks with PyTorch. The introduction to basic neural networks, convolutional neural networks and recurrent neural networks is combined with the development of real applications in the computer vision field.

#### **MB624 Practical Digital Marketing (1.5 units)**

This course offers an in-depth understanding and hands-on experience in current digital marketing. We will look at how to build and manage campaigns from small to global, including multiple languages in multiple countries. Overview of the types of campaigns along with a detailed look at tools and methods. This includes keyword research, SEO (search engine optimization), digital advertising on Google and Microsoft Bing search engines, social media marketing with Facebook, Instagram, Twitter, LinkedIn, email marketing, content marketing, and web analytics with Google Analytics. This class enables students to design and carry out a digital marketing campaign for any project. Each lecture is followed by practical hands-on work. You will see how to use a tool and then you will do the work in class. There will be lots of examples of digital marketing success (and failures) at companies. Discussion and your questions about your projects or companies are strongly encouraged.

#### **MB626 Data Visualization for Machine Learning (1.5 units)**

This course covers Data visualization and communication using Machine Learning and its core models and algorithms for students in the Data Science Program. It covers all significant topics, including graphics, discrete and continuous variables, clustering and classification. The objective of the course is to provide students an overview of machine learning techniques to visualize and explore, analyze, and leverage data. The course covers the use of data analysis and machine learning to aid the development of visualization. Implement prototypes that use visualization to explain machine learning models supervised, unsupervised, and reinforcement learning. Students will be familiarized with broad machine learning and statistical pattern recognition topics, including neural network training, classification, regression, and support vector machines. This course will use different languages' frameworks to demonstrate machine learning techniques. Students will use R and Tableau to complete the homework, assignments and projects through the course.

#### **MB628 Machine Learning for NLP (1.5 units)**

This course covers Big Data and NLP on Cloud. It provides an overview of Microsoft Azure Cloud Platform and a deeper dive of the data processing and NLP capabilities. Through a combination of presentations, demos, and hand-on labs, students will learn how to design data processing systems, orchestrate end-to-end data pipelines, build scalable, accurate, and production-ready natural language models using cloud technologies. The latest NLP models, including GPT3, BERT, etc., will be covered in this course.

### **MB630 Data Engineering with SQL and NoSQL (1.5 units)**

This course covers SQL and NoSQL databases with AWS and Apache Cassandra. The first part of the course will cover SQL languages and the second part will cover NoSQL. We will practice how to write complex SQL queries. Apache Cassandra is a free, distributed, wide column store. NoSQL database management systems are designed to handle large amounts of data across many commodity servers, providing high availability with no single point of failure. Cassandra supports clusters spanning multiple datacenters, with asynchronous masterless replication allowing low latency operations for all clients. We will have hands-on projects about the real applications. While Cassandra is a NoSQL database designed for massive data analytics, Cassandra offers a limited SQL interface called CQL, that does not have a join and windows function. We will integrate Spark SQL with Cassandra and run advanced SQL queries such as join, window function, and nested sub-queries. We will also work on PostgreSQL, an open source relational database for more advanced SQL queries that are designed to handle SQL coding challenges in many of the data science and data engineering job interviews.

### **MB632 Introduction to Cloud Computing (1.5 units)**

This course will provide students with an overview understanding of Cloud Computing's impact, the financials and an understanding of this technology, enabling students to gain both an overview of its uses and some hands-on experience with it.

This course is an introduction to Cloud Computing for students without programming. The students who have general experience working in tech or modern startups will find this course especially helpful to understand the technology.

The main cloud providers like Azure, AWS, GCP will be covered, with simple hands-on practices. Network SDN/VDN, Network security, virtualization, containerization, serverless functions, software platform, infrastructure AS a service will be covered in the course. Students will do the hands-on exercises in the configuration of simple components in both Azure and AWS.

