# 2022 UNIVERSITY CATALOG

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USV UNIVERSITY OF SILICON VALLEY®

## MISSION STATEMENT

The mission of the University of Silicon Valley is to prepare students for success in the creative-technology industries by providing an extraordinary, real-world education inspired by the entrepreneurial spirit of our Silicon Valley location.

# 2022 CATALOG

**Catalog Effective Period:** January 1, 2022 to December 31, 2022

**Published Date:** January 1, 2022

This catalog is intended to provide general information regarding the courses, programs, services, and requirements of the University of Silicon Valley for the 2022 calendar year. Most of the policies and regulations affecting students are described in this catalog, and each student is responsible for becoming familiar with this information. 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. More current and complete information may be obtained from the appropriate department or administrative office or from our website at www.usv.edu.

The University of Silicon Valley reserves the right to make changes to this catalog to reflect changes to federal and state regulations, and any other changes the University deems necessary, which may be in the form of an addendum. The catalog will be distributed in hard copy (limited quantities) and available online. Catalog corrections and addendums will be in the online version.

Any questions a student may have regarding this catalog that have not been satisfactorily answered by the University may be directed to:

The Bureau for Private Postsecondary Education
1747 N. Market Blvd
Suite 225
Sacramento, CA 95834

*or*

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

Website: www.bppe.ca.gov

Telephone: (888) 370-7589 or (916) 574-8900

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 website www.bppe.ca.gov.

For important regulatory information, please visit our website at https://usv.edu/disclosures/.

The University of Silicon Valley has no pending petition in bankruptcy, 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.).

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## WELCOME MESSAGE

Dear Students,

On behalf of our incredible faculty, staff, and administration, I'm delighted to welcome you to the University of Silicon Valley!

This catalog describes the various programs of study and the specific courses at the University, and it explains numerous procedures and policies relevant to your time as a student here. Although all of the information in this catalog is extremely valuable, we especially urge you to read (and save!) the sections related to your specific program of study **(Educational Programs)** and its relevant classes **(Course Descriptions).** Degree programs periodically change, and the catalog is updated regularly to reflect those changes. However, as with all universities, the catalog that is in effect when you enter your degree program will be the one that is used to define your degree program, even if the program changes while you are still in attendance.

As one of the oldest colleges in California, the University of Silicon Valley has a long and distinguished history of preparing students for careers in a continuously evolving world. Our students are educated broadly in the digital arts, technology, and business to prepare them for new and converging professions in multimedia, gaming, technology, design, and business. By combining professional, industry-based coursework with a core foundation of science and math, arts and humanities, critical thinking, and communication, we help students reach their professional goals and become lifelong learners with the needed flexibility to adapt to the rapidly changing work environments of the future.

At the University of Silicon Valley, you'll find yourself surrounded by an incredibly dedicated group of faculty and staff all working to create a welcoming, stimulating, and supportive environment in which you can thrive as you pursue your educational goals. Our faculty have relevant industry experience and networks, and our alumni comprise a great resource for jobs, internships, and workshops. Our students are focused and talented—in fact, all the artwork in this catalog is student work—and they are eager to make their mark on the world.

During your time here, we strongly encourage you to explore all that the University of Silicon Valley has to offer. Get involved in one of our clubs, participate in our many social activities, and definitely take advantage of our Career Services Center. We are thrilled that you have decided to pursue your education with us, and we are committed to helping you achieve those goals and dreams in every way we can!

We wish you all the very best,

**Brian K. Shepard, DMA**
Provost and Chief Academic Officer

## INTRODUCTION

The University of Silicon Valley prepares students for careers in the Silicon Valley economy by combining an industry-focused curriculum with a fully accredited, student-centered approach. Our students enjoy small, intimate classes where they are immersed in technology, design, and business using hands-on, project-based learning taught by a faculty of industry professionals.

## HISTORY OF THE UNIVERSITY

Dr. Henry Daniel Cogswell, born in Tolland, Connecticut, March 3, 1820, was a man of both vision and distinguished heritage. The Cogswell family was descended from Alfred the Great and Charlemagne and immigrated to America in 1635 from England. Dr. Cogswell cherished his family crest and motto, "NecSpernoNecTimeo," which means, "I neither despise nor fear."

As his ancestors numbered among America's pioneers, so was Dr. Cogswell's own life one of pioneering and service. Henry D. Cogswell had a humble childhood. It was necessary for young Cogswell to go to work at an early age in the New England cotton mills. After a day's work in the mills, he spent the evening hours reading, writing, and learning arithmetic. Eventually he became a teacher, but after one year, he decided to enter the dental profession. Upon completion of his training at the age of 26, Dr. Cogswell began the practice of dentistry in Providence, Rhode Island.

In 1846, Dr. Cogswell married Caroline E. Richards, daughter of Ruel Richards, a manufacturer in Providence. When gold was discovered in California, Dr. Cogswell followed the pioneering urge he had inherited from his ancestors. He left for California by sea and after 152 days aboard the clipper ship "Susan G. Owens" landed in San Francisco on October 12, 1849. Rather than enter the rugged and uncertain business of mining, he practiced dentistry and established a mercantile business in the mining region.

After several successful years of dental practice and real estate investments, and buoyed by his ever-present strength of purpose, Dr. Cogswell became one of San Francisco's first millionaires. Dr. Cogswell was a pioneer in his profession as well. In 1847, he designed the vacuum method of securing dental plates. In 1853, he performed the first dental operation in California using chloroform.

On March 19, 1887, Dr. and Mrs. Cogswell executed a trust deed setting apart real property (valued at approximately one million dollars) to establish and endow Cogswell Polytechnical College. It was, as far as is known, the first school of its kind west of the Mississippi River. The purpose of the College as a charitable trust is well expressed in the words of Dr. Cogswell in his presentation address to the first Board of Trustees, which he and Mrs. Cogswell had selected. It is remarkable that his reference to the immediate need for technical training is as true now as it was at that time. He spoke, in part, as follows: "Educated working men and women are necessary to solve the great labor problems that will arise in the future. For the purpose of this education, there is room and need for technical schools in all quarters of our country. For the purpose, then, of providing boys and girls of the state a thorough training in mechanical arts and other industries, we have made the grant, as set forth in these papers, providing for the founding and maintaining of Cogswell Polytechnical College."

The school was opened in August 1888 in the Mission District in San Francisco, California as a high school with well-equipped departments of technical education for boys and business education for girls. The school operated in this capacity until June 30, 1930, when its status was changed to that of a technical college offering a college-level two-year program. The University of Silicon Valley was granted candidacy for accreditation from the WASC Senior College and University Commission (WSCUC) in 1975 and first became accredited in 1977.

In 1985 the university moved to Cupertino, CA and in 1993 the university purchased a campus in Sunnyvale, CA, which it moved to in 1994. In 1992, the university began offering Bachelor's Degrees and Master's Degrees in 2012. In 2015 the university moved to its current location of 191 Baypointe Parkway in San Jose, California. In 2020 the university changed its name from Cogswell Polytechnical College to Cogswell University of Silicon Valley and in 2020 to the University of Silicon Valley.

## FACILITIES

The University of Silicon Valley is located in the Silicon Valley at 191 Baypointe Parkway, San Jose, CA 95134. It is conveniently housed in a 45,000 square foot, single story building that supports our culture of collaboration and the fusion of arts and engineering. The University has free parking and is within walking distance of bus routes and the VTA light rail.

Residential courses are held at the University of Silicon Valley at 191 Baypointe Parkway, San Jose, CA 95134. Many courses and/or educational programs are also offered online as well. Our modern facilities contain the requisite equipment and materials that make it possible for students to create games; render and animate short films; develop complex computer software; track, edit, mix, and master soundtracks, and more—all while collaborating with peers and faculty.

## University Office Hours of Operation

| | |
|---|---|
| Monday through Thursday | 9:00am to 6:00pm |
| Friday | 9:00am to 5:00pm |
| Saturday* | 9:00am to 1:00pm |
| Sunday | Closed |

**Saturday hours are for Admissions and Financial Aid*

## Accreditation and Approvals

The University of Silicon Valley is accredited by the WASC (Western Association of Schools and Colleges) Senior College and University Commission (WSCUC). WSCUC, 1001 Marina Village Parkway, Suite 402, Alameda, CA 94501, (510)748-9001, www.wscuc.org. WSCUC is a regional accrediting agency that is recognized by the United States Department of Education.

The University of Silicon Valley is a private institution and is approved to operate by the Bureau for Private Postsecondary Education (BPPE) in the State of California. Approval to operate means the institution is compliant with the minimum standards contained in the California Private Postsecondary Education Act of 2009 (as amended) and Division 7.5 of Title 5 of the California Code of Regulations.

The University of Silicon Valley is:

- Approved to participate in the US Department of Education's federal student aid programs. For a listing of those programs please refer to the Financial Aid section of this catalog.
- Approved to participate in the California Student Aid Commission's State Grant program (Cal-Grant).
- Certified with the Student and Exchange Visitor Program (SEVP) to issue the Form I-20 to nonimmigrant students seeking admissions under an F-1 Student Visa.
- A participating institution in the Department of Defense (DOD) Voluntary Education Partnership Memorandum of Understanding (MOU) program.
- Approved for the training of veterans by the California State Approving Agency for Veteran's Education (CSAAVE) for the following educational programs. For benefit eligibility information, call 1-888-GIBILL1.
    - Bachelor of Business Administration
    - Bachelor of Science in Computer Science
    - Bachelor of Arts in Digital Art and Animation
    - Bachelor of Science in Digital Audio Technology
    - Bachelor of Arts in Game Art
    - Bachelor of Science in Game Engineering
    - Certificate in Computing
    - Graduate Certificate in Project Management
    - Master of Arts in Entrepreneurship and Innovation
    - Master of Science in Management and Leadership in Creative Technologies

## Educational Programs

The University of Silicon Valley is approved to offer the following educational programs:

### Certificate Programs

- Virtual Reality/Augmented Reality Certificate Program (VRAR)
- Certificate in Cloud Computing (CCC)
- Graduate Certificate in Project Management (GCPM)

### Undergraduate Degree Programs

- Bachelor of Business Administration (BBA)
- Bachelor of Science in Computer Science (CS)
- Bachelor of Arts in Digital Art and Animation (DAA)
- Bachelor of Science in Digital Audio Technology (DAT)
- Bachelor of Arts in Game Art (GA)
- Bachelor of Science in Game Engineering (GE)
- Bachelor of Science in Software Development (SWD)

### Graduate Degree Programs

- Master of Arts in Entrepreneurship and Innovation (MA ENT)
- Master of Science in Management and Leadership in Creative Technologies (MS MLCT)

## University Board of Trustees, Leadership and Administration

### Board of Trustees

- Scott McKinley, Chairman
  Founding Partner, McKinley Hodge Group
- Eve Andersson
  Senior Director, Google
- Richard Chuang
  Founder, d1nO, PDI/DreamWorks
- Dr. Fardad Fateri
  Chairman and Chief Executive Officer, International Education Corporation
- Charles Restivo (ex-officio)
  CEO and President, University of Silicon Valley
- John Seely Brown
  Independent Co-Chairman, Deloitte Center for the Edge
  Advisor to the Provost, University of Southern California
- Frances Valintine
  Founder and CEO, Tech Futures Lab / The Mind Lab
- Jason Woody
  Senior Managing Director, Palm Ventures
- Robert Wrubel
  Chief Innovation and Partnership Officer, DeVry University
  Operating Advisor, Palm Ventures

### Executive Committee

- Charles Restivo, Chief Executive Officer and President
- Dr. Brian Shepard, Provost and Chief Academic Officer
- Ilona Kreynis, Chief Financial Officer
- Dr. Reba Smith, Chief Compliance Officer
- Eric Rajasalu, Vice President, Enrollment and Strategic Development
- Leslie Anderson, Director of Human Resources

### Academics

- Carolus Brown, Dean of Students
- Angela Acuna, Registrar
- Milla Zlatanov, Vice President of Institutional Research and Quality Assurance

### Department Directors

- Dr. Bobbi Makani, Professor, Director of Business, Entrepreneurship, and Innovation Department
- Bineet Sharma, Director of Computer Science Department
- Michael Kaczmarek, Interim Director of Digital Art and Animation Department
- Ricardo Kayanan, Assistant Professor, Director of Game Design Development Department
- Xo Xinh Nguyen, Associate Professor, Director of Audio and Music Technology Department
- Dr. Adam Ruch, Director of Arts & Sciences Department and New Program Development

### Administration

- Dr. Andrey Fedin, Vice President of Information Technology and Campus Services
- Sean Porter, Controller
- Stacey Valentine, Director of Financial Aid
- Jason Arana, Director of Career Services
- Jonelle Tate, Director of Admissions
- Kari Edwards, Director of HS Admissions and Outreach
- Randall Wells, Director of Distance Education

## ACADEMIC CALENDAR

The University of Silicon Valley operates on a trimester calendar. The trimester calendar allows students to attend the University year-round, giving them the opportunity to graduate sooner, potentially save money on living expenses while attending university, and providing a head start on their career. The calendar year consists of three 15-week academic terms with start dates in Spring, Summer, and Fall. There are also mid-sessions that begin on the 8th week of each trimester. New students may start at the beginning of the trimester and at the mid-session of the trimester. Students graduating high school may normally start in the Summer Mid-Session or in the Fall.

| **Spring Trimester** | |
|---|---|
| January 7, 2022 | New Students Orientation |
| January 10, 2022 | First Day of Classes |
| January 16, 2022 | Last Day to Add/Drop Classes |
| January 17, 2022 | Martin Luther King Day (Holiday) - University Closed |
| February 21, 2022 | Presidents Day (Holiday) - University Closed |
| March 26, 2022 | Last Day to Withdraw from Classes |
| April 24, 2022 | Last Day of Classes |
| April 24, 2022 | Commencement Ceremony |
| **Spring Mid-Session** | |
| February 25, 2022 | New Students Orientation |
| February 28, 2022 | First Day of Classes |
| March 6, 2022 | Last Day to Add/Drop Classes |
| March 4, 2022 | Last Day to Withdraw from Classes |
| April 24, 2022 | Last Day of Classes |
| **Summer Trimester** | |
| May 6, 2022 | New Students Orientation |
| May 9, 2022 | First Day of Classes |
| May 15, 2022 | Last Day to Add/Drop Classes |
| May 30, 2022 | Memorial Day (Holiday) - University Closed |
| June 20, 2022 | Juneteenth (Holiday) - University Closed |
| July 4, 2022 | Independence Day (Holiday) - University Closed |
| July 17, 2022 | Last Day to Withdraw from Classes |
| August 21, 2022 | Last Day of Classes |
| **Summer Mid-Session** | |
| June 24, 2022 | New Students Orientation |
| June 27, 2022 | First Day of Classes |
| July 3, 2022 | Last Day to Add/Drop Classes |
| July 4, 2022 | Independence Day (Holiday) - University Closed |
| July 31, 2022 | Last Day to Withdraw from Classes |
| August 21, 2022 | Last Day of Classes |
| **Fall Trimester** | |
| September 2, 2022 | New Students Orientation |
| September 5, 2022 | Labor Day (Holiday) - University Closed |
| September 6, 2022 | First Day of Classes |
| September 12, 2022 | Last Day to Add/Drop Classes |
| November 11, 2022 | Veterans Day (Holiday) - University Closed |
| November 13, 2022 | Last Day to Withdraw from Classes |
| November 24-27, 2022 | Thanksgiving Day (Holiday) - University Closed |
| December 18, 2022 | Last Day of Classes |
| **Fall Mid-Session** | |
| October 21, 2022 | New Students Orientation |
| October 24, 2022 | First Day of Classes |
| October 30, 2022 | Last Day to Add/Drop Classes |
| November 11, 2022 | Veterans Day (Holiday) - University Closed |
| November 24-27, 2022 | Thanksgiving Day (Holiday) - University Closed |
| November 27, 2022 | Last Day to Withdraw from Classes |
| December 18, 2022 | Last Day of Classes |

**This calendar is subject to change.*

# ADMISSIONS POLICIES

All applicants for admission to the University of Silicon Valley must have a high school diploma (this can be from a foreign school if it is equivalent to a U.S. high school diploma); the recognized equivalent of a high school diploma, such as a general education development (GED) certificate; a passing score on a state-authorized test, such as the High School Equivalency Test or the Test Assessing Secondary Completion; completed homeschooling at the secondary level as defined by state law; or successfully completed an Associate's or Bachelor's Degree. The University does not accept Ability-to-Benefit students.