### **MB636 DevOps (1.5 credits)**

DevOps is a set of practices that combines software development and IT operations. It aims to shorten the systems development life cycle and provide continuous delivery with high software quality. DevOps is complementary with Agile software development; several DevOps aspects came from Agile methodology. Software and the Internet have transformed the world and its industries, from shopping to entertainment to banking. Software no longer merely supports a business; rather it becomes an integral component of every part of a business. This course will teach students how to design, build, and deliver software using DevOps philosophy. One fundamental practice is to perform very frequent but small updates. This is how organizations

innovate faster for their customers. Popular tools (like Jenkins, spinnaker) will be used for teaching. Other tools may be used as needed.

### **MB638 Deep Learning with TensorFlow (1.5 credits)**

TensorFlow is one of the most in-demand and popular open-source deep learning frameworks available today. The course teaches you applied machine learning skills with TensorFlow so you can build and train powerful models. In this hands-on course, you'll learn the necessary tools to build scalable AI-powered applications with TensorFlow. After finishing this course, you'll be able to apply your new TensorFlow skills to a wide range of problems and projects. This course can help you prepare for the Google TensorFlow Certificate exam and bring you one step closer to achieving the Google TensorFlow Certificate.

### **MB640 Data Collection and Multivariate Analysis (1.5 credits)**

This course teaches students about the advanced data analytics in the business world. Students will learn the method to gather, clean, analyze and model data to provide insights. Students also learn the foundations for statistical inference, the process of inferring properties of an entire population from those of a subset known as a sample, and various modeling, which allows us to associate how differences in data that describe one phenomenon are related to differences in others. Various modellings are used for assessing profitability, setting prices, identifying anomalies, and generating forecasting. Big data has become more and more common in business. This course also covers how to build a multivariate model with big data.

### **CSE520 Advanced Operating System (3 credits)**

This course offers graduate students an in-depth understanding and hands-on experience in modern understanding and hands-on experience in modern operating system design and implementation. Topics include progress, memory, file system, I/O, deadlocks, operating system implementations, modern distributed and network system architectures, communication and synchronization in distributed systems, thread and process scheduling. Projects are required.

### **CSE540 Advanced Data Structure and Algorithms (3 credits)**

This course is designed to teach efficient use of data structures and how to design an algorithm to solve a practical problem. Students will learn the logical relations between data structures associated with the real problem and its physical representation. Topics include algorithms and algorithm efficiency analysis, data organization and the applications. Practical use of the arrays, stacks, queues, single and double linked lists, trees, graphs, and heaps will be covered in depth. The class based data models with OOB design concept will also be introduced.

### **CSE550 Advanced Java Programming for Internet Application (3 credits)**

This course learns all the basics and advanced features of Java programming. It starts with the basics and Leads to Advance features of Java in detail. This course covered and explained several topics of the latest Java 8 Features in detail. Topics include– Lambdas. Java 8 Functional interface, Stream and Time API in Java 8. This course teaches the students how to develop, debug and Java Internet applications. The course starts with keywords, syntax, and constructs that form the core of the Java language and then it leads the students to advanced features of java, including multithreaded programming and Applets. Students get a chance to review the fundamentals and learn the advanced topics. The previous programming experience in C/C++ is required for this course.

### **CSE552 Full Stack Development (1.5 units)**

Full Stack Development course will enable you to build interactive and responsive web applications using both front-end and back-end technologies. This course starts with basics of Web Development, covers JavaScript and jQuery essentials, guides you to build remarkable user interface via Angular or React, helps you to build scalable backend applications using Express & Node.js plus manage data using MongoDB. You will complete the course with a small project.

### **CSE554 Internet and Network Security (3 credits)**

The course addresses security risks in computer networks and computer systems and the fundamental techniques used to reduce these risks. It also gives an introduction to the role of security as an enabling technology for electronic commerce. The course is divided into four major parts: (1) Fundamentals of Network Security and System Security, (2) Fundamentals of Cryptography: This is probably the most important part of this course. This part involves basic reasoning and understanding of cryptography. This includes the fundamentals of symmetric and asymmetric key systems, message integrity (hashing functions), digital signature, digital certificate, key management, and familiarity with common standards for these techniques; (3) Cryptography in real world applications: Several security applications will be discussed, including PGP, SSL, IPsec, with SSL be the focus- major components of SSL protocol and its role in electronic commerce. Students will learn how to set up an https web server, and how to apply and integrate digital certificate with browsers, web servers, and communication protocols on the Web; (4) Hands-on Cryptography: This part is for those who are interested in implementing security software using cryptography.

### **CSE556 Database System (3 credits)**

This course provides an in-depth understanding of the Database Management System. Emphasis is on the latest database architecture, database configuration and administration. Topics include logical/physical database layout, database server processes, database creation, various database physical objects; client/server configuration, multi-threaded server configuration, database storage management, database security, database utilities, database monitoring, partitions, and

database backup/recovery methods. This course specifically details procedural extensions to SQL to develop stored procedures, functions, packages and database triggers. In addition, it covers database performance tuning from an application development point of view by exploring query optimizer, database hints, and various database access methods. Cloud Database Development and Management explains how student can take advantage of the cloud environment to develop their own fully functioning database systems.

### **CSE558 Machine Learning (3 credits)**

This course will teach methods and techniques for using stored data to make decisions. The student will learn data types including operational or transactional data such as data for sales, cost, and inventory; nonoperational data such as forecast data and macroeconomic data; and meta data, and learn their patterns, associations, or relationships, and how to use the information for decision making. Statistical learning concepts such as regression, classification, decision trees and model reduction techniques such as principal component analysis will be introduced. Specific examples of engineering and businesses using data mining techniques will be given in the course. The student is required to work on course projects by using modern data analysis software and referring to cases studied.

### **CSE572 Artificial Intelligence Application Using TensorFlow (3 credits)**

This course will teach the fundamentals and contemporary usage of the TensorFlow library for deep learning projects. The goal is to help students understand the graphical computational model of TensorFlow, explore the functions it has to offer, and learn how to build and structure models best suited for a deep learning project. The main content of the course includes the following parts, TensorFlow basics, Linear and Logistic Regression and TensorFlow Serving, Deep Neural Network, regularization, hyper-parameter tuning, Convolutional neural network, LSTM and Seq2seq, and Reinforce Learning. Through the teaching, students will use TensorFlow to build models of different complexity, from simple linear/logistic regression to convolutional neural networks and recurrent neural networks to solve tasks such as word embeddings, translation, optical character recognition. Students will also learn best practices to structure a model and manage research experiments.

### **CSE574 Deep Learning (3 credits)**

Deep Learning has become the most important skill in AI. This course will help students become good at Deep Learning. In this course, students will learn the foundations of Deep Learning, understand how to build neural networks, and learn how to apply machine learning knowledge in real projects. The course will teach Convolutional networks, RNNs, LSTM, Adam, Dropout, Batch Norm, and more. Students will work on projects from autonomous driving, sign reading, and natural language processing. Students will master not only the theory, but also see how it is applied in industry. Students will practice all these ideas in Python and in TensorFlow, which will



be covered in the course too. After this course, students will be able to apply deep learning to their work. Students will complete a real project at the end.

#### **CSE590 Special Topics (0.5 - 1.5 credits)**

Special topics courses include courses that address a current or timely topic, that are in a "pilot" phase before being offered on an ongoing basis, or that are known to be one-time offerings. Special topics course offerings can vary from term to term. Each special topic course should add the keyword on the course title to identify the course content.

#### **CSE591 Seminars (0.5 - 1.5 credits)**

This course is meant to give students opportunities to explore topics in broad areas. Students will participate in a series of presentations. The presenters will come from other schools, industries, our faculty, and other students. The topics may be any aspect of the latest technologies or an approach that is interesting to students. Students can take up to two seminar courses. In this course, students will participate in activities that will develop their broad skills and knowledge, also they will have opportunities to explore a special topic in depth.