The University of Silicon Valley maintains a rolling admissions process whereby the University continuously accepts and reviews completed applications, rendering admission decisions to applicants throughout the calendar year. Students considering enrolling at the University of Silicon Valley must review the admissions requirements listed below as requirements may vary by program and/or degree level.

## ADMISSIONS REQUIREMENTS FOR AVOCATIONAL PROGRAMS

In general, admission decisions are based on the evaluation of the applicant's professional and/or educational experience, application, and recommendations. The following are the general admissions requirements for all avocational certificate program students:

- Professional Experience
  - Two (2) or more years of experience in related fields: i.e., Media Arts, Programming, Game Development, or Engineering.
  - Recommendation Form completed by a current or prior supervisor, personal reference, or business colleague.

Students who do not have the desired professional experience may meet the admissions requirements by providing proof of the appropriate educational background, or a combination of professional experience and education.

- Educational Background
  - Two (2) or more years of post-secondary educational background in related fields: i.e., Technical Artist, Media Arts, Programming, Game Development, or Engineering.
  - Recommendation Form completed by current or prior faculty.

Applicants for admission to undergraduate programs must also interview with a University of Silicon Valley Admissions Advisor and complete an Application for Admissions.

## ADMISSIONS REQUIREMENTS FOR UNDERGRADUATE PROGRAMS

Applicants for admission to undergraduate programs must:

- Interview with a University of Silicon Valley Admissions Advisor.
- Complete an Application for Admissions.
- Submit an essay describing interest in one of the University's educational programs.*
- Submit SAT or ACT scores (recommended for all first-time freshman students).
- Provide a minimum of one (1) academic or professional letter of recommendation (preferred).
- Provide samples of original work for the Digital Art and Animation (DAA), the Digital Audio Technology (DAT), and Game Art (GA) programs. For instructions on submitting work for specific programs, please see the "Admissions Process" section of the Admissions page on the University website at: https://usv.edu/admission/.
- Complete placement tests in English, Mathematics, and Music Theory, if applicable, to assess the student's competency level in each subject.
  - Acceptable scores to determine placement in English and Math for students who do not achieve the minimum passing scores listed above.

| Subject | Score | Placement |
|---|---|---|
| English | 0 – 49% | ENG050 |
| | 50 – 79% | ENG100 & ENG060 |
| | 80 – 100% | ENG100 |
| Mathematics | 39% or less (12 / 30) | MATH050 |
| | 40% - 65% (13 -19 / 30) | MATH112 & MATH060 |
| | 66% or greater (20 -30 / 30) | MATH112 |

- Students may waive English placement testing based on ACT or SAT scores. Below are the acceptable scores to determine placement in English. Placement is based on the student's highest score from all test dates.

| ACT English Score | SAT Critical Reading Score | Placement |
|---|---|---|
| 6 or lower if taken in or after September 2016<br>17 or lower if taken prior to September 2016 | 479 or lower if taken in or after March 2016<br>499 or lower if taken prior to March 2016 | ENG050 |
| 7 or higher if taken in or after September 2016<br>18 or higher if taken prior to September 2016 | 480 or higher if taken in or after March 2016<br>500 or higher if taken prior to March 2016 | ENG100 |

- Provide proof of secondary school completion with a minimum unweighted GPA of 2.7 is recommended.
  - Acceptable documentation includes:
    - Final, official high school transcript that includes the date of graduation (unofficial transcripts may be used to begin the application process).
    - Official report of passing scores earned on the General Education Development (GED).
    - Certification of a passing score on a state-authorized high school equivalency test.
    - Official transcript signed by the parent or guardian of a homeschooled student that lists the secondary school courses the student completed and documents the successful completion of a secondary school education in a home school setting. Home school documents are only acceptable if state law recognizes homeschooling to be equivalent to public school or treats the home school as a private school.
    - A copy of a secondary school completion or leaving credential or similar document for students who completed secondary education in a foreign country. All foreign high school completion documents must be translated and/or evaluated by an evaluation agency to determine equivalency to that of a U.S. high school diploma or its equivalency.
    - Official college transcript that indicates completion of a high school diploma, an Associate's or Bachelor's Degree from an approved, accredited 4-year college or university.
  - Unofficial transcripts must be received prior to the start of the term, however official transcripts must be received no later than 30 calendar days from the start of the term.
  - All transcripts should be mailed to:

    **University of Silicon Valley**
    **Attn: Registrar's Office**
    **191 Baypointe Parkway**
    **San Jose, CA 95134**

*In the event an applicant fails to provide official documentation showing completion of secondary education, the student's status will be canceled. Any monies paid will be refunded according to the cancelation policy.*

**** Essay is not required for Undergraduate Non-Degree Program***

## ADMISSIONS REQUIREMENTS FOR GRADUATE PROGRAMS

To enroll in a graduate degree program, applicants must have earned an undergraduate degree from an approved, accredited college or university. Applicants for admission to graduate degree programs must:

- Interview with a University of Silicon Valley Admissions Advisor.
- Complete an Application for Admissions.
- Submit an essay describing interest in the Master's degree program and career goals.
- Provide a minimum of one (1) letter of recommendation.
- Provide proof of completion of a four-year Bachelor's degree. A minimum unweighted GPA of 2.7 is recommended.
  - Acceptable documentation includes:
    - Final, official college transcript that includes the date of graduation (unofficial transcripts may be used to begin the application process)

- If the degree was earned outside the United States, transcripts have to be translated, if applicable, and assessed by a member of the National Association of Credential Evaluation Services (NACES) or Association of International Credential Evaluators (AICE) to determine that it is equivalent to a Bachelor's degree earned in the United States.

- Unofficial transcripts must be received prior to the start of the term, however official transcripts must be received no later than 30 calendar days from the start of the term.
- All transcripts should be mailed to:

  **University of Silicon Valley**
  **Attn: Registrar's Office**
  **191 Baypointe Parkway**
  **San Jose, CA 95134**

*In the event an applicant fails to provide official documentation showing completion of an undergraduate degree, the student's status will be canceled. Any monies paid will be refunded according to the cancelation policy.*

Desired qualifications:

- Comfort with everyday mathematics; exposure to economics and statistics a plus.
- Familiarity with Microsoft Office Suite software or similar software.
- Results from standardized graduate admissions tests, such as the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT).

## ADMISSIONS REQUIREMENTS FOR INTERNATIONAL STUDENTS

The University of Silicon Valley welcomes students from other countries. International applicants for admission must:

- Interview with a University of Silicon Valley Admissions Advisor.
- Complete an International Students Application for Admissions.
- Submit an essay describing interest in one of the University's educational programs.
- Provide a copy of a current valid passport with an expiration date of at least six (6) months beyond the intended period of stay and is valid for travel to the United States.
- Submit SAT or ACT scores (if applicable).
- Provide a minimum of one (1) academic or professional letter of recommendation (preferred).
- Provide bank statements and/or other supporting documents demonstrating adequate financial support to cover all educational and living expenses while in school.
- Provide samples of original work for the Digital Art and Animation (DAA), the Digital Audio Technology (DAT), and Game Art (GA) programs. For instructions on submitting work for specific programs, please see the "Admissions Process" section of the Admissions page on the University website at: https://usv.edu/admission/.
- Provide proof of secondary school completion with a minimum unweighted GPA of 2.7 is recommended.
  - Acceptable documentation includes:
    - Final, official high school transcript that includes the date of graduation.
    - Official report of passing scores earned on the General Education Development (GED).
    - Certification of a passing score on a state-authorized high school equivalency test.
    - A copy of a secondary school completion or leaving credential or similar document for students who completed secondary education in a foreign country. All foreign high school completion documents must be translated and/or evaluated by an evaluation agency to determine equivalency to that of a U.S. high school diploma or its equivalency.
    - Official college transcript that indicates completion of a high school diploma, an Associate's or Bachelor's Degree from an approved, accredited 4-year college or university in the United States.
- Provide proof of English language proficiency since all instruction is conducted in English.
  - Acceptable documentation includes:

        - Test of English Foreign Language (TOEFL) Exam results with the minimum accepted score of 525 (paper-based), 197 (computer- based), or 69 (internet-based)
        - International English Language Testing System (IELTS) – Academic Version results with minimum accepted score of 6.5 for undergraduate and 7.0 for graduate students.
    - TOEFL and IELTS test scores are valid for two (2) years after the test date. There is no limited number of times a student can take either test, but tests cannot be taken more than once in a 12-day period.
    - The official scores become part of the permanent student record once the student has enrolled with the University.
    - TOEFL or IELTS not required if:
        - The high school diploma was issued in the United States.
        - The applicant's Native language is English, and the foreign diploma is in English and was not translated.
        - The applicant can provide evidence of receiving at least four (4) years of educational training in the English language. These students will need to only take the placement exam to assess English competency.
- Provide a copy of an official transcript from each college attended.
    - All transcripts must be translated, if applicable, and assessed by a member of the National Association of Credential Evaluation Services (NACES) or Association of International Credential Evaluators (AICE).
- Complete placement tests in English, Mathematics, and Music Theory, if applicable, to assess the student's competency level in each subject.
    - Acceptable scores to determine placement in English and Math for students who do not achieve the minimum passing scores listed above.

| Subject | Score | Placement |
|---|---|---|
| English | 0 – 49% | ENG050 |
| | 50 – 79% | ENG100 & ENG060 |
| | 80 – 100% | ENG100 |
| Mathematics | 39% or less (12 / 30) | MATH050 |
| | 40% - 65% (13 -19 / 30) | MATH112 & MATH060 |
| | 66% or greater (20 -30 / 30) | MATH112 |

    - Students may waive English placement testing based on ACT or SAT scores. Below are the acceptable scores to determine placement in English. Placement is based on the student's highest score from all test dates.

| ACT English Score | SAT Critical Reading Score | Placement |
|---|---|---|
| 6 or lower if taken in or after September 2016<br>17 or lower if taken prior to September 2016 | 479 or lower if taken in or after March 2016<br>499 or lower if taken prior to March 2016 | ENG050 |
| 7 or higher if taken in or after September 2016<br>18 or higher if taken prior to September 2016 | 480 or higher if taken in or after March 2016<br>500 or higher if taken prior to March 2016 | ENG100 |

    - International applicants must complete and submit application materials approximately 60 days before the desired start date in order to provide adequate time for the University to process documents required for the U.S. Citizenship and Immigration Services (USCIS). The University currently does not provide visa services or vouch for student status and any associated charges; however, it will provide acceptance letters as required. If accepted, international students must enroll as full-time students only.

International applications, official transcripts, and all supporting documents should be mailed to:

**University of Silicon Valley**
**Attn: Designated School Official (DSO)**
**191 Baypointe Parkway**
**San Jose, CA 95134**

*In the event an international applicant fails to provide proof of official documentation showing completion of an undergraduate degree, the student's status will be canceled. Any monies paid will be refunded according to the cancelation policy.*

## NOTIFICATION OF ADMISSION

The University of Silicon Valley will notify all applicants of the status of their application. Applicants will receive an acknowledgement of admission status approximately two (2) weeks after their application and supporting documents have been received and processed. Notification will include information regarding the enrollment process, the registration process, academic advising and student services.

## ENROLLMENT PROCESS

Upon acceptance, an Enrollment Agreement and a School Performance Fact Sheet for the degree of choice will be provided to the student, outlining the policies and rights of a student during enrollment. These documents should be reviewed, signed, and returned to the Admissions Office before registering for classes. Students who are accepted and confirm the University of Silicon Valley's offer of admission must submit an enrollment fee of $100 (for resident students) or $500 (for international students). The enrollment fee is nonrefundable. Please keep in mind that the University of Silicon Valley has the right to withdraw its offer for admission for the following reasons: any part of the admissions application contains misrepresentations; or you do not complete the requirements for high school graduation by the end of the current school year.

### STUDENT'S RIGHT TO CANCEL

You have the right to cancel your enrollment without any penalty or obligation and obtain a refund of charges paid through attendance at the first class session from the start of the program, or the seventh day after enrollment, whichever is later. All cancellations must be made in writing and delivered to the institution. If you have received a Student ID/Access Badge, it must be returned within 30 calendar days of the date you signed your notice of cancellation. If you cancel, any payment you have made, and any negotiable instruments signed by you shall be returned to you within 30 calendar days following the receipt of your notice to withdraw from the program.

## ENROLLMENT STATUSES

The following are the University's classifications of different types of students:

- **Matriculated Degree Student** – A degree candidate who has applied, been admitted and registered, and is actively pursuing a degree. Matriculated degree students are further classified as follows:
  - First Time Freshman – A degree-seeking student for the first time at the undergraduate level who has no prior experience attending any post-secondary institution. Students who entered with advanced standing (college credits earned before graduation from high school) are also included.
  - Transfer Student – A degree-seeking student with prior experience attending any post-secondary institution. Transfer students may or may not transfer credits from another institution.
  - Returning Student (Re-enrolled) – A degree-seeking student who reapplies to continue an education at the university after not attending for more than one (1) year.
  - Re-entry Student - A degree-seeking student who re-enters to continue an education at the university after not attending for less than one (1) year.
  - International Student – a) A student who does not hold U.S. citizenship or permanent residency in the U.S.; or b) A student who is enrolled for credit at an accredited higher education institution in the U.S. on a temporary visa, and who is not an immigrant (permanent resident with an I-551 or Green Card), or an undocumented immigrant or refugee. (UNESCO)
- **Non-matriculated Student**: A domestic student who is not seeking a degree at the time of admission, is not interested in receiving financial aid, and who wishes to waive placement testing and academic advisement. Non-matriculated students do not follow the admission requirement of matriculated students.
  - The Non-matriculated student status is designed to allow any interested individual to attend college credit courses without declaring a major or seeking a degree. Students who register under this status for a given term may not matriculate until the following term.
  - This status is most suited to students who wish to enroll in courses for personal enrichment, learning/upgrading job skills or fulfilling degree requirements for another institution.
  - Non-matriculated students will earn credits for coursework taken at the University. Matriculated students take precedence over non-matriculated students for classes with limited class size. A non-matriculated student who wishes to become a matriculated student must follow the admission requirement for matriculated students.

Both matriculated and non-matriculated students will be classified as one of the following:

- **Full-time**:
  - Undergraduate Programs: A student who is enrolled for 12 or more credits during a term.
  - Graduate Program: A student who is enrolled in 6 or more credits during a term.
- **Part-time**:
  - Undergraduate Programs: A student who is enrolled in fewer than 12 credits during a term.
  - Graduate Program: A student who is enrolled in fewer than 6 credits during a term.
- **Auditor**: A student who is enrolled in a class, but who is not taking the course for credit. This option must be declared at the time of registration. Degree students, as well as non-matriculated students, may audit courses. Students taking the course for credit will take precedence when class seats are limited.

## Requirements for Non-matriculated Students

Non-matriculated students may enroll and register for classes by following the steps below:

- Complete an Enrollment Agreement;
- Complete a Registration Form; and
- Pay the appropriate tuition and fees prior to starting classes.

Current matriculated students have priority seating and non-matriculated students will be registered one (1) week prior to the term. A non-matriculated student may only attend the University of Silicon Valley for up to total of 12 semester credits. In certain circumstances, non-matriculated students may appeal the limit to the Provost and CAO. A non-matriculated student may decide to apply for a degree-seeking status upon completion of admission requirements as listed in the current Catalog and Addendum.

## Requirements for Auditing Students

Students will need to complete a Registration Form in person. The form is available at the Registrar's Office. Students may then be required to interview with a faculty, or with the Department Director, for approval prior to registration. The Registration Form must be submitted to Registrar's Office for processing after fees have been paid with the Financial Aid/Business Office and approval from faculty or a Department Director has been received.

Students will be responsible for any fees associated with auditing the course(s). Refer to the Financial Information section for prices. Once students register into course(s) under audit status, they cannot switch to any other status during the term in which they are auditing.

## Requirements for Readmission

Students who have withdrawn/dropped from the University for 12 months or more since their last day of attendance must reapply by following the application procedures for admissions, as listed in this catalog.

Students who have withdrawn/dropped from the University less than 12 months since their last day of attendance may request in writing to be readmitted. The request must address the reason(s) the student stopped attending and include an action plan that the student will follow to ensure satisfactory completion of a program of study, if applicable.

If readmitted, students will return under any current academic, admission, curricular or academic procedures, and degree plans listed in the University Catalog and/or Addendum at the time of readmission. However, students who return within 12 months may have the option to re-enter under a previous degree plan at the University's discretion if the University remains approved to confer the degree.

## Right to Revoke Acceptance or Enrollment

The University of Silicon Valley reserves the right to revoke acceptance or continued enrollment if:

- Any application materials are false or misrepresented.
- The student imposes any risk to the health, safety, or welfare of others.
- The student disrupts the orderly processes or violates any of the of the University's policies.
- The student does not sign an Enrollment Agreement.