#### **CSE598 Computer Systems Engineering Internship (1-2 credits)**

This course is designed for students to gain practical experience from working in industry. Part-time CPT is 1 credit, together with concurrent 9 course credits, and full time CPT is 2 credits, together with 6 concurrent course credits. Each 1 credit of a practicum course requires at least 45 hours of practical experience related to the student's program curriculum.

#### **CSE599 Computer Systems Engineering Capstone (3 credits)**

This course is designed for students to gain hands-on experience on integrating the knowledge learned from the program including the core courses, and elective courses, and deliver a final project under the guidance of the course instructor. The final delivery project will vary depending on the trend of the computer industry, and the students' background. The scope of the course is determined by the instructor.

#### **CSE600 Python for AI (1.5 units)**

Python has been used in many technical fields, especially for AI programming. This course will teach the learner to the basics and some advanced features of the python programming and prepare students for the AI programming and big data applications. Students do not need prior programming experience to take this course. The class will cover the basic Python, including String, List, Set, Dictionary, Tuple, Concept of mutable and immutable, Sequence, Function, Control flow, File I/O, Module Class, and advanced Python, including Iterators and Generators, Decoration, Class in depth, NumPy, Pandas, etc. The examples and problems used in this course are drawn from diverse areas such as text processing and data processing, so that students will be able to use Python for various applications.



### **CSE604 Machine Learning Fundamental (1.5 units)**

The Machine Learning course provides students with the ability to apply machine learning or predictive analytics methods. Machine learning models covered include classifiers, regression and unsupervised learning. Some more advanced topics, such as, deep learning models are introduced. In this course, you will learn how to apply machine learning to creating data driven solutions to business problems, query data sources for both training machine learning models and production models. You will also learn how to construct, evaluate, and cross-validate classification and regression models to predict value in production and how to construct unsupervised learning models to discover and understand structure in unlabeled data sets, develop and understand deep learning models and their relationship to other machine learning models.

### **CSE606 AI Application with GAN (1.5 units)**

This course focuses on deep neural network learning with Generative Adversarial Network (GAN) and introduces some key concepts in deep neural learning. Training Deep learning networks requires a good understanding of the nature of gradient descent and its variant, and different forms of loss functions. GAN is a class of machine learning frameworks. Given a training set, GAN learns to generate new data with the same statistics as the training set. A GAN trained on photographs can generate new photographs that look at least superficially authentic to human observers. Though originally proposed as a form of generative model for unsupervised learning, GANs have also proven useful for semi-supervised learning, fully supervised learning, and reinforcement learning. The core idea of a GAN is based on the "indirect" training through the discriminator, which itself is also being updated dynamically.

### **CSE608 AI Application with Reinforcement Learning (1.5 units)**

This course focuses on in-depth understanding of deep learning applications and introduces some key concepts in reinforcement learning. Training Deep learning networks can be a challenging task and requires a good understanding of the nature of gradient descent and its variants. Students will learn about different forms of loss functions and hyper parameters and regularization in conv nets, RNNs and others. The focus then turns into reinforcement learning as an alternative to supervised learning. OpenAI Gym is introduced as a tool to simulate the agent's environment and interaction. We will use Keras as a key framework to model different neural network architectures.

### **CSE610 Cloud Computing and Security (1.5 units)**

This course offers students an in-depth understanding and hands-on experience of cloud computing using AWS. It will cover a wide range of topics in Compute, Storage, Networking, Security, Monitoring and Logging, as well as Account and Cost Management. Topics include evolution of cloud computing, AWS global infrastructure, architectural principles, key services

and their common use cases, security and compliance model, pricing and account management. Students will do hands-on projects on setting up the AWS account and select needed resources.

### **CSE612 AI Application in Computer Vision (1.5 units)**

The course covers the fundamental concepts in Computer Vision, including probability and mathematical theories, image processing, feature detection, structure from motion, face detection and recognition, etc. The course also introduces the deep learning tools such as PyTorch and TensorFlow with computer vision applications such as human pose estimation. Students will learn the fundamental concepts of computer vision theories and practical solutions. Students will also learn to use the OpenCV software for solving image processing and computer vision problems, and the PyTorch and TensorFlow tools for training deep learning neural network models to solve computer vision problems.

### **CSE618 Algorithm in Python (1.5 units)**

This course is designed to teach efficient use of data structures and how to design an algorithm to solve a practical problem. Students will learn the logical relationships between the data structures associated with the real problems and their physical representations. Topics include algorithms and algorithm analysis, data organization and the applications. Practical use of the arrays, stacks, queues, single and double linked lists, trees, graphs, and heaps will be covered in depth. The class-based data models with object-oriented design patterns will also be introduced.

### **CSE620 Deep Learning with PyTorch (1.5 units)**

This course will teach deep learning with a focus on its application in computer vision. Deep learning is a branch of machine learning which mainly uses the technology of neural networks. We will discuss the basics of computer vision, machine learning and venture into deep learning theories and applications. We will also learn a variety of machine learning and deep learning frameworks with PyTorch. The introduction to basic neural networks, convolutional neural networks and recurrent neural networks is combined with the development of real applications in the computer vision field.

### **CSE622 Big Data Analytics with Apache Spark (1.5 units)**

Spark has increased the speed of analyzing applications significantly. Because of being versatile and easy to use, Spark is rapidly gaining market share. Spark makes it easier to solve complex data problems on a large scale. It is now the most active open source project in the big data community. This course introduces the use of Spark Core, SQL, Hadoop / HDFS / Hive (Needed for Spark) for practical applications, online demonstration, and enterprise application cases (such as housing price database). In this course, students will learn the command line syntax and examples of using commands through Spark, and Spark program tuning tips and writing application code in Python and Scala with Spark in the areas of SQL, streaming, machine learning and graph computing.

### **CSE624 Network Security (1.5 units)**

This course covers key security issues in computer communication networks. Among the issues to be discussed are: the security of LANs, WANs; threats to computer networks through exploitation of network infrastructure design weaknesses; security flaws in the network infrastructure protocols; security of content in computer network services; and risk assessment and security policies. Network intrusion detection and forensics technologies, cryptographic and authentication systems, capability and access control mechanisms are also discussed, including new developments in Internet routing and transport protocols, secure mail, directory, and multimedia multicast services. Current trends and research in security policies and technologies will also be discussed.

### **CSE628 Machine Learning for NLP (1.5 units)**

This course introduces students to Big Data and NLP on Cloud. It provides an overview of Microsoft Azure Cloud Platform and a deeper dive of the data processing and NLP capabilities. Through a combination of presentations, demos, and hand-on labs, students will learn how to design data processing systems, orchestrate end-to-end data pipelines, build scalable, accurate, and production-ready natural language models using cloud technologies. The latest NLP models, including GPT3, BERT, etc., will be covered in this course.

### **CSE630 Data Engineering with SQL and NoSQL (1.5 units)**

This course will teach SQL and NoSQL databases with AWS and Apache Cassandra. The first part of the course will cover SQL languages and the second part will cover NoSQL. We will practice how to write complex SQL queries. Apache Cassandra is a free, distributed, wide column store. NoSQL database management systems are designed to handle large amounts of data across many commodity servers, providing high availability with no single point of failure. Cassandra supports clusters spanning multiple datacenters, with asynchronous masterless replication allowing low latency operations for all clients. We will have hands-on projects about the real applications. While Cassandra is a NoSQL database designed for massive data analytics, Cassandra offers a limited SQL interface called CQL, that does not have a join and window function. We will integrate Spark SQL with Cassandra and run advanced SQL queries such as join, window function, and nested sub-queries. We will also work on PostgreSQL, an open source relational database for more advanced SQL queries that are designed to handle SQL coding challenges in many of the data science and data engineering job interviews.