## College Level Examination Program (CLEP) and DANTES Subject Standardized Tests (DSST)

Students may receive credit for certain courses through exams administered by the College Level Examination Program (CLEP) and the Defense Activity for Non-Traditional Education System (DANTES) Subject Standardized Tests (DSST). Minimum passing scores are detailed in the tables below.

| CLEP Subject | Score | USV Equivalent |
|---|---|---|
| American Government | 49+ | GE: Social Sciences |
| American Literature | 49+ | GE: Humanities and Arts |
| Analyzing and Interpreting Literature | 49+ | GE: Humanities and Arts |
| Biology | 49+ | GE: Physical and Biological Sciences (Non-Engineering) |
| Calculus | 49+ | MATH143 Calculus 1 |
| Chemistry | 49+ | GE: Physical and Biological Sciences (Non-Engineering) |
| College Algebra | 49+ | MATH115 College Algebra and Trigonometry |
| College Composition | 49+ | GE: Basic Skills |
| English Literature | 49+ | GE: Humanities and Arts |
| Financial Accounting | 49+ | DMM250 Financial Models and Management 1<br>BUS250 Finance |
| College Composition modular | 49+ | GE: Basic Skills |
| History of the US I: Early Colonization to 1877 | 49+ | GE: Social Sciences |
| History of the US II: 1865 to the Present | 49+ | GE: Social Sciences |
| Humanities | 49+ | GE: Humanities and Arts |
| Introductory to Business Law | 49+ | BUS125 Business Law |
| Introductory Psychology | 49+ | GE: Social Sciences |
| Introductory Sociology | 49+ | GE: Social Sciences |
| Natural Sciences | 49+ | GE: Physical and Biological Sciences (Non-Engineering) |
| Pre-Calculus | 49+ | MATH116 Pre-Calculus |
| Principles of Management | 49+ | BUS110 Principles of Management |
| Principles of Marketing | 49+ | BUS141 Principles of Marketing |
| Principles of Microeconomics | 49+ | GE: Social Sciences |
| Social Sciences and History | 49+ | GE: Social Sciences |
| Western Civilization I: Ancient Near East to 1648 | 49+ | GE: Social Sciences |
| Western Civilization II: 1648 to the Present | 49+ | GE: Social Sciences |

| DSST Subject | Score | USV Equivalent |
|---|---|---|
| Art of Western World | 400+ | GE: Arts |
| Business Ethics and Society | 400+ | DMM365 Ethics, Development and Responsibility Management<br>BUS365 Personal and Organizational Ethics |
| Ethics in America | 400+ | GE: Social Science |
| Principles of Finance | 400+ | DMM250 Financial Models and Management 1<br>BUS250 Finance |
| Principles of Physical Science I | 400+ | GE: Physical and Biological Sciences (Non-Engineering) |
| Technical Writing | 400+ | GE: Written Communication II |

## ADVANCED PLACEMENT (AP) PROGRAM

Students may receive college credit for certain courses based on Advanced Placement (AP) exam scores. Credit in appropriate courses will be given for examinations passed with a score of three (3) or higher. These tests are administered by national testing organizations and test results must be sent directly to the College by the organization in order to be valid. The following Advanced Placement exam scores transfer directly into USV as credit for the following courses:

| AP Test | USV Course |
|---|---|
| AP Art History | GE: Humanities +Arts |
| AP Biology | GE: Physical and Biological Sciences (Non- Engineering) |
| AP Calculus AB | MATH143 Calculus 1 |
| AP Calculus BC | MATH144 Calculus 2, MATH145 Calculus 2 |
| AP Chemistry | GE: Physical and Biological Sciences (Non-Engineering |
| AP Chinese Language and Culture | GE: Humanities and Arts – Letters, or Social Science – Social Issues |
| AP Comparative Government and Politics | GE: Social Sciences – Comparative Systems or Social Issues |
| AP Computer Science A | CS 212 Java Programming |
| AP English Language and Composition | GE: Basic Skills – Written Communication |
| AP English Literature and Composition | GE: Humanities and Arts – Letters or Written Communication II |
| AP European History | GE: Social Sciences – Comparative Systems or Social Issues |
| AP French Language and Culture | GE: Social Sciences – Social Issues |
| AP German Language and Culture | GE: Humanities and Arts – Letters, or Social Science – Social Issues |
| AP Italian Language and Culture | GE: Humanities and Arts – Letters, or Social Science – Social Issues |
| AP Japanese Language and Culture | GE: Humanities and Arts – Letters, or Social Science – Social Issues |
| AP Latin | GE: Humanities + Arts – Letters |
| AP Macroeconomics | GE: Social Sciences – Comparative Systems or Social Issues |
| AP Microeconomics | GE: Social Sciences – Comparative Systems or Social Issues |
| AP Music Theory | DAT103 Music Theory |
| AP Physics 1, or AP Physics 2 | GE: Physical and Biological Sciences |
| AP Psychology | GE: Social Sciences – Human Behavior |
| AP Spanish Language and Culture | GE: Social Sciences – Social Issues |
| AP Spanish Literature and Culture | GE: Humanities and Arts – Letters, or Social Science – Social Issues |
| AP Studio Art 2D Design Portfolio | ART100 2D Design |
| AP Studio Art Drawing Portfolio | ART110 Sketching |
| AP United States Government and Politics | GE: Social Sciences – Comparative Systems or Social Issues |
| AP United States History | GE: Social Sciences – Comparative Systems or Social Issues |
| AP World History | GE: Social Sciences – Comparative Systems or Social Issues |

## CREDIT BY EXAMINATION

Students who possess specific skills or knowledge in a course area can apply for Credit by Examination. If the request is approved, students may demonstrate competency and receive course credit by successfully completing associated examinations and/or assignments rather than attending class. Credit by examination is only available for lower division courses, excluding preparatory courses. A course previously failed, withdrawn from, audited, enrolled in, or one in which a student has received an Incomplete grade may not be challenged.

Students who desire to challenge a course must see the Registrar's Office to obtain a Credit by Examination Form. Students should include a short explanation of their circumstances and any relevant portfolio work with their application. The appropriate Department Director will review the application and determines whether to accept the challenge.

Please note that challenge examinations are not counted when determining full- or part-time status for the term. Upon approval, there is a $75.00 nonrefundable fee for taking a challenge examination. Examinations may only be taken one (1) time per course. The student will have 30 calendar days from the date of approval to complete an examination.

The courses listed below are representative. Students may apply to challenge other courses and each request will be reviewed.

| Department | Course |
|---|---|
| Arts & Sciences | ENG100 English Composition |
| Arts & Sciences | MATH112 College Algebra |
| Audio and Music Technology | DAT103 Music Theory |
| Audio and Music Technology | DAT111 Desktop Production Fundamentals |
| Audio and Music Technology | DAT116 Desktop Audio Production |
| Audio and Music Technology | DAT211 Digital Sound Synthesis |
| Audio and Music Technology | DAT221 Studio Production |
| Computer Science | CS106 Introduction to Scripting: Python |
| Computer Science | CS111 Code 0: Introduction to Programming and Logic |
| Computer Science | CS115 Web Programming: HTML5, CSS, and JavaScript |
| Computer Science | CS212 Java Programming |
| Digital Art and Animation | ART100 2D Design |
| Digital Art and Animation | ART105 Color Theory |
| Digital Art and Animation | DAA106 Digital Imaging Concepts |
| Digital Art and Animation | ART108 Introduction to Photography |
| Digital Art and Animation | DAA109 Web Design |
| Digital Art and Animation | ART110 Sketching |
| Digital Art and Animation | ART115 Figure Drawing 1 |
| Digital Art and Animation | DAA240 Introduction to 3D Modeling |

## Residency Requirements

At a minimum, a student enrolled in an undergraduate program must complete at least 25% of the program of study in residence with the University of Silicon Valley (example: a student in a program of study with 120 credits must complete a minimum of 30 credits in residence at the University).

At a minimum, a student enrolled in a graduate program must complete at least 75% of the program of study in residence with the University of Silicon Valley (example: a student in a program of study with 30 credits must complete a minimum of 22 credits in residence at the University).

## Credits Earned at the U.S. Armed Forces Institute

Credit will be awarded, at the sole discretion of the University, for U.S. Armed Forces Institute (USAFI) courses if in compliance with the Guide to the Evaluation of Educational Experiences in the Armed Forces, published by the American Council on Education (ACE).

## Articulation Agreements

The University of Silicon Valley does not currently have any established articulation agreements with any other academic institutions.

## Notice Concerning Transferability of Credits and Credentials Earned at Our Institution

The transferability of credits you earn at the University of Silicon Valley is at the complete discretion of an institution to which you may seek to transfer. Acceptance of the degree you earn in the educational program is also at the complete discretion of the institution to which you may seek to transfer. If the credits or degrees that you earn at this institution are not accepted at the institution to which you seek to transfer, you may be required to repeat some or all of your coursework at that institution. For this reason, you should make certain that your attendance at this institution will meet your educational goals. This may include contacting an institution to which you may seek to transfer after attending the University of Silicon Valley to determine if your credits or degree will transfer.

## TRANSFER OF CREDIT POLICY

The University of Silicon Valley has developed and implemented a transfer credit policy and executes practices for consistent application to all students. Full and accurate disclosure of policies and practices is important, to ensure to all incoming transfer applicants that the transfer process is built on a strong commitment to fairness and effectiveness.

Award of transfer of credit toward program completion is based upon 1) comparability of transfer credit to the requirements of a specific course in a selected program of study, and 2) compliance with stated criteria for this credit at the University of Silicon Valley.

Criteria for the consideration of transfer of credit are contingent on the following conditions:

- For undergraduate students, coursework completed must have a minimum grade of "C." For graduate students, coursework completed must have a minimum grade of "B". Courses taken for credit with a "P" grade may be transferred if a clearly defined institutional policy identifies the "P" grade as equivalent to a "C" or better for undergraduate work, or a grade of "B" or better for graduate study.
- The does not award credit for work experience, physical education, English as a second language (ESL) or Preparatory courses.
- USV will consider foreign postsecondary official transcripts if evaluated and translated by a member of the National Association of Credential Evaluation Services (NACES) or Association for International Credential Evaluators, Inc. (AICE).
- Courses completed beyond ten (10) years prior are evaluated on a case-by-case basis.
- Coursework must have been completed at the same level (upper or lower division) as, or a higher level than, a course deemed comparable.
- Coursework must be awarded for credit value equal to, or greater than, that required for the comparable USV course (i.e., semester or quarter converted basis must equal or exceed that required by USV).
    - Conversion of quarter credit to semester credits is as follows:
        - 3 semester credits equate to 4.5 quarter credits (multiply semester credits by 1.5)
        - 4.5 quarter credits are equal to 3 semester credits (divide credits by 2/3rds)
- Official Transcripts must be sent directly to the Registrar's Office within 14 calendar days of the start of a term. Transcripts marked "Unofficial" or "Issued to Student" will not be considered for evaluation for transfer credit.
- USV will maintain a written record of the previous education and training of veterans and eligible persons. All transfer credit evaluation records will clearly indicate that the credit is granted, if appropriate, and the time for program completion will be shortened proportionately.
- All students requesting transfer credit will be notified accordingly.

## TRANSFER OF CREDIT AFTER MATRICULATION

A student who is requesting to attend another academic institution may do so by completing a Transfer of Credit after Matriculation Permission Form available from the Registrar's Office. Students should not register at another academic institution until receiving confirmation that the University of Silicon Valley has approved the proposed transfer credit. Students may only transfer a maximum of 20 semester credits after matriculation. Approval requires the action of the Department Director and Registrar.

Students may need to provide the following information from the other institution:

- Name of Institution
- Course Numbering System
- Credit Hour Policy
- Course Description
- The Equivalency

Students who are attending another academic institution should consult with the Registrar. It is advised that students register for at least six credits with the University of Silicon Valley to be an active student. No transfer credits will be accepted during the last 12 semester units of course work.

# REGISTRATION AND RECORDS

## REGISTRATION

The University offers online registration. Students are notified via email when the registration period is open and are made aware of important deadlines. Students are responsible for reviewing the academic calendar for specific dates and deadlines. Open registration extends up to the week prior to the start of a term. Once open registration closes, students are no longer able to use the student portal to add/drop classes (see Add/Drop Period section).

All active students have access to the online Student Portal where they can find academic, financial, curricular, and textbook information, along with a degree audit and course schedules. For further registration assistance, a guide is available in the Student Portal. Students may consult with their designated Academic Advisors for assistance.

Continuing students who register during late registration may be subject to a late registration fee.

## PREREQUISITES

A student may not enroll in a course for which all prerequisites have not been satisfied. A student may not register for a class and its prerequisites in the same term. For information on prerequisites and co- requisites, please see the course descriptions in this catalog.

## PREPARATORY COURSEWORK

Preparatory coursework prepares students for college life and successful academic progress. These courses are prerequisites for other college courses. Students may not progress and register without completion of required preparatory courses within the specified time.

Students who do not pass the University's placement tests must register and satisfactorily complete preparatory coursework as prescribed. Preparatory coursework must be completed within the first three (3) terms of enrollment. Students who are also required to register and satisfactorily complete any developmental coursework must do so within the first term. Freshman and Transfer students with twelve (12) credits or less will be required to meet this requirement. Students may confer with an Academic Advisor for additional information regarding this requirement.

## ADD / DROP PERIOD

The Add/Drop period closes at the end of the first week of the term. Students wishing to add or drop classes after registration closes must obtain an Add/Drop Form from the Registrar's Office and must submit the completed form to the Registrar's Office within the Add/Drop period.

Students who do not attend a course in which they have registered may be dropped from the course by the end of the first week. Once dropped from a course, seat availability is not guaranteed. An instructor may allow a student from the waitlist who has been in attendance during the Add/Drop period to enroll, as long as there is seat availability.

## WAITLIST

Students on the waitlist for a course may sit in class during the Add/Drop period only if there are seats available. Students who are registered and listed on the class roster have priority. Below are items students should know about attending a course while on a waitlist:

- The faculty member for the assigned course must permit a waitlisted student to sit in class. Faculty may choose to disallow this on a per class basis, and/or based upon seat availability.
- If, by the end of the Add/Drop period, seats remain unavailable, a student will be removed from the
- Waitlist and cannot continue with the course.
- Sitting in class does not guarantee that a student will be registered into the course by the end of the Add/Drop period. Students should prepare by registering for other courses before the Add/Drop period.
- Students may be asked to leave, upon faculty request, at any time to accommodate students who are registered in the course.
- If seats become available, students will be registered into the course(s) by order listed on the waitlist.

## TRANSCRIPTS AND OTHER OFFICIAL DOCUMENTS

Official transcripts, unofficial transcripts, and other University documents may be requested at the Registrar's Office. A $10 fee will be assessed for each official transcript requested. Requests for unofficial transcripts or other official documents can be serviced by the Registrar's Office at no charge. Requests must be completed online or in writing by completing the Document Request Form and returning it to the Registrar's Office via fax, university email or mail.

## Document Hold

No official documents, including official transcripts or diplomas, will be released until all financial obligations are met and library materials, equipment, or other University property is returned.

## Student Records Retention

Conforming to State Regulation (5 CCR §71930), the University of Silicon Valley retains all required records for a minimum of five (5) years from the end of a student's award year. However, some financial aid documents and all transcripts are kept indefinitely.

## Change of Contact Information

It is the student's responsibility to inform the school for any changes in contact information (phone, e-mail, mailing address). An Update to Student Information Form should be submitted to the Registrar's Office immediately after a change occurs.

# Financial Information

## Tuition and Fees

| Effective: Spring 2022 | | |
|---|---|---|
| **Undergraduate Tuition** (per credit hour): | $866 | Refundable According to the Institutional Refund Policy |
| **Graduate Tuition** (per credit hour): | $499 | Refundable According to the Institutional Refund Policy |
| **Fees** (per term): | | |
| Campus Fee (Undergraduate Students): | $500 | Non-refundable |
| Technology Fee (Graduate Students): | $50 | Non-refundable |
| Student Tuition Recovery Fee/STRF (*per $1,000*): | $0.50 | Non-refundable |
| Books and Supplies: | $500 | Estimated Costs |
| Housing Fee: | $6,695 | Refundable According to the Institutional Refund Policy |
| **Other:** | | |
| Enrollment Fee: | $100 | Non-refundable |

| Charges (for the first term) | | | | |
|---|---|---|---|---|
| **Tuition and Fees** | **Undergraduate Students** | | **Graduate Students** | |
| | w/o Housing | With Housing | w/o Housing | With Housing |
| Undergraduate Tuition (based on 15 credits): | $12,990 | $12,990 | | |
| Graduate Tuition (based on 9 credits): | | | $4,491 | $4,491 |
| Enrollment Fee: | $100 | $100 | $100 | $100 |
| Campus Fee: | $500 | $500 | $0 | $0 |
| Technology Fee: | $0 | $0 | $50 | $50 |
| Student Tuition Recovery Fee (STRF): | $60 | $60 | $10 | $10 |
| Books and Supplies (Estimated): | $500 | $500 | $500 | $500 |
| Housing Fee: | $0 | $6,695 | $0 | $6,695 |
| Student Housing Application Fee: | $0 | $300 | $0 | $300 |
| **Total Charges for the First Term:** | **$14,150** | **$21,145** | **$5,151** | **$12,146** |

| Other Fees | Amount |
|---|---|
| Late Payment Fee | $25 per Payment Due Date (non-refundable) |
| Official Transcript | $10 per transcript (non-refundable) |
| Graduation Fee | $100 (non-refundable) |
| Credit by Examination Fee | $75 per examination (non-refundable) |
| Audit Fee (waived for USV graduates) | $500 per course (refundable per refund policy) |
| Diploma Reprint Fee | $25 (non-refundable) |
| Student ID Card Replacement Fee | $10 (non-refundable) |
| Student Housing Application Fee | $300 (non-refundable) |
| Replacement VTA Pass Fee | $25 (non-refundable) |
| International Students Enrollment Fee | $500 (non-refundable) |
| Non-sufficient Funds (NSF) Fee | $20 (non-refundable) |
| Late Equipment Return Fee | $5 per day (non-refundable) |

| Total Program Costs | | |
|---|---|---|
| **Program** | **Current Period** | **Total Costs** |
| BA in Digital Art and Animation | $28,136.00 | $115,674.00 |
| BA in Game Art | $28,135.00 | $112,075.00 |
| Bachelor of Business Administration | $28,135.00 | $112,075.00 |
| BS in Computer Science | $28,135.00 | $112,075.00 |
| BS in Digital Audio Technology | $28,135.00 | $112,075.00 |
| BS in Game Engineering | $28,135.00 | $112,075.00 |
| BS in Software Development | $28,135.00 | $112,075.00 |
| Certificate in Cloud Computing | $15,964.00 | $15,964.00 |
| Graduate Certificate in Project Management | $7,192.00 | $7,192.00 |
| MA in Entrepreneurship and Innovation | $11,687.00 | $16,728.00 |
| MS in Management and Leadership in Creative Technologies | $13,185.00 | $19,224.00 |

*Tuition and Fees are subject to change.*

## Tuition Information for Registration

Students are not officially registered unless their account balances are current as determined by the Business Office of the University. Tuition may be paid in several ways, including, but not limited to, payment in full according to the tuition schedule and through financial aid. The Financial Aid Office can provide a detailed explanation of payment methods and plans.

Tuition payments may be paid by credit card through the on-line student portal, over the phone, or via individual Pay Pal account by sending payment to paypal@usv.edu and referencing the student's first and last name. Visa, MasterCard, American Express and Discover cards are accepted. Payments may also be made by personal check, money order or cashier's check made payable to: University of Silicon Valley.

All payments should be sent to:

**University of Silicon Valley**
**Attn: Business Office**
**191 Baypointe Parkway**
**San Jose, CA 95134**

The name of the student, the student's university ID number and the purpose for any amount paid must be included with the payment.

## Audit Policy for USV Graduates

The University of Silicon Valley permits its graduates to return as non-degree-seeking students by allowing them to audit undergraduate courses at no charge. Graduates taking courses under this program are allowed to register during the late registration period, provided they obtain the approval of the instructor for the course being taken and the approval of the Provost and CAO. Graduates must follow the regular registration process. Class availability is on a space-available basis and degree-seeking students have precedence over graduates.

## Student Tuition Recovery Fee (STRF)

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 North Market Blvd., Suite 225, Sacramento, California, 95834, (916) 574-8900 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or are 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 noncollection 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, WITHDRAWAL, AND REFUND POLICIES

## STUDENT'S RIGHT TO CANCEL

You have the right to cancel your enrollment without any penalty or obligation and obtain a refund of charges paid through attendance at the first class session from the start of the program, or the seventh day after enrollment, whichever is later. All cancellations must be made in writing and delivered to the institution. If you have received a Student ID/Access Badge, it must be returned within 30 calendar days of the date you signed your notice of cancellation. If you cancel, any payment you have made and any negotiable instruments signed by you shall be returned to you within 30 calendar days following the receipt of your notice to withdraw from the program.

To cancel your enrollment with the University of Silicon Valley you must mail or hand-deliver a signed and dated copy of your written notice to:

**University of Silicon Valley**
**Attn: Registrar's Office**
**191 Baypointe Parkway**
**San Jose, CA 95134**

## PROCESS FOR WITHDRAWING FROM THE UNIVERSITY

Students should provide written notice to the Registrar's Office of intent to withdraw from the University. All University property—ID Badge, library books, equipment, etc.—must be returned, or the student may be billed at reasonable costs for the unreturned item. Students requesting to officially withdraw from the University must complete an Exit Form. Exit Form can be obtained through the Registrar's Office.

## Withdrawal from the University and the Impact on Financial Aid

You have the right to withdraw from the University at any time. In addition, you may be withdrawn by the University at any time if you fail to meet the academic and attendance policies or you do not return from an approved leave of absence on the scheduled date. Your official withdrawal date will be the date the University determines you will no longer be attending ("Date of Determination" or "DOD"). The date of determination is the date that you notify the University of your intention to withdraw or the date that you failed to meet the academic or attendance policies of the University; whichever is earlier. A refund will be calculated through your last date of attendance per the Refund Calculation policy.

## Refunds for Dropped Classes

Students may add and drop a class only within the first week of a term without any academic penalty. Any drop after the Add/Drop period is considered a withdrawal and the student will receive a withdrawal grade (W) if it is within the withdrawal period.

Students who drop classes within the designated add/drop period are entitled to a full refund of tuition charges for each class dropped. Students who drop classes after the Add/Drop period but do not withdraw from the university (remaining enrolled in other courses) are not eligible for a refund of tuition for the dropped classes.

Please refer to the Academic Calendar for deadlines.

## Refunds for Students Who Withdraw from the University

If you should find it necessary to discontinue or withdraw from the university, you must provide notice to the Registrar's Office of intent to withdraw by means of the Exit Form. Notice must be made in writing and students must return any University property: i.e., ID Badge, library books and equipment, etc. Once you begin classes, if you should withdraw without notice, your withdrawal date will be your last date of attendance. If a student is absent fourteen (14) consecutive calendar days without notice, he/she may be considered withdrawn from the program.

Students who withdraw from all classes on or after the start of the term, as well as students who withdraw from the University after the Add/Drop period will be subject to a pro-rata refund of institutional charges. The calculation will be based on the student's last date of attendance, up to the 60% completion point in the term. Institutional charges include tuition, the campus fee, and the housing fee as shown in the Tuition and Fees section. Students who withdraw after the 60% completion point in the term are not eligible for a refund. For example, the 55th percentile point will be equivalent to a 45% refund of tuition charges.

Students receiving DoD Tuition Assistance (TA) who withdraw from the University after the Add/Drop period will be subject to a pro-rata return of unearned TA funds, based on the last day of attendance, up to the 60% completion point in the term. Students who withdraw after the 60% completion point in the term are not eligible for a refund or return of TA funds.

Institutional scholarship recipients who withdraw from the university are subject to a pro-rata charge for any unearned portion of the scholarship using the same percentage calculation as defined above for institutional charges.

State Grant recipients who withdraw from the university are subject to a pro-rata return of funds using the same calculation as defined in the Return of Title IV section and in accordance with the California Student Aid Commission.

Veteran Benefit recipients who withdraw from the university, unless requested by Veterans Affairs, will not be subject to a return of Veteran Benefits. Any Veteran Benefit received in excess of earned Institutional Charges and all other final adjustments will be refunded to the student.

If a student's payments by way of cash, checks, credit card(s), financial aid, agencies, or other methods exceeds the amount the school may retain based upon the refund policy, a refund for this difference shall first be paid to the sponsoring agency, as required, prior to a student receiving these monies. With written permission from the student, refunds may be returned to the loan programs to reduce the student's loan debt. If monies applied to a student's account are less than the amount the school may retain, the student must make arrangements with the school to pay this difference. Other Charges and Fees listed in the Tuition Pricing Schedule may be non-refundable. Any balance remaining on account after the refund calculations have been applied must be paid by student.

Return of unearned funds and/or refunds owed to agencies, private loans, scholarships, and to the student will be paid within 30 days of the date of determination of withdrawal. Notification will be sent to withdrawn students of all returns and funds made.

## Return of Credit Balances

A credit balance occurs whenever a student's payments exceed their charges for the term. In such cases, refund checks will be issued directly to the student or parent as soon as possible, but no later than 30 days, or within 14 days if the credit balance was caused by Federal Student Aid (Title IV) Funding. Students may choose to authorize the university to retain these funds to pay for a future term or to return these funds to the lender in lieu of receiving a check. The university will notify students via email when refund checks have been issued.

## Return of Title IV Funds

The University of Silicon Valley is approved by the U.S. Department of Education as an eligible participant in the Federal Student Aid (FSA) programs established under the Higher Education Act of 1965 (HEA), as amended.

Students receiving federal student financial aid funds (grants and/or loans) are entitled to a refund of moneys not paid from federal student federal program funds. Additionally, a portion of these funds must be returned to the federal student aid programs if a student completes 60% or less of a payment period. A payment period represents one-half of an academic year. Federal student aid is generally disbursed in two payment periods for each academic year. If applicable, returns to Title IV programs will be made within 45 days of the date the student is determined to have withdrawn from school

If the student (or parent, in the case of a PLUS Loan) is eligible for additional funds at the time of withdrawal, the student may receive additional Federal Student Aid (Title IV) funds. If the student received more FSA funds than he or she earned under the Federal Return of Title IV Funds Policy, the University, and in some cases the student, is required to return the unearned funds to the federal program(s) or lender, as applicable.

Any balance remaining on the account after the refund calculation has been applied must be paid by student.

### Return of Title IV Calculation

The formula for calculating the percentage of Title IV funds earned is based on the Federal Return of Title IV Policy as follows:

For students who withdraw or are dismissed from the institution, the number of days from the start date of the term to the student's last date of attendance in the term from which the student withdrew. This is then divided by the total days in the term to determine the completion percentage and the percentage of aid earned for the term. If the percentage attended is greater than 60%, 100% of the aid for the term is earned, as well as 100% is earned for those who completed previously attended terms. The percentage of aid earned is then multiplied by the combined total of the Title IV Aid disbursed or could have been disbursed during the term to determine the amount of aid the student actually earned for the term. Scheduled breaks of five (5) consecutive calendar days or more are excluded from the return calculation.

All unearned portions of federal aid are returned to the appropriate programs in the following order:

- Unsubsidized Direct Stafford Loans
- Subsidized Direct Stafford Loans
- Direct PLUS Loans (Parents)
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Other Title IV programs

If applicable, refunds to Title IV programs will be made within 45 days of the date the student is determined to have withdrawn based on the institution's withdrawal policy. Notification will be sent to withdrawn students of all refunds made. Examples of return of funds calculations that may be made in accordance with Federal regulations and University policy may be obtained from the Financial Aid Office.

## Post-Withdrawal Disbursements

Students who have earned more aid than had been disbursed at the time of withdrawal may be eligible for a Post Withdrawal Disbursement. The Financial Aid Office will notify the student within 30 days of the date of determination of withdrawal of the availability of Post-Withdrawal funds. The student will have 15 calendar days to respond to the notice. It is at the discretion of the University to allow a Post-Withdrawal Disbursement for a student who fails to respond to the school within the prescribed 15-day period. Once the student accepts the Post-Withdrawal Disbursement, the University has 180 days from the date of determination of withdrawal to disburse those funds to the student's account.

# FINANCIAL AID

The primary responsibility for meeting college costs rests with the student and the student's family. However, we recognize that many students are not able to pay the full costs of a college education. For this reason, the University of Silicon Valley offers programs that provide financial assistance for students who need or would like help in funding their college education. The Financial Aid Office is available to help students and their families in developing a financial plan and exploring funding options to meet educational costs.

All students who receive federal- or state-sponsored financial assistance must maintain satisfactory academic progress (SAP) as defined in the academic policies. Students are encouraged to call or visit the Financial Aid Office for more information.

## GRANTS, LOANS, AND WORK-STUDY PROGRAMS

Financial aid consists of programs that are funded and regulated by federal and state governments. The programs consist of two different types of aid: Gift Aid and Self-Help. A grant is money for college that does not have to be repaid. Students with bachelor's degrees are not eligible for grants. For federal grants, students must possess a high school diploma, GED or its equivalent. Self-help is either money borrowed that must be repaid (loans) or money earned through institutional work (FWS).

The University of Silicon Valley participates in the following financial aid programs:

### FEDERAL GRANTS

The U.S. Department of Education offers a variety of grants to students who can demonstrate financial need, to assist them in paying for educational costs.

- **Federal Pell Grant** – This grant provides federal money for students with financial need. The federal government uses the information from the FAFSA to determine who is eligible and how much each student is eligible to receive.
- **Federal Supplemental Education Opportunity Grant (FSEOG)** – This grant provides supplemental federal money for students with exceptional need who are eligible for the Pell Grant.

### STATE GRANTS

The State of California, through the Student Aid Commission, offers and administers several grant programs for undergraduate students.

- **Cal Grant** – Recipients must meet both academic and financial requirements. The University of Silicon Valley is eligible for and accepts Cal Grant A and Cal Grant B.
- **Chafee Grant** – This grant provides financial assistance to students who are/were foster youth.

### FEDERAL LOANS (DIRECT LOANS)

These loans are from the U.S. Department of Education and usually offer borrowers lower interest rates and have more flexible repayment options.

- **Direct Subsidized Loans** – These loans are for undergraduate students who demonstrate financial need. Interest charges and payments begin six months after the student's last day of attendance or when the student has reached 150% of the direct subsidized loan limit.
- **Direct Unsubsidized Loans** – These loans are for undergraduate students. Students are not required to demonstrate financial need to be eligible for these loans. Interest charges begin thirty days after loan funding and payments are not required while still attending college, up to six academic years.
- **Direct Plus Loans** – These loans are for parents of dependent undergraduate students. The parent is legally responsible for repayment of the loan. These loans charge interest and are subject to credit check.

### PRIVATE LOANS

These loans are non-federal loans made by a private lender such as a bank, credit union, or state agency.

### FEDERAL WORK-STUDY (FWS)

Provides partial funding to colleges to assist in employing students with financial need. Eligibility is based on available funds.

## Applying for Financial Aid

Students who want to apply for federal and/or state financial aid must first complete the Free Application for Federal Student Aid (FAFSA) by the mandated deadlines. The FAFSA can be completed using the website www.fafsa.ed.gov and entering the University of Silicon Valley school code of 001177. If required, additional documents must be submitted to the Financial Aid Office.

## Verification

The U.S. Department of Education randomly selects some federal student aid applicants for Verification, which is the process used to check the accuracy and validity of information provided to them during the application process. All students selected for verification will be notified and will be provided with a clear explanation of the documentation that is needed to satisfy the verification requirements, such as proof of income and household members. The submission deadline is generally 30 days from notification, and the consequences of failing to provide the requested information is thoroughly discussed. Students are periodically reminded of any requirement that has not yet been met. This advising may occur whether the student's application is selected for verification or not.

Since verification is requested to be completed within 14 days after notification, if the school is not supplied with needed documents by this deadline, the student may be required to make tuition arrangements other than federal student aid (FSA) funding. If a change is required as a result of verification, corrections to the Free Application for Federal Student Aid (FAFSA) must be made. Corrections can be processed electronically by either the school or the student.

Students are to comply with the verification request noted in the comment section of the Student Aid Report (SAR) and any additional requests made by the school for completing the verification forms provided. Once the student has received a corrected Student Aid Report (SAR) or the school has received a corrected Institutional Student Information Record (ISIR), the Financial Aid Office will notify the student if there is a change in eligibility or funding. Income information used in determining eligibility is confidentially maintained in the student's financial aid file.

## Suspension and Reinstatement of Financial Assistance

Students who are suspended from a program of study or terminated from the University of Silicon Valley are ineligible for financial aid until they regain admission and comply with satisfactory academic progress requirements.

## Cost of Attendance

Financial Aid eligibility is based on enrollment status and the cost of attendance (COA) as determined by the Higher Education Act (HEA). COA establishes a student's financial need and sets limits on the total aid that a student may receive based on geographic region.

COA criteria include:

- Tuition and Fees (charged by the institution)
- Housing (charged by the institution or allowance calculated by the government)
- Allowances for Expenses (Books, Transportation, Personal, Loan Fees etc.)

"Financial Need" is then calculated using the following formula: Cost of Attendance – Expected Family Contribution (determined by the FAFSA) = Financial (Remaining) Need

## Veterans Education Benefits

The Department of Veterans Affairs provides education benefits to veterans and eligible service members and/or their families. The University of Silicon Valley participates in multiple VA programs based on the student's specific eligibility.

## Yellow Ribbon Program

The University of Silicon Valley participates in the Veterans Affairs (VA) Post-9/11 GI Bill® Yellow Ribbon program. This program allows approved degree-granting institutions and the VA to partially or fully fund tuition and fee expenses that exceed the established thresholds under the Post-9/11 GI Bill®. It assists in making additional funds available for veterans' education programs without an additional charge to their GI Bill® entitlement. The maximum school contribution under this program is $5,000 per calendar year. For more questions relating to this program, veterans may contact the Financial Aid Department for assistance.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. Government Website at https://www.benefits.va.gov/gibill.

## Student Loan Obligation

If a student obtains a loan to pay for an educational program, the student has the responsibility to repay the full amount of the loan plus interest, less the amount of any refund.

## Statement of Educational Purpose

All recipients of Federal Student Aid are required to sign a Statement of Educational Purpose stating that all federal aid received will be used solely for college-related expenses.

## Rights and Responsibilities of Students Receiving Financial Assistance

**Students have the right to:**

- Know what financial aid programs are offered at the University of Silicon Valley.
- Know the criteria for continued student eligibility under each program.
- Know how the University determines whether the student is making satisfactory academic progress (SAP), what the consequences are of failing to make SAP, and how to reestablish eligibility for financial assistance.
- Know the method of disbursement of financial aid funds and the frequency of the disbursements.
- Know the terms of any loans received as part of the financial aid package; receive a sample loan repayment schedule, and explanation of the necessity for repaying the loans.
- Know the general conditions and terms applicable to any employment provided as part of the financial aid package.
- Be supplied with exit counseling information upon graduation, dropping below half-time status or exiting the University.
- Know how financial need is determined.
- Know how cost of attendance is determined.
- Know the institutional policy and the Title IV policy for withdrawals refunds.
- Know the terms and conditions under which students receiving federal education loans may obtain deferments and/or loan forgiveness.

**Students have the responsibility to:**

- Complete the financial aid forms accurately and submit them on time to the right place. Intentional misrepresentation on an application for federal financial aid is a violation of law and a criminal offense subject to penalties.
- Submit a FAFSA and other required documents every award year for continued eligibility in the federal and state aid programs.
- Maintain satisfactory academic progress to continue receiving financial aid.
- Check their university e-mail account for important financial aid information.
- Complete loan entrance counseling prior to receiving the first disbursement of a Stafford loan for first-year, first-time borrowers.
- Understand the University's refund policy and Title IV refund policy.
- Repay any student loans borrowed.
- Complete loan exit counseling when a student is exiting or graduating from the University and has federal education loans.
- Notify the Financial Aid Office of a change in name, address, or attendance status.
- Submit all documentation including verification requests, corrections and new information requested by the Financial Aid Office.
- Understand that all financial aid is contingent on the individual student's continued eligibility and the availability of funds.
- Understand all forms and agreements the student signs and keep copies.
- Complete financial aid forms accurately and on time.
- Contact the Financial Aid Office with any questions or for assistance.
- Understand that intentional misrepresentation on an application for federal financial aid is a violation of law and a criminal offense subject to penalties.

## INSTITUTIONAL SCHOLARSHIPS AND GRANTS

The University of Silicon Valley offers and accepts several scholarships to help undergraduate students pay for their education. These scholarships may come from federal, state, and private sources; unlike loans, there are funds that do not have to be repaid. Institutional scholarships and grants are awarded by academic year and are reserved for students meeting established eligibility criteria as outlined on the specific scholarship application information pages. A summary of the available institutional scholarships and grants is listed below. For more information on our institutional scholarships, please contact the Financial Aid Office. You may also visit our website at: https://usv.edu/admission/scholarships/.

| Scholarship / Grant | Maximum Amount per Term | Eligibility Criteria |
|---|---|---|
| 15 to Finish Scholarship | $1,000 | This scholarship program is designed to provide tuition assistance to eligible students who are enrolled for and taking 15 or more credits per term throughout their educational program here at USV. |
| Business, Entrepreneurship, and Innovation Scholarship | 10% of tuition | This scholarship program is designed to provide tuition assistance to students who are seeking careers as entrepreneurial innovators in business and are enrolled one of our Master's degree programs. Candidates must have completed an undergraduate degree program at an accredited college or university. Eligible students have the opportunity to receive 10% tuition scholarships. Must be enrolled with full-time status of 6+ credits per term and maintain a GPA of 3.0 or higher. |
| CEO Leadership of Tomorrow Scholarship | 25% of tuition | The CEO of USV awards scholarships annually to qualified candidates who are alumni of USV and demonstrate an interest in business leadership. This scholarship program is designed to provide tuition assistance to students who are enrolled one of our Master's degree programs. Eligible recipients will be selected in order of merit with preference given to applicants who have completed an undergraduate degree program at the University of Silicon Valley. Eligible students have the opportunity to receive 25% tuition scholarships. Must be enrolled with full-time status of 6+ credits per term and maintain a GPA of 3.0 or higher. |
| Dragon Scholarship | $500 | This scholarship program is designed to provide tuition assistance to eligible students with demonstrated academic merit. It is available to students who have and continue to maintain a cumulative grade point average (GPA) of 3.0 or higher based on a 4.0 grading scale. All new students must provide a copy of their high school and/or college transcript that validates academic merit achievement. |
| Dragon Plus Scholarship | $1,000 | This scholarship program is designed to provide tuition assistance to eligible students with demonstrated academic merit. It is available to students who have and continue to maintain a cumulative grade point average (GPA) of 3.5 or higher based on a 4.0 grading scale. All new students must provide a copy of their high school and/or college transcript that validates academic merit achievement. This scholarship cannot be combined with the Dragon Scholarship. |
| Educators' Grant | 25% of tuition | The Educators' Grant is for current educators and education administrators who want to continue with graduate coursework. Candidates must be a current primary, secondary, or postsecondary teacher or administrator and enrolled in one of our Master's degree programs. Candidates must have completed an undergraduate degree program at an accredited college or university. Eligible students have the opportunity to receive 25% tuition scholarships. Students must be enrolled with full-time status of 6+ credits per term and maintain a GPA of 3.0 or higher. To qualify, applications must be submitted with proof of educator or administrator status (i.e., letter from school on official letterhead that verifies position/status). |
| Business Partnership Training Grant | 25% of tuition | This Business Partnership Training Grant is for current employees of companies that have a business partnership with USV who want to continue with graduate education. Candidates must be an employee in good standing with a USV business partner and enrolled in one of our Master's degree programs. Candidates must have completed an undergraduate degree program at an accredited college or university. Eligible students have the opportunity to receive 25% tuition scholarships. Students must be enrolled with full-time status of 6+ credits per term and maintain a GPA of 3.0 or higher. To qualify, applications must be submitted with verification status (i.e., letter from company on official letterhead that verifies position/status). |

| Scholarship / Grant | Maximum Amount per Term | Eligibility Criteria |
|---|---|---|
| Esports Scholarship | $2,000 | The University of Silicon Valley offers athletic scholarships to qualified members of the USV Dragons e-Sports collegiate team. Students who make the esports team are allowed to apply for this scholarship. Eligible students must have and continue to maintain a cumulative grade point average (GPA) of 3.0 or higher based on a 4.0 grading scale. Esports scholarship amounts are based on game rank and other performance factors and level of academic achievement. |
| Family Member Grant | $1,000 | Available to students with immediate family members attending the University of Silicon Valley. Immediate family members are defined as parents or stepparents; children or stepchildren; spouses or domestic partners; and siblings by blood, marriage, or adoption. Applicants must provide proof of familial relationship (i.e., marriage license or birth certificate) for each family member attending USV. |
| Golden-Age Scholarship | $500 | Available to students who are 45 years of age or older. Candidates must provide valid, unexpired government issued identification that validates the candidate's age. |
| Native American Scholarship | $500 | Available to students who are of Native American, Native Alaskan, or Native Hawaiian heritage. Applicants must provide proof Certification of Indian Blood (CIB) or other acceptable documentation that validates their Native American heritage. Students who are eligible for tribal funding are not eligible to apply. |
| Realize Your Dream Scholarship | $1,500 | This scholarship program helps to provide tuition assistance to students who are considered "Dreamers" who are not U.S. citizens, permanent residents, or hold valid non-immigrant visas and are eligible for the California Dream Act / Cal Grant. Candidates must demonstrate need based on information provided by a completed Free Application for Federal Student Aid (FAFSA®) or CA Dream Act Application. |
| Salute to Military Service Scholarship | $2,500 | This scholarship program available to students who either they, their spouse, or their parent have or are currently serving in a branch of the US military, including the Air Force, Army, Coast Guard, Marine Corps or Navy. This includes those servicemembers who are retired, honorably discharged veterans, on Active Duty, Reservists, or National Guard members. Active Duty, Active Reservists, and Active National Guard servicemembers must have completed initial military training requirements. Must provide DD-214 for veterans and retirees, Letter from Commander certifying active military status and birth certificate or marriage license for proof of relationship for children or spouses of servicemembers. Student and/or parent who are currently eligible for GI Bill® or Tuition Assistance benefits are not eligible to apply. |
| Transfer Grant | $500 | Available to transfer students who are not first-time freshmen and have prior experience attending any postsecondary institution. Eligible students must transfer at least 12 credits from another institution. Applicants must provide a copy of their college transcript that validates completion of postsecondary courses for which they seek transfer credit. Award of transfer of credit toward program completion is based upon comparability of transfer credit to the requirements of a specific course in a selected program of study, and compliance with stated criteria as outlined in the Transfer of Credit Policy in the Catalog. |
| Valor Scholarship | $3,000 | The Valor Scholarship Program is available to assist qualified students to decrease their overall cost of tuition. This program is open to students who have been accepted, are enrolled, or attending the University of Silicon Valley. Students must have completed the Free Application for Federal Student Aid (FAFSA) prior to submitting a scholarship application. Candidates must apply for and accept all applicable state, agency, private, and/or federal student aid for which they or their parents qualify. Scholarship is based on need. Must demonstrate need as determined by the FAFSA® application process, the financial aid awarding process, and other established guidelines. |
| Women in Business and Computer Science Scholarship | $500 | Available to female students who are enrolled in either our Bachelor of Business Administration or BS in Computer Science degree program. Candidates must provide valid, unexpired government issued identification that validates the candidate's gender as female. |

*Institutional scholarships and grants are available to those who qualify. All applications will be reviewed by the Scholarship Committee for the University. Scholarship and grant awards may vary due to specific conditions and eligibility criteria. Please see the respective application information pages for more details.*

## Additional Informational Resources About the General Financial Aid Process

- www.mappingyourfuture.org – Mapping Your Future – Learn about financial aid and the application process.
- http://www.studentaid.ed.gov - U.S. Department of Education's Student Aid Programs information.
- www.fafsa.gov – Complete the Free Application for Federal Student Aid (FASFA) online, add the University of Silicon Valley's school code (001177), make FAFSA corrections, and electronically sign the FAFSA.
- www.fsaid.ed.gov – To create a new FSA ID and gain access to various federal Student Aid online systems.
- www.studentloans.gov – To obtain more information or apply for Federal Direct Loans.
- www.benefits.va.gov – To obtain more information about Veterans benefits.
- www.csac.ca.gov – To obtain more information about the Cal Grant.
- www.chafee.csac.ca.gov – To obtain more information about the Chafee Grant.
- Federal Student Aid Information Center: 1-800-4-FED-AID, (1-800- 433-3243) or 319-337-5665

# General Policies

## Family Education Rights to Privacy Act (FERPA)

The University of Silicon Valley complies with the Family Education Rights and Privacy Act (FERPA) regulations (also known as the Buckley Amendment (1974)). This act gives eligible students certain rights to their education records.

These rights include:

- The right to inspect and review the student's education records within 45 days of the day the University receives the request.
- The right to request the amendment of the student's education records if the student believes the records are inaccurate.
- The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.
- The right to prevent disclosure of directory information (name, degree received, major and dates of attendance). If you wish to withhold the disclosure of all of the items of directory information (listed below), complete the Directory Information Opt-Out Form and submit it to the Registrar. This form must be received by the Registrar prior to the close of the Add/Drop period in any given term or term to ensure that the above information is not released for the remainder of the term.
- The right to be annually reminded of the student's rights under FERPA.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA.

The name and address of the Office of Education that administers FERPA is as follows:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5901

The Buckley Amendment grants the University the authority to release directory information to any person upon request—unless a student requests, in writing, that directory information be kept private. University directory information will be disclosed at the University's discretion. The University regards the following as directory information:

- Student's name
- Dates of attendance
- Degrees/awards earned
- Major field of study

It is important that parents/eligible students have the opportunity to make informed decisions about the use of the student's directory information. However, there are times when schools must be allowed to implement policies that will permit them to effectively protect their students. As such, the Department of Education has also changed the directory information exception to state that parents may not, by opting out of directory information, prevent a school from requiring a student to wear or present a student ID badge.

A copy of the Family Education Rights and Privacy Act may be requested from the University or viewed at the following website http://www2.ed. gov/policy/gen/guid/fpco/ferpa/index.html.

## COMMUNICATIONS AND PRIVACY GUIDELINES

In accordance with our compliance with the Family Educational Rights and Privacy Act (FERPA), student information and records are held and communicated only via verified, compliant digital systems sanctioned by the university. These include: the student management system, CampusNexus; learning management system, Canvas; the email system; and directly by telephone to the student. No other digital communications systems should be used to store or communicate specific, personally identifiable educational records. This includes in-class technologies used to support group project work, and email addresses outside the @usv.edu domain.

Students are advised not to discuss their personal information including grades, attendance records, ADA accommodations or other similar information via any means other than those mentioned above. Faculty and administrators are reminded of their obligations towards FERPA and must restrict their communications regarding students' personal records to the systems mentioned above. Other communications technologies such as those used in project courses, can and should be used only to support the work of the course, including discussing objectives, schedules, and creative or technical matters pertaining to the project or assignment. For further details, refer to the Student or Faculty Handbooks, or contact the Chief Compliance Officer.

## DRUG-FREE ENVIRONMENT STATEMENT

Consistent with state and federal law, the University of Silicon Valley will maintain a campus free from the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance. The unlawful manufacture, distribution, dispensation, possession or use of controlled substances, illicit drugs and alcohol are prohibited on any University-owned or affiliated property. The following rules will be enforced uniformly with respect to all students:

- No alcoholic beverages will be brought to, or consumed on, University property or during university-sponsored events. Moderate consumption of alcohol will be permitted at designated USV gatherings or under circumstances expressly authorized by the University.
- All students, while on campus, at a university-sponsored event, or while performing University activities, are prohibited from being under the influence of alcohol.
- The sale, possession, use, transfer or purchase of an illegal drug or controlled substance on university property, during a university-sponsored event, or while performing a university activity is strictly
- No prescription drug will be brought to, or consumed on, University property during a university-sponsored event, or while performing a university activity, by any student other than the one for whom it is prescribed. Such drugs should be used only in the manner, combination and quantity prescribed.

The Drug and Alcohol Abuse Prevention Program may be viewed in full on our Disclosures Page at: https://usv.edu/disclosures.

## THE CLERY ACT

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act requires postsecondary institutions to provide timely warnings of crimes that represent a threat to the safety of students or employees and to make public their campus security policies. It also requires that crime data be collected, reported, and disseminated to the campus community and to the Department of Education annually. The Clery Act is intended to provide students and their families with accurate, complete, and timely information about safety on campuses so that they can make informed decisions. Such disclosures are permitted under FERPA. The following website provides more information about these and other provisions about campus safety: http://www.ed.gov /admins/lead/safety/campus.html.

## CRIME AWARENESS AND CAMPUS SECURITY POLICY

The University of Silicon Valley holds that students (prospective and currently enrolled), faculty, staff and non-matriculated students have a right to be aware of the amount of criminal activity that occurs on its campus in accordance with Title II of the Student Right to Know Act of 1990. The University encourages all persons to report criminal activity that occurs on campus to the Campus Services and/or the appropriate law enforcement agency.

The Campus Safety and Security Report may be viewed in full on our Disclosures Page at: https://usv.edu/disclosures.

## CRIME PREVENTION

The University will publicize crime prevention information through the University's official publications. The University urges all members of the campus community to be responsible for their own safety and to assist in the prevention of crime.

## Security Services on Campus

The University of Silicon Valley personnel maintain a close working relationship with the local law enforcement agencies. The University will provide information on criminal activity to the law enforcement agency in whose venue the act occurs. The University will annually request from each law enforcement agency data indicating the criminal activity for each particular site in accordance with the Student Right to Know and Campus Security Act.

## Maintenance of Physical Plant Facilities with Security Consideration

The University is mindful of security needs in the daily operation of campus facilities. The planning and maintenance of campus facilities takes into account the safety and security of persons on campus. The interior and exterior lighting systems on campus are constructed and maintained in such a manner as to provide a well-illuminated facility to help deter criminal activity. Locks and security devices are kept in working order.

Access to facilities is limited to those persons who have authority to use them. All students and employees are required to wear The ID badges. Visitors must sign in at the front desk and wear a "visitor badge." Campus buildings are locked, and security systems activated when not in use, and are unlocked by designated University personnel for accepted use.

## Students with Disabilities / Requesting Accommodations

The University of Silicon Valley provides accommodations for students with disabilities. Students must initiate an Accommodations Request Form each term. It is recommended that students begin the accommodation registration process at least four weeks before the start of each term, although the University will consider the merits of each request at the time the request is received.

Students who request accommodations should contact the Dean of Students, who will assist and advise them in their registration and accommodation request procedures. Upon contacting the Dean of Students, the student will be required to submit reasonable medical documentation supporting the registration and accommodations request, in addition to completing internal forms related to the accommodation request. The University has the discretion to determine what type of professional documentation is necessary.

Once appropriate documentation has been received, the Dean of Students will determine the appropriate, reasonable accommodations or aids. The Dean of Students will notify affected faculty members and housing partners of the accommodation—and provide assistance and guidance to ensure appropriate implementation. The student will receive a copy of this notification. All records related to disability and accommodation registration are confidential and private.

## Statement on Nondiscrimination

The University of Silicon Valley is an equal opportunity institution of higher education and is firmly committed to nondiscrimination in its delivery of educational services. These practices include, but are not limited to, admission to, and participation in the benefits and services of, educational programs or related activities sponsored by the University. In compliance with all applicable federal and state laws, decisions will be made irrespective of the individual's sex, race, color, religion, religious creed, age (over 18 years), mental or physical disability, medical condition as defined by law, national origin, marital status, veteran status, sexual orientation, gender, or any other basis prohibited by federal or state law or local ordinance. This policy is in accordance with Title VI of the Civil Rights Act of 1964, as amended; Executive Order 11246, as amended; Title IX of the Educational Amendments of 1972; Section 504 of the Rehabilitation Act of 1975; and any applicable state and local laws. When necessary, the University will reasonably accommodate individuals with disabilities if the individuals are otherwise qualified to meet the fundamental requirements of the University's educational program and/or able to safely perform all essential functions, without undue hardship to the University.

## Harassment Policy

The University of Silicon Valley strives to cultivate an educational, employment and business environment free of unwelcome harassment of any kind. It is the policy and commitment of the University not to discriminate or harass on the basis of sex, race, color, religion, religious creed, age (over 18 years), mental or physical disability, medical condition as defined by law, national origin, marital status, veteran status, sexual orientation, gender, or any other basis prohibited by federal or state law or local ordinance in its educational programs, activities, admissions, or employment policies. The University of Silicon Valley actively complies with the requirements of Federal Executive Orders 11246 and 11375 as amended; the Civil Rights Act of 1973 as amended; Title IX of the Educational Amendments of 1972; Section 503 and 504 of the Rehabilitation Act of 1973; Section 402, Vietnam Era Veterans Readjustment Assistance Act of 1974, the Age Discrimination Act of 1975; the Americans with Disabilities Act of 1990 (as amended by the ADA amendments Act of 2008); and pertinent law and regulations of the State of California, as well as other applicable state and federal statutes. For a more detailed explanation of the policy, reporting options and investigative procedures please refer to the Student Handbook.

## TITLE IX AND SEXUAL MISCONDUCT POLICY

Consistent with the standards set forth by Title IX of the Educational amendments of 1972, and the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (20 USC §1092 (f)) and the recent Violence Against Women Act, which dictates the standards by which colleges must educate, investigate, and report acts of sexual misconduct, the University of Silicon Valley's Sexual Harassment Education Committee offers educational programs throughout the duration of the academic year. These programs promote awareness of sexual assault, risk reduction strategies, and safe bystander intervention strategies. The Department of Student Life also provides personal counseling and referrals to outside agencies for victims of sexual assault.

Any instance of sexual assault should be reported to the Dean of Students, the Title IX Coordinator or Residence Life Staff as soon as possible after the incident occurs. The victim will be provided with the Reporting Options Handout and informed of the right to notify law enforcement agencies. In the event that the victim chooses to notify these authorities, the student will receive support and guidance in doing so by university and community personnel. The University will also provide interim protective measures, including but not limited to changing academic or living assignments and enacting no-contact orders when reasonably able. Interim protective measures will be in place whether the victim decides to initiate an investigation or not.

Designated Title IX Coordinators are as outlined below:

| Name | Title IX Position | Room # | Phone Number |
|---|---|---|---|
| Carolus Brown, Dean of Students | Title IX Student Coordinator | 108 | (408) 498-5137 |
| Leslie Anderson, Director of Human Resources | Title IX Employee Coordinator | 188 | (408) 498-5148 |
| Dr. Reba Smith, Chief Compliance Officer | Confidential Reporting Agent | 191 | (408) 498-5125 |

Alleged sexual assault will be investigated and adjudicated through the process outlined in the Harassment Policy within this catalog. In cases of sexual assault, both the complainant and the respondent shall be informed of the judicial outcomes of any campus disciplinary hearings pertaining to sexual assault.

## STUDENT GRIEVANCE AND COMPLAINT POLICY

The purpose of the Student Grievance Policy is to provide an opportunity for students to seek redress for an action by a member of the faculty, administration, or staff. Unless the grievance alleges discrimination, the Student Grievance Policy does not apply to decisions rendered by individuals, the Campus Judicial Committee, or Administrative Hearing Officers regarding violations to the Code of Conduct. Furthermore, this is not the appropriate procedure to follow when appealing an academic decision, such as a final grade. Appeals of academic decisions are explained elsewhere in the University Catalog.

The University of Silicon Valley is committed to maintaining a stimulating environment for work, study and recreation for its students, faculty, administration, and staff. The University will not tolerate any behavior by students, staff or faculty members that constitutes sexual or other unlawful harassment, discrimination, or other inappropriate action.

### STEPS TO REDRESS

- **Step One:** The University of Silicon Valley recognizes that problems, complaints, or grievances may arise in the daily relationships between faculty, staff, and students. Individuals are encouraged to first attempt to resolve their differences directly with one another. Informal discussion between persons directly involved in a grievance is an essential first step in attempting to informally resolve the dispute—and is encouraged.
- **Step Two:** If a satisfactory solution is not reached at Step One or if the student is legitimately apprehensive about pursuing Step One, the grievance should be taken to the individual's supervisor (i.e., Department Director, head of department, Dean). Grievances can be submitted in oral or written form. The supervisor is responsible for tracking the reported grievance and providing the student and impacted employee with written feedback regarding the resolution within five (5) business days.
- **Step Three:** If a satisfactory solution is not reached at Step Two, or if the student is legitimately apprehensive about pursuing Step Two, the grievance should be taken to the Provost and CAO or the Dean of Students. The student must explicitly state that the communication constitutes initiation of a formal grievance. Formal grievances can be submitted in oral or written form. The Provost and CAO or the Dean of Students is responsible for documenting the grievance by using the Student Grievance Documentation Form. The Provost and CAO or Dean of Students will inform the student of the timeline for resolution and to whom the report will be sent. If the Provost and CAO or the Dean of Students is the individual against whom the student is initiating a grievance, the grievance should be presented directly to Human Resources.

Within three (3) business days of receipt of the report, and in order to provide appropriate support for the resolution process, the Provost and CAO or the Dean of Students will provide simultaneous notification to Human Resources *and* the executive team member who has oversight of the reported individual's department.

The corresponding executive team member will then work with the department head, faculty/staff/administrator, and student, to reach an agreeable resolution. Written feedback regarding the resolution will be provided to the student within ten (10) business days of receipt of the report from the Provost and CAO or Dean of Students. The Student Grievance Documentation will only be kept in the employee file if repercussive action is taken. The Student Grievance Documentation Form will always be maintained by the Dean of Students.

- **Step Four:** If the student deems the resolution to be unsatisfactory, the student may submit a written request to the Dean of Students in order to petition the convening of the Campus Judicial Committee. The request to convene the Campus Judicial Committee must be submitted within three (3) business days of the date of the written resolution provided in Step Three. The petition shall include information regarding the previous attempts at resolution and an indication of why the results are not satisfactory.

  Upon receipt of the petition to convene the Campus Judicial Committee, the individual against whom the student has initiated a grievance and that individual's supervisor shall be informed, in writing, of the student's request to pursue Step Four remediation.

  The Campus Judicial committee shall meet to review the case within five (5) business days after the receipt of the petition to convene the committee. The Campus Judicial Committee shall be convened based on the guidelines set forth in the Conduct Proceedings and Judicial Committee section of the Student Handbook.

  Three members of the Campus Judicial Committee shall satisfy themselves first that the committee has a general understanding of the basic facts of the dispute. The committee shall follow the procedures outlined below. All other rights applicable to the student are available equally to the employee. Any written grievance filed with the Campus Judicial Committee or a designee must be given simultaneously to the employee.

  **DECISION OF THE CAMPUS JUDICIAL COMMITTEE**

  1. The Campus Judicial Committee shall transmit its written recommendation to the Provost and CAO within three (3) business days after the hearing.
  2. The recommendation shall include:
     a. A statement of the grievance
     b. The dates Steps One, Two and Three were satisfied
     c. Summary of the information presented at the hearing
     d. Findings and rationale for the recommendation
  3. The committee's recommendation may include, but is not limited to, a verbal or written warning, probation, suspension, or termination.
  4. After reviewing the recommendation, the Provost and CAO shall decide as follows:
     a. Affirm and seek implementation of the committee's recommendation, or
     b. Refer the case with additional information back to the committee with a new recommendation
  5. If the case is referred back to the committee, the committee, after reviewing the recommendation of the Provost and CAO, shall revisit and if in agreement revise its recommendation to the Provost and CAO.
  6. The Provost and CAO shall implement, after affirming or modifying, the final recommendation of the committee. Written notification of the conclusion of the grievance process must be sent to the student, by the Provost and CAO, within five (5) business days after the receipt of the Judicial Committee's recommendations.
  7. The decision of the Provost and CAO is final and binding on the student and the university and shall be communicated in writing to all appropriate persons.

**STUDENTS REQUESTING TOTAL CONFIDENTIALITY**

If the student requests not to be identified, but wishes to make a report, the student may report a grievance to the Provost and CAO or the Dean of Students. The Provost and CAO or Dean of Students will intake and document the report; however, it will be addressed outside of the grievance policy. The report will be sent, without the student's identifying information, to the letusknow@usv.edu email address to allow the University to address the grievance in a general, student-nonspecific manner.

If, after completing the steps in the grievance policy outlined above, the student is still unsatisfied with the result a complaint may be filed with the following agencies:

- 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 website: www.bppe.ca.gov.
- The Department of Consumer Affairs by writing the Consumer Information Division, 1635 North Market Blvd., Suite N 112, Sacramento, CA 95834 or by calling 916-574-7720.
- The State of California, Department of Justice, Office of the Attorney General at https://oag.ca.gov/contact.

The Office of Institutional Research and Quality Assurance and the Compliance Department provide students with alternate methods by which they can file a concern or comment with the University, outside of the Student Grievance Policy. Alternate methods include the following:

- Emailing the letusknow@usv.edu email address with information regarding a comment, concern, or suggestion.
- Entering a comment or suggestion into the Suggestions & Concerns Box, located above the sink in the Dragon's Den. Comments entered into the Suggestions & Concerns Box are checked on a weekly basis. Comments can be entered anonymously.
- Completing annual student surveys or course evaluations.

### Copyright Infringement

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement. Penalties for copyright infringement include civil and criminal penalties, and may result in disciplinary action, up to and including dismissal from the University.

Civil and criminal penalties for copyright infringement may include the following:

Persons found liable for civil copyright infringement may be ordered to pay either actual damages or "statutory" damages affixed at not less than $750 and not more than $30,000 per work infringed. For "willful" infringement, a court may award up to $150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504, 505. Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $250,000 per offense.

For more information, please see the website of the U.S. Copyright Office at www.copyright.gov. For more information on copyright and legally acceptable alternatives, please contact the University's Information Technology Department.

### Voter Registration

The University of Silicon Valley encourages all eligible students to exercise their right to vote. Links to register to vote will be made available on the University website and students are notified annually via email each Fall. For more information on participating in elections, go to: http://www.usa.gov/Voting. For information on voting in California, go to: http://www.sos.ca.gov/elections/voter-registration/.

## Academic Policies

### Academic Freedom

Institutions of higher education are founded for the common good, and not to further the interests of merely the individual teacher or the institution itself. The common good depends upon the free search for truth and its free exposition.

Academic freedom is essential for these purposes and applies to both teaching and research. Freedom in research is fundamental to the advancement of truth. Academic freedom in teaching is fundamental in protecting of the rights of a teacher, as well as the student's freedom in learning. It carries with it both rights and responsibilities.

The University of Silicon Valley endorses the 1940 Statement of Principles and 1940 and 1970 interpretive comments of the American Association of University Professors on academic freedom, which includes in substance, but is not limited to, the following:

**ACADEMIC FREEDOM**

- The teacher is entitled to full freedom in research and in publication of the results, subject to the adequate performance of his/her other academic duties.
- The teacher is entitled to freedom in the classroom in discussing his/her subject, but he or she should be careful not to introduce into his/her teaching controversial matter that bears no relation to the subject.
- The college or university teacher is a citizen, a member of a learned profession and a member of the educational community. When an individual teacher speaks or writes as a citizen, that individual should be free from institutional censorship or discipline—but the teacher's position in the community imposes special obligations. As a person of learning and an educator, a teacher should remember that the public may judge the academic profession by its members' written or verbal statements. Hence, a teacher should at all times be accurate, should exercise appropriate restraint and should show respect for the opinions of others.

## ACADEMIC LEADERSHIP

The University of Silicon Valley prides itself on providing our students with highly qualified faculty. Our faculty's academic credentials and theoretical knowledge are often complemented by years of industry experience—equipping them with a firm practical understanding of the tools and techniques that they teach. Our faculty's resources and teaching methodologies are directly aligned with supporting student success. The institution's curriculum is guided by industry advisory boards that seat current professionals in notable companies.

Working closely with faculty in their target industries, students learn from supportive and caring professionals. Our faculty challenge and coach students to put forth their best effort. In turn, our students bring focus, hard work and dedication. This is the University of Silicon Valley.

Faculty information, including biographies, backgrounds and links to each educator's projects and portfolios are located on our website at: https://usv.edu/academics/faculty/.

## INSTRUCTIONAL DELIVERY METHODS

**ON-CAMPUS (RESIDENTIAL) –** Residential courses meet on campus in a traditional classroom and/or laboratory environment.

**ONLINE (DISTANCE EDUCATION) –** Online courses are offered through an online learning management system (LMS). Students have access to their online courses 24 hours a day; 7 days a week. Online faculty are responsive: the institution's best practice is to respond within 48 business hours, and students receive feedback on submissions in no more than 5 business days as certain project-based assignments and examinations may require in-depth feedback.

NOTE: On-campus students must have a minimum cumulative grade point average (CGPA) of 2.0 to register for an online course. Incoming new students (i.e., freshmen, transfer students) will be assessed based on grades earned at the last attended academic institution.

**HYBRID (ON-CAMPUS AND ONLINE) –** Hybrid courses are offered as a combination of traditional classroom and/or laboratory environment learning and via the use of an online learning management system (LMS). Typically, instructional time consists of 50% of on campus meeting while the other 50% of instruction time is via LMS. Percentages may vary depending on class, student and/or instruction needs.

## MAXIMUM ACADEMIC LOAD

The maximum load for undergraduate degree students is 17 semester credit hours, including audited courses. An undergraduate student who under special circumstances wishes to take more than 17 credit hours must obtain written permission by the Provost and CAO and register for classes using the Add/Drop process.

## COURSE REQUIREMENT SUBSTITUTION

Course substitution requires approval of the Department Director or Chair and Provost and CAO. An Academic Advisor initiates a course substitution request for a student. A student may substitute a maximum of 16 credit hours of coursework. All prerequisites must be met.

## ADDITIONAL DEGREES

A student may receive more than one degree from the University of Silicon Valley. To enroll for an additional degree, current students must submit an approved Change of Program Form with the required signatures to the Registrar's Office. A student must complete all graduation requirements for each degree received.

## CREDIT HOUR DEFINITION

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency reasonably approximating not less than:

- One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one term, or the equivalent amount of work over a different amount of time; or

- At least an equivalent amount of work as required in paragraph one (1) of this definition for other academic activities as established by the University, including laboratory work, internships, practica, studio work and other academic work leading to the award of credit hours

One (1) hour of classroom or direct faculty instruction is defined by one (1) hour of class meeting time comprised of 50 minutes of lecture plus 10 minutes of "break time".

The University of Silicon Valley operates on a 3 trimester per calendar year basis, consisting of 15-week trimesters which are further divided into modules of 7-8 weeks for some programs. Courses may be offered in different scheduling configurations and are awarded equivalent semester credit hours. The course learning materials, outcomes, and standards are equivalent across all schedules and teaching modalities.

Instructional hours can be defined as "lecture" or "lab" hours. Lecture hours are understood as direct instruction led by the faculty member, not necessarily in the form of a verbal lecture (i.e. videos, demonstrations, or other original material presented). Lab hours are defined as scheduled work occurring in class including project work, group work, exercises, presentations, practica, etc. that is supervised by, but not necessarily led by, a faculty member. Courses can be designed to include exclusively lecture hours, or a mixture of lab and lecture hours at the proper ratio.

USV awards one credit hour based on a 15-week trimester as follows:

- **Lecture Hours**: The reasonable equivalent of one hour of faculty-led instruction, and an additional two hours of work undertaken by the student outside of class per week, for 15 weeks. The hour of faculty-led instruction is defined as a 50-minute period to account for reasonable breaks.
- **Lab Hours**: The reasonable equivalent of two hours of in-class work supervised by a faculty member, and an additional two hours of work undertaken by the student outside of class per week, for 15 weeks. This includes project work, exercises, group work, practica etc. The two hours are defined as two 50-minute periods.

For courses not scheduled over a 15-week period, the equivalent time is required. (i.e., 1.8 hours of instruction plus 3.75 hours of student work per week in an 8-week module.)

*Example*: A 3-credit course can be composed of 45 lecture hours, or 15 lecture hours and 60 lab hours.

### INTERNSHIP/PRACTICUM CREDIT HOUR

Internship/practicum hours are determined by the supervising faculty and the work supervisor at the cooperating site if applicable, both of whom must judge and certify different aspects of the student's work. This in turn represents between 45 and 60 hours of work per term. Three (3) credit hours represents between 135 and 180 total hours of academic work per term

### METHODS AND MODALITIES

Courses are designed by faculty and the instructional design team to comply with the above definitions. Faculty design courses to include sufficient learning activities based on an estimation of time required to meet the associated course learning outcomes.

- **On-Campus Courses**: The credit hour is based on the time a student spends in the classroom, lab, practicum etc. The physical contact hour (a 50-minute period) is augmented with two hours of out-of-classroom work, or time on tasks needed to complete the course. Faculty and instructional design teams estimate how long it will take the average student to complete all of the assignments for each week, including reading assignments, research, supplemental videos, quizzes, discussions, project work, etc.
- **Online Courses**: The physical classroom contact time is replaced by virtual activities prepared and/or led by the instructor, e.g., announcements; live or recorded/pre-recorded video sessions; assignments; and technology-enabled lessons and/or activities. Faculty and instructional design teams estimate how long it will take the average student to complete all of the assignments for that week, including reading assignments, supplemental videos, quizzes. discussions, group work, etc. Online courses may be defined as **synchronous** or **asynchronous**.

- **Online-Synchronous Courses**: Real-time, face-to-face meetings are scheduled throughout the trimester via audio or video conferencing. Students are expected to participate in these meetings in a virtual environment, and attendance is monitored. In general, the contact time with the student in an online, synchronous course will be similar to the amount of physical contact time that would be expected in an equivalent on-campus course.
- **Online-Asynchronous Courses**: No real-time meetings are required. All learning materials are prepared and available to the student via the Learning Management System (LMS). These materials must meet the entire credit hour requirement, including the instructor-led and additional student work components. Student participation is monitored via online interactions, assignment submissions, quizzes or similar measurable activity.

**Hybrid Courses**: Some combination of the methods described above, which results in the required time dedicated to tasks as required by the credit hour policy.

## Attendance Policies

### On-Campus (Residential) Attendance Policy

The students are expected to attend every class session scheduled for each course in which they enroll. Students who miss a class must arrange with the instructor to take any examination or complete any make-up work at an alternate time. The following are the attendance policies that apply to all students:

- A student who does not attend an individual class for 14 consecutive calendar days may be withdrawn from the class by the University. A withdrawal ("W") grade will be given if withdrawal occurs on or prior to the last day to withdraw deadline. A withdrawal after the last day to withdraw will be assigned a withdrawal fail ("WF") grade.
- A student who is absent from all classes for 14 consecutive calendar days may be withdrawn from the University and subject to the refund policies. For each registered course, a withdrawal ("W") grade will be given if withdrawal occurs on or prior to the last day to withdraw deadline. A withdrawal after the last day to withdraw will be assigned a withdrawal fail ("WF") grade for each registered course.

### Online / Hybrid Attendance Policy

The provides two distance learning delivery methods with the utilization of a learning management system (LMS): "online" and "hybrid." Online courses are held Monday through Sunday. The students registered for online courses must participate in each course in which they enroll. At a minimum, a student must submit a gradable item each week. A gradable item is defined as a threaded discussion, assignment, test, or quiz. The students registered for hybrid courses must attend, at the least, a once-a-week in class lecture while submitting assignments via the LMS.

The following are the attendance policies that apply to all students enrolled in any distance learning delivery method:

- A student who does not participate in an individual class for 14 consecutive calendar days (two (2) weeks) may be withdrawn from the class by the University. A withdrawal ("W") grade will be given if withdrawal occurs on or prior to the last day to withdraw deadline. A withdrawal after the last day to withdraw will be assigned a withdrawal fail ("WF") grade.
- A student who is absent from all classes for 14 consecutive calendar days (two (2) weeks) may be withdrawn from the University and subject to the refund policies described below. For each registered course, a withdrawal ("W") grade will be given if withdrawal occurs on or prior to the last day to withdraw deadline. A withdrawal after the last day to withdraw will be assigned a withdrawal fail ("WF") grade for each registered course.

### Holidays and Scheduled Breaks

Holidays and scheduled breaks are not included in the 14 consecutive calendar days. If the 14th consecutive day falls on a day that class is not in session, the following regularly scheduled class day will be used. For a listing of holidays or scheduled breaks, refer to the academic calendar available in this catalog or on the University website at https://usv.edu/academics/academic-calendar/. Students may appeal the attendance policy to extenuating circumstances as described in the Attendance Appeal Policy.

## Attendance Appeal Policy and Reinstatement

Students seeking to be readmitted to class after having been withdrawn for excessive absences must complete an Appeal Form. The form must be approved by the faculty, indicating successful academic progress, and acknowledged by an Academic Advisor. The form can be obtained from the Registrar's Office. Students will have three (3) business days from the date of the withdrawal to submit form. If the form is not submitted, the student will not be reinstated and allowed to continue.

Students may only file up to two (2) appeals per course. Second appeals must be reviewed by the student's Department Director and Academic Advisor. Students may continue to attend the course(s) while awaiting the completion of the Request to be Reinstated Form.

## Leave of Absence (LOA) Policy

In limited circumstances, the University allows a student to take an approved leave of absence (LOA). An approved LOA is a temporary interruption in a student's education and is not considered a withdrawal from the university. An unapproved LOA will be treated as a withdrawal from the university. A leave of absence must meet the following requirements to be an approved LOA:

- All requests for leave must be submitted in advance and in writing by the student. The LOA request must include the reason for the leave and be signed and dated by the student. The request should be submitted to the Registrar's Office for approval. In rare circumstances, the student may not be able to apply for the LOA in advance (i.e., car accident, incapacitation); however, with proper documentation the LOA may be granted by the University.
- The leave is for a specified period of time with a scheduled return date not to exceed 180 days in any 12- month period. All leaves in a 12-month period are combined when calculating adherence to the 180-day rule.
- Approval may be denied if the reason for the leave is not justification for interrupting the student's education, or if there is not a reasonable expectation of return.

If a student fails to return from the LOA on the specified return date, the student will be considered withdrawn from university, which may have an impact on the student's loan repayment terms, including the expiration of the student's grace period. Students on leave, whether approved or unapproved, are not eligible to live in student housing.

## Standard Period of Non-Enrollment (SPN) Policy

Students intending to request one term (trimester) off from attending the University of Silicon Valley must submit a written request for a Standard Period of Non-Enrollment (SPN) to the Registrar's Office. The SPN request form is available on the student portal or in the Registrar's Office. SPN's can be requested for one term (trimester) only during any 12-month period. A Standard Period of Non-Enrollment (SPN) must be requested prior to the end of the term preceding the term the student is requesting to be away from the University. Requests submitted after the end of term will not be considered. The request must be approved by the Registrar, Provost and CAO, Business Office, and the Financial Aid Director before a student's status is changed.

Students approved for an SPN are expected to return at the beginning of the term following the SPN. While on an approved SPN, students will not be considered to have withdrawn from the University, no additional charges will be generated, and Financial Aid funds will not be disbursed. Students must register for the intended return term during the registration period as outlined in the Academic Calendar and must meet with a Financial Aid Advisor before they will be allowed to resume attending classes. Students who fail to return to the University by the expected date will be considered to have withdrawn from school and will therefore be responsible for any balance due. If withdrawn, the official withdrawal date will be retroactive to the student's last day of attendance and the date of determination will be the day the student was expected to have returned to the University.

An SPN extends a student's expected graduation date. Students on SPN may not be able to maintain their course sequencing. Students on SPN are not eligible to live in student housing.

## Internship Program

An internship is expected to add to the educational experience of the student. Therefore, to register for the course students are required to obtain authorization from their Academic Advisor, Department Director, and the designated internship coordinator. The Department Director reviews the internship to determine whether various factors ensure that the experience fits within the academic needs of the student. The Academic Advisor reviews the internship request to determine applicability to degree plan. The responsibility of the internship coordinator is to provide input regarding the viability of the internship site.

## Change of Program

A student may change programs by completing a Change of Program Form available from the Registrar's Office and obtaining the required signatures. All course and admissions requirements for the new program must be satisfied to qualify for the degree sought. A change of program does not change the student's academic standing (satisfactory academic progress, or SAP). The transaction is not official until the Change of Program Form is processed by the Registrar's Office and a new degree plan is assigned. Students are limited to a maximum of three (3) changes of program.

## Grading System and Grade Points

The University uses the following four-point grading system:

| Grade Scale | | | | | |
|---|---|---|---|---|---|
| **Letter** | **Grade Point Value** | **Cutoff Percentage** | **Description** | **Calculated in GPA?** | **Credit Earned?** |
| **A+** | 4.0 | 97.0 | Letter Grade | Yes | Yes |
| **A** | 4.0 | 94.0 | Letter grade | Yes | Yes |
| **A-** | 3.7 | 90.0 | Letter grade | Yes | Yes |
| **B+** | 3.3 | 87.0 | Letter grade | Yes | Yes |
| **B** | 3.0 | 84.0 | Letter grade | Yes | Yes |
| **B-** | 2.7 | 80.0 | Letter grade | Yes | Yes |
| **C+** | 2.3 | 77.0 | Letter grade | Yes | Yes |
| **C** | 2.0 | 74.0 | Letter grade | Yes | Yes |
| **C-** | 1.7 | 70.0 | Letter grade | Yes | Yes |
| **D+** | 1.3 | 67.0 | Letter grade | Yes | Yes |
| **D** | 1.0 | 64.0 | Letter grade | Yes | Yes |
| **D-** | 0.7 | 60.0 | Letter grade | Yes | Yes |
| **F** | 0.0 | < 60.0 | Letter grade | Yes | No |
| **Other Grades** | | | | | |
| **Letter(s)** | **Grade Point Value** | **Cutoff Percentage** | **Description** | **Calculated in GPA?** | **Credit Earned?** |
| **AF** | N/A | N/A | Administrative Fail. Administration or Faculty unable to issue a grade. | No | No |
| **AU** | N/A | N/A | Audit | No | No |
| **CR** | N/A | N/A | Credit earned, C or better | No | Yes |
| **I** | N/A | N/A | Incomplete. This is a temporary grade. | No | No |
| **NP** | N/A | < 74.0 | No pass. Unsatisfactory, "C-"or below. | No | No |
| **P** | N/A | 74 | Pass. "C" or better | No | Yes |
| **T** | N/A | N/A | Transfer credit awarded | No | Yes |
| **W** | N/A | N/A | Withdrawal | No | No |
| **WF** | 0 | 0 | Withdrawal Fail | Yes | No |

## Class Standing

The class standing of an undergraduate student is determined as follows:

- **Freshman** 0–30 semester credits successfully completed
- **Sophomore** 31–60 semester credits successfully completed
- **Junior** 61–90 semester credits successfully completed
- **Senior** More than 90 semester credits successfully complete

## Academic Honesty

Academic honesty is a fundamental principle of the educational process. It is essential to maintaining the value of the academic degrees that students receive and the credibility of the University. Academic honesty is vital to the proper evaluation of the level of knowledge and understanding a student acquires in a course. This evaluation may be based on quizzes, exams, reports, homework, projects, discussions, and any other assignments used by faculty to ascertain the student's command of the course material. Any act that invalidates the process of evaluation is an act of academic dishonesty. USV forbids all forms of academic dishonesty, including cheating and plagiarism.

The integrity of the University of Silicon Valley's academic programs relies on the honesty of students, faculty, and administration, especially as related to the grading of submitted student work. This policy describes the expected contributions of faculty towards the pursuit of academic integrity and honesty at USV.

A. Pursuant to the terms of the USV Student Code of Conduct, administration and faculty must employ reasonable measures to ensure that the student to whom academic credit is awarded is the person who completes the assessed work.

B. Reasonable, industry-standard measures must be taken to verify and authenticate the identity of all students, especially distance-education students.

C. Faculty must address breaches of the Academic Honesty Policy according to the procedure set forth below.

D. Other staff must relay concerns about breaches of academic honesty to an academic manager (Dean of Students, Department Director, or Provost) for review.

Basic measures required in all courses include:

A. Assignments must be submitted in a manner that allows the instructor to confirm the submitter's identity (i.e., handed in, submitted online via the student's password-protected Learning Management System (LMS) account, attached to an email from the student's USV email account, etc.)

B. Explanations of academic honesty and resources regarding plagiarism, referencing, and citation to be made available to students via the LMS.

C. Observation of reasonable exam proctoring protocols for in-class tests.

D. Grades and/or feedback released to all students at the same time.

While all courses may benefit from these additional measures to ensure academic honesty, Online courses, with limited direct instructor/student interaction, should implement measures such as the following to ensure the student being evaluated and graded is the one submitting the work.

A. Weighted quizzes or exams are:

    a. Secured within the password-protected LMS;

    b. Available for a limited time, and not available after grades are released;

    c. Contain measures for randomization of answers in a multiple-choice context (i.e., each student sees answers listed in a different order such that A) might be correct for on student and C) correct for another);

B. At least one assignment contains a progressive submission (i.e., a draft, abstract, outline, annotated bibliography, design, prototype or similar plan is submitted for approval prior to the final assignment);

C. A sample of original writing, artwork, or other creative activity is obtained in an early, low-stakes, weighted assignment prior to week 4 of the trimester. Subsequent submitted work can be compared to this initial piece for initial evaluation of authenticity.

D. Where appropriate, written assignments can be checked against common plagiarism detection tools.

Examples of academic dishonesty include, but are not limited to:

- Copying from another student's exam, enabling unauthorized access to test or assignment answers, submitting work from a previous class, use of false identity online, and accessing unauthorized materials during a closed-book exam.
- Plagiarism: representing another's academic or creative work as your own, and incorporating another's ideas, words or phrasing without giving credit to the author.
- Alteration of grades or official records.
- Changing already-graded documents.
- Use of purchased or acquired papers.
- Submission of homework, take-home exams, reports, or projects mostly prepared by another student.
- Facilitation or assistance in any act of academic dishonesty.

Students caught engaging in academic dishonesty may be subjected to failure for the assignment, failure for the class and/or additional disciplinary procedures as outlined in the Student Handbook.

## Academic Honors

**The President's Honor Roll –** The President's Honor Roll recognizes undergraduate students who have completed twelve (12) or more credits of coursework during the term with a 3.80 grade point average or better.

**The Dean's Honor Roll –** The Dean's Honor Roll recognizes undergraduate students who have completed twelve (12) or more credits of coursework in a term with a 3.50-3.79 grade point average.

## Incomplete

An Incomplete ("I") grade may be assigned if the student has essentially completed the course except for a missing examination, project, or paper due to circumstances beyond the student's control. An Incomplete is not considered a passing grade and will not satisfy the prerequisite requirement of any subsequent course.

It is the responsibility of the student to bring pertinent information to the instructor regarding why all work cannot be completed during the current term, and to reach agreement on the means by which the remaining course requirements will be satisfied. If the instructor agrees, the instructor will submit a Petition for Incomplete Grade Form with an "I" grade for that course for that term.

It is a student's responsibility to follow up with the instructor to remove an Incomplete. The instructor will assign a final grade when the work agreed upon has been completed and evaluated. The instructor will then submit a Change of Grade form to the Registrar for processing.

Incomplete grade changes must be cleared within 30 calendar days from the last day of a term. Failure to meet deadlines will result in the incomplete grade being changed to the default grade for work completed prior to the term's end. Exceptions may be considered under mitigating circumstances if supporting documentation is provided.

## Pass / No Pass

Any Preparatory or internship coursework completed may be evaluated on a pass ("P") or no pass ("NP") basis. Preparatory coursework does not apply towards requirements for graduation. For the purpose of determining whether a student has successfully met satisfactory academic progress (SAP) standards, pass/no pass grades do not count towards the cumulative grade point average (CGPA), a qualitative standard; however, they will be factored into the quantitative standard in determining pace of completion.

## Audit

A student may choose to audit a nonrequired course. An auditor is allowed to participate in class discussions and take exams but does not receive unit credit or a grade. The grade report and official transcript for the course will indicate "AU" rather than a letter grade. An audit grade may not be changed to a letter grade. An audited course does not satisfy a prerequisite requirement, cannot be subsequently challenged, and may not be used to waive a graduation requirement or for determining financial aid awards.

## Withdrawals

Students who withdraw after the Add/Drop period and within the last day to withdraw will receive a withdrawal ("W") grade. Students who withdraw from a course after the withdrawal deadline will receive a withdrawal fail ("WF") grade. A student must complete an Add/Drop Form and submit to the Registrar's Office for processing.

In documented mitigating circumstances (e.g., accident, illness, death of an immediate family), a student who withdraws after the withdrawal deadline may receive a withdrawal ("W") grade. Supporting documentation or verification of circumstances is required. This documentation must be provided to the Registrar's Office for processing and recordkeeping. The request form and documentation must be submitted no later than the last day of the term. The form and request must be approved by both the Registrar and the Provost and CAO.

## Grade Appeal

If a student believes an incorrect grade for a course has been issued, the matter should first be discussed with the instructor, who has the ability to modify an incorrect grade. If a student is not satisfied with the instructor's explanation and action, the student may initiate a grade appeal by following the process outlined below.

1. Submit a Grade Appeal form to the Provost and CAO, presenting a complete description and explanation of the reason(s) for the appeal along with any supporting documents and evidence. The electronic form can be requested by emailing registrarsoffice@usv.edu.

2. All Grade Appeal forms must be submitted within 30 calendar days of the grade being issued. Appeals submitted after 30 calendar days of the grade being issued will not be considered.
3. Once the Grade Appeal form and supporting documentation are received, the Provost and CAO will form a Grade Appeal Committee to review the case and make a recommendation to the Provost and CAO. The committee will be composed of two to three faculty members and one administrative employee. The committee will not include the original instructor.
4. Within ten business days of the Grade Appeal form being received, the student will be notified of the date on which the committee will meet to review and resolve the matter.
5. Within five business days of deciding the outcome, the Provost and CAO will notify both the student and the instructor, in writing, of the decision and reasoning.
6. If the student is not satisfied with the result of the Grade Appeal Committee's decision, the student may appeal directly to the Provost and CAO who will review the Grade Appeal Committee's deliberation and issue a final decision. The Provost and CAO's decision is final and cannot be appealed.

In the event of the student's grade is changed, the Provost and CAO will submit a formal grade change request to the Registrar's Office for processing, thus completing the grade appeal process. Note that a student's grades may increase or decrease through the grade appeal process.

## Repeated Courses

A student may repeat a course that he or she previously passed with a low grade or failed. Only the highest grade will be used to calculate the cumulative grade point average. A student may not repeat a course more than twice without written approval from the Provost and CAO.

## Grade Checkpoints

Grade checkpoints are conducted three times a term, during the fourth, eighth, and twelfth weeks in order to monitor student academic progress. Grade checkpoints are a resource for students to ensure that they are aware of their progress and have the resources necessary to promote academic success. Academic Advisors meet with students that are not maintaining a C average to discuss strategies for improving academic success, campus and community resources, current and future schedules, and create a success plan. Student academic performance will continue to be monitored at all successive grade checkpoints throughout the term.

## Independent Study

Independent study is a form of study that requires a high level of self-directed learning. It is designed to provide students the opportunity to work independently in a special project with periodic instructor guidance and feedback. Independent study is best suited for a special research or a creative project in a specific area of study. The study must be on an approved topic or creative project. The course culminates with a final project as described in the proposal form.

Students can take Independent Study (IND) for 1 – 3 credits but can only take a single Independent Study (IND) course in a given term. For every unit of credit, students must spend approximately 45 hours through the trimester working on their project. For example, in a 15-week term:

- 1 Credit = 45 Hours
- 2 Credits = 90 Hours
- 3 Credits = 135 Hours

Their overall contact time with the professor is expected to be approximately 3 Hours per Credit Unit.

Independent study should not be used in lieu of a class that needs a substantial amount of teaching. The student should already possess enough knowledge in the area to function independently as a self-learner. It should also not be used to substitute for a class a student has failed. IND may be used as a substitute for another class where the project aligns with the CLOs of the class and the student takes the IND for the same number of units.

Procedures to be followed are below:

1. Students are expected to find and conduct an initial meeting with the supervising professor to decide on the content and scope of the project.
2. Students planning to take IND should have a minimum cumulative GPA of 2.50.
3. The request for approval should include a completed Independent Study Proposal.

4. The Independent Study Proposal should demonstrate the relevance and appropriateness to the program learning outcomes.
5. The student must engage and interact with the supervising professor throughout the term by regularly submitting activity logs / time sheets that have details about time spent on academic activities.
6. Students must engage in the IND course with a high-level of self-directed learning.
7. At the end of the term, students must submit a completed academic, artistic, or creative project to
8. be assessed by the supervising professor.

## SATISFACTORY ACADEMIC PROGRESS (SAP)

It is necessary to measure satisfactory academic progress (SAP) to be eligible for federal student aid (FSA) and to become a University of Silicon Valley graduate. SAP is measured at the end of each evaluation period. The evaluation period for all programs is one 15-week term. Failure to meet SAP standards may result in a student being placed on financial aid/academic warning or financial aid/academic probation, and/or dismissal from the University or dismissal of participation in financial aid programs. SAP is measured using qualitative (i.e., cumulative grade point average) and quantitative (i.e., pace of completion) standards.

### QUALITATIVE STANDARD

The University of Silicon Valley measures its undergraduate students' academic progress at the end of each evaluation period to ensure students are maintaining a minimum cumulative grade point average (CGPA) of at least a 1.75 at the end of their first term and thereafter, a minimum of 2.0. Students in a graduate program must maintain a CGPA of at least 3.0. Preparatory coursework is included in the quantitative assessment of SAP; however, Preparatory courses are not included in the GPA.

### QUANTITATIVE STANDARD

The University of Silicon Valley additionally measures students using a quantitative standard, pace of completion, to ensure successful completion of their programs of study. The pace of completion is based on the number of cumulative credits completed versus the number of cumulative credits attempted. All students must complete their programs of study without exceeding 150% of the published length of their program measured in credit hours.

The following chart presents the benchmarks that must be achieved at the end of each term:

| Undergraduate Programs | | |
|---|---|---|
| **Term** | **Qualitative (CGPA)** | **Quantitative (Pace of Completion)** |
| **1** | 1.75 | 25% |
| **2 to 4** | 2.0 | 50% |
| **5 and after** | 2.0 | 66.67% |
| **Graduate Programs** | | |
| **Term** | **Qualitative (CGPA)** | **Quantitative (Pace of Completion)** |
| **All** | 3.0 | 66.67% |

The following chart details how grades count toward calculating completion rates and CGPA for SAP:

| Grade | Credits Attempted (Denominator) | Credits Completed (Numerator) | Calculated in CGPA |
|---|---|---|---|
| >D- | Yes | Yes | Yes |
| F | Yes | No | Yes |
| W | Yes | No | No |
| WF | Yes | No | Yes |
| AF | No | No | No |
| AU | No | No | No |
| CR | Yes | Yes | No |
| I | Yes | No | No |
| P | Yes | Yes | No |
| NP | Yes | No | No |
| T | Yes | Yes | No |

### FINANCIAL AID/ACADEMIC WARNING

If a student fails to meet SAP at the end of the evaluation period, the student is placed on Financial Aid/Academic Warning (FA/Academic Warning) for the next term. The University will reinstate financial aid for one meet only. Students who fail to meet SAP after the warning period will lose financial aid eligibility and may be dismissed unless they successfully appeal and are placed on Financial Aid/Academic Probation (FA/Academic Probation).

### FINANCIAL AID/ACADEMIC PROBATION

Students who fail to meet SAP after the FA/Academic Warning period but successfully appeal the results (see SAP Appeals Process section) will be placed on FA/Academic Probation. FSA eligibility will be reinstated for one term while the student is on FA/Academic probation status.

### ACADEMIC PLAN

Students who fail to meet SAP after the FA/Academic Warning Period may be placed on an Academic Plan designed to ensure they will be able to meet SAP, but it may take more than one term to meet progress standards. This plan will be student-specific and will be monitored at the end of each evaluation point to determine that the student is meeting the requirements of the academic plan. Students are eligible to receive federal student aid as long as they continue to meet these requirements. If at any time, it is determined that the student is no longer meeting the requirements of the academic plan, he/she may be terminated from school and may no longer be eligible for federal student aid.

### PLAN OF ACTION

The following are possible items to be included in a plan of action:

- Reduction in number of hours attempted
- Change in program (major)
- Enrollment in specific courses prescribed by the Academic Advisor
- Re-enrollment in courses in which the student previously received a low or failing grade
- Other measures recommended by the Academic Advisor

### DISMISSAL POLICY

Students who fail to meet the minimum standards for Satisfactory Academic Progress may be dismissed from the University for one or more trimesters. Students who are dismissed will automatically be ineligible for federal student aid until such time that they are reinstated to the University after successfully appealing their dismissal. Additionally, students may not be able to register for upcoming terms until reinstated.

### SAP APPEALS PROCESS

Students who lose FSA eligibility due to SAP may appeal the result on the basis of injury or illness, death of a relative, or other special circumstances. The appeal must be submitted the Monday of the week prior to the next term's start. The SAP Appeal Committee will meet and provide a response to the student within one (1) week of receiving the appeal. At a minimum, the SAP Committee will consist of one staff member from each of the following departments: Registrar's Office, Student Life, Academics, Compliance and Financial Aid. Students may be required to attend scheduled committee meetings to present appeals.

The appeal must include the reason for the student's failure to achieve SAP and the changed conditions/situation that will lead to making SAP at the next evaluation period. The student will be placed on FA/Academic probation during this period. If the student is denied the appeal, it will result in dismissal from the program. However, if it is likely that the student will not meet SAP standards by the end of the next evaluation period, the student will be placed on an academic plan. This plan will outline the steps the student needs to achieve in order to maintain eligibility. Achieving the objectives of the academic plan renders the student once again eligible for financial aid, to continue studies at the University, and be removed from FA Probation.

Students receiving VA educational benefits will be placed on probation if their GPA is below 2.0. A maximum of two terms on probation is allowed. If at the end of two terms the student's GPA remains below 2.0, benefits will be terminated.

### REINSTATEMENT / REGAINING FINANCIAL AID ELIGIBILITY

Students who are dismissed and not reinstated will automatically be ineligible for future financial aid until such time that they are reinstated to the University by successfully appealing SAP ineligibility. A student whose appeal is approved, and who is placed on FA/Academic Probation or an Academic Plan, will be reinstated and must maintain a CGPA of 2.0 in undergraduate programs, or 3.0 for graduate programs, with a pace of completion above the metrics stated herein the SAP policy.

**MAXIMUM TIME FRAME**

Students enrolled at the University of Silicon Valley must complete their programs of study within 150% of the published program length measured in credit hours in order to graduate. For example, a student enrolled in a program that is 120 credits in length will only be allowed to attempt up to 180 credits (120*1.5 = 180 hours). If students fail to meet the maximum timeframe permitted to complete the program, they may pursue completion of their programs of study if they submit a successful appeal to the University. If the appeal is approved, the student may remain enrolled at the University, but without eligibility for financial aid.

The following is an overview of other areas impacting SAP:

- Preparatory coursework is included in the qualitative assessment of SAP but is not included in the CGPA.
- Transfer credits and credits earned through other institutionally accepted methods (i.e., CLEP) are included in units attempted and completed but not in the CGPA.
- Incomplete ("I") grades are not counted as credits completed; however, the "I" grade does count as credits attempted. Once the "I" grade is replaced, SAP will be reevaluated.
- Withdrawal (W) grades are included in the credits attempted but not in the CGPA.
- Courses dropped within the Add/Drop period are not included in either the measurement of SAP.
- Students may repeat a course once, and the highest earned grade will be used to calculate the CGPA. Grades will be included in the GPA calculation if a student chooses to repeat a course more than once. Any courses that are repeated will count towards pace of completion.
- Students who have officially withdrawn from the University or are on leave of absence are still subject to SAP standards.
- Returning students resume their studies at the point at which they left off. Students resume their studies under the same SAP statuses as when they left their original programs of study.
- When a student changes majors or seeks to earn additional degrees, only courses that apply toward the new degree will be counted in calculating the number of credits attempted. If the student changes majors, the student's SAP status remains the same as in the prior program of study.
- If a graduate of the University of Silicon Valley enrolls in a new program of study, only courses that apply toward the new degree will be counted in calculating the number of credits attempted.

## GRADUATION REQUIREMENTS

**UNDERGRADUATE PROGRAMS –** To receive an undergraduate degree in a program of study, the student must achieve the following:

- Complete courses as prescribed in the academic catalog under which the student enrolled.
- Complete unit and course requirements with a minimum of a 2.0 cumulative GPA.
- Complete the program of study within 150% of the published length of the program.

**GRADUATE PROGRAMS –** To receive a graduate degree in the program of study the student must achieve the following:

- Complete the course as prescribed in the academic catalog under which the student enrolled.
- Complete unit and course requirements with a minimum of a 3.0 cumulative GPA.
- Complete their program of study within 150% of the published length of their program.

## APPLICATION FOR GRADUATION PROCEDURE

The graduation audit is the official confirmation of the completion of all the requirements for a degree. A graduation audit is also necessary to ensure all appropriate documents have been submitted to the Registrar's Office, and to ensure the student's academic file is complete before a diploma is awarded. Students should keep close track of all coursework completed and keep in regular contact with their Academic Advisors. A student may initiate a graduation audit when within eighteen (18) credits of graduation.

To initiate a graduation audit, a student must:

1. Request an Application for Graduation Form from the Registrar's Office (also available on the University website)
2. Submit appropriate fees to the Business Office
3. Return the completed Application for Graduation Form to Registrar's Office.

A verification letter with the results of the graduation audit will be sent within one month of applying for graduation.

**GRADUATION FEES –** Students must pay a one-time $100.00 graduation fee.

## Graduation with Honors

A student who earns a cumulative GPA in one of the ranges below shall graduate with honors:

| | |
|---|---|
| 3.5–3.79 | Cum Laude |
| 3.8–3.99 | Magna Cum Laude |
| 4.0 | Summa Cum Laude (highest honors) |

## Student Academic Responsibilities

It is the responsibility of students to:

1. Be aware of and comply with policies and procedures, deadlines and graduation requirements found within this catalog and the Student Handbook.
2. Monitor progress toward completion of graduation requirements.
3. Comply with the content of the Student Handbook and Student's Rights and Responsibilities.

## Commencement