### **CSE632 Introduction to Cloud Computing (1.5 units)**

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### **CSE650 Digital Integrated Circuit Design using FPGA (1.5 units)**

Digital design using FPGAs is a very important activity in industries because the cost of an FPGA design is much lower than that of an ASIC design. Also, the time-to-market is much faster. To design a digital system using the FPGA, the designers should understand the architectures of the FPGA, as well the CAD tools that comes along with it. In this course, we will study in detail, the FPGAs architecture. Various digital blocks such as combinational logic, sequential logic, finite state machines, RAM, DSP, and a microprocessor are built by exploiting the architectures of the FPGAs. At the end of the course, the students can design systems and IP exploiting FPGA architecture using Verilog.

## ADMINISTRATION AND FACULTY

### Executive Officers

President / Chief Academic Officer	Glen Qin (Zhigang Qin) Ph.D. EECS MBA
Chief Executive Officer / Director of Marketing	Elizabeth Xu Ph.D.
Chief Operating Officer	Henry (Hang) Zhang MSSE MSEE BSCS

### Staff

Registrar, Records, Campus Management System Designer	Maggie Ren, MFA
Director of Library Services	Peijun Zheng, PhD
Director of Student Services	Glen Qin, Ph.D.
Department Chair, Computer Systems and Engineering	William Li, PhD
Department Chair, Business Administration	Glen Qin, PhD

### Faculty

#### ***Master of Business Administration (MBA)***

##### **Glen Qin (15 years' experience)**

Ph.D. in Philosophy University of California, Berkeley  
MS in Science & Engineering, University of California, Berkeley  
MBA, Northwestern Polytechnic University  
BS in Engineering, Tsinghua University, Beijing, China

##### **Jeng-Dau Wu (James) (10 years' experience)**

Ph.D. in Business Administration, Golden Gate University, San Francisco, CA  
MS in Business Administration, University of California, Berkeley, CA  
BS of Business Administration, National Taiwan University, Taiwan

##### **Guangbin (March) Liao (12 years' experience)**

MBA in Business, UC Berkeley, Berkeley, CA  
BS in Automation, University of Science and Technology of China, Anhui, China

##### **Flora Chu (15 years' experience)**

Ph.D. in Business Administration, Northwestern Polytechnic University, Fremont, CA  
MS in Business Administration, Chadwick University, Birmingham, AL

BS in Business Administration, Biola University, La Mirada, CA

**Leland Lee Winters (15 years' experience)**

Ph.D. in Business Administration, Northwestern Polytechnic University, Fremont, CA

Ph.D. in Medicine UTESA, Medical School, Santo Domingo, Dominican Republic

MS in Health Administration, University of Washington, Seattle, WA

**An Luo (18 years' experience)**

Ph.D. in Biomedical Engineering, Columbia University, New York, NY

MS in Pattern Recognition & Intelligent Systems, Chinese Academy of Sciences, Beijing, China

BE in Electrical Engineering, Tsinghua University, Beijing, China

**Qian (Chandler) Qian (16 years' experience)**

Ph.D. in Systems Design Engineering, University of Waterloo, Ontario, Canada

MS in Geography, University of Waterloo, Ontario, Canada

BS in Environmental Planning and Management, Nankai University, Tianjin, China

**Andreas Ramos (13 years' experience)**

MA in Philosophy, University Heidelberg, Heidelberg, Germany

BA with Honors in Philosophy, University of Tennessee, Knoxville, Tennessee

**Xinyu Zhang (12 years' experience)**

MA in Computer Science, University of West Florida, Pensacola, FL

**Faith Bradley (11 years' experience)**

Ph.D. Public Policy, University of Arkansas - Fayetteville, Arkansas

MS in Business Administration, George Washington University, Washington DC

**Jay Ruparel (20 years' experience)**

MBA, Indian Institute of Management (IIM), Bangalore Indian

BE (Electronics & Communications), North Gujarat University, Patan Indian

**Elizabeth Xu (20 years' experience)**

Ph.D. Atmospheric Science, University of Nevada, Reno

M.S. in Computer Science, University of Nevada, Reno

M.S. in Environmental Science, Peking University

## ***Master of Science in Computer Systems and Engineering***

### **Jahan Ghofraniha (15 years' experience)**

Ph.D. in Philosophy in Electrical Engineering, University of British Columbia  
MS in Applied Science in Electrical Engineering, University of British Columbia

### **Bhairav Mehta (15 years' experience)**

MBA in Product Management, Cornell University, Ithaca, NY, USA  
MS in Computer Science, Queen's University, Kingston, Canada

### **Danian Gong (19 years' experience)**

Ph.D. in Communication and Information Systems, Tsinghua University, Beijing, China  
MS in Engineering, Tsinghua University, Beijing, China  
BS in EE Dept., Zhejiang University, Hangzhou, China

### **William Li (15 years' experience)**

Ph.D. in Physics, University of Nevada, Reno, NV  
M.S. in Computer Science, University of Nevada, Reno, NV  
M.S. in Environmental Science, Peking University, China  
B.S. in Space Physics, Peking University, China

### **Ge Yung (George) Jen (24 years' experience)**

Ph.D. in Computer Engineering, Northwestern Polytechnic University, Fremont, CA  
MBA in Business, Northwestern Polytechnic University, Fremont, CA  
MS in Computer Engineering, Wayne State University, Detroit, MI

### **Daniel Z Zanger (20 years' experience)**

Ph.D. in Mathematics, Massachusetts Institute of Technology, Cambridge, MA  
BA in Mathematics, University of California at Berkeley, Berkeley, CA

### **Rohit Sharma (19 years' experience)**

M.Tech. in Computer Technology, Indian Institute of Technology, Delhi, India  
BS in Engineering, AMU, Aligarh, India

### **Jim Lai (26 years' experience)**

Ph.D. in Electrical and Computer Engineering, Northeastern University, Boston, MA  
MS in Electrical and Computer Engineering, Fudan University, Shanghai, China

### **Bo Shen (24 years' experience)**

Ph.D. in Computer Science, Wayne State University - Detroit, MI  
B.S. in Computer Science, Nanjing University of Aeronautics & Astronautics - Nanjing, CN

**Amir Amadzadeh (22 years' experience)**

Ph.D. in Electrical Engineering, University of California, Los Angeles

**Weilan Wu (15 years' experience)**

MS in Computer Science, Washington University, St. Louis, Missouri  
BS in Computer Science, South China University of Technology, Guangzhou, China

**Yongchang Feng (24 years' experience)**

Ph.D. in Materials Science & Engineering, Carnegie Mellon University, Pittsburgh, PA  
MBA, Leavey School of Business, Santa Clara University, Santa Clara, CA  
MS, Materials Science, Chinese Academy of Science, P.R. China

**Ken Halbrecht (20 years' experience)**

MBA in Finance, International Business, Fordham University - New York, NY  
BS in Economics in Marketing and Operations Research, dual major. Minor in Comp Sci and Law, The Wharton School, The University of Pennsylvania - Philadelphia, PA

**Bahman Zohur (37 years' experience)**

PhD, Nuclear Engineering, University of New Mexico  
MS, Mechanical Engineering, University of New Mexico  
MS in Physics, University of Illinois

## CALENDAR

The Administrative Office is closed for two weeks during the Christmas and New Year Holidays each year and also for all legal United States (US) Federal Government holidays.

## HOLIDAYS

- ✓ New Year's Day
- ✓ Martin Luther King, Jr. Day
- ✓ President's Day
- ✓ Good Friday
- ✓ Memorial Day
- ✓ Independence Day
- ✓ Labor Day
- ✓ Veteran's Day
- ✓ Thanksgiving (Thursday and Friday)



- ✓ Christmas (2-week break)

2023 Start Dates
January 5, 2023
Mar 1, 2023
May 1, 2023
July 1, 2023
August 31, 2023
October 28, 2023

Note: CSTU offers programs on a modular based schedule. Classes start every other month. Students may enroll at the beginning of a class.

### Course Schedule

[https://www.cstu.edu/pages/academic/calendar/calendar\\_google.html?v=b71c625257](https://www.cstu.edu/pages/academic/calendar/calendar_google.html?v=b71c625257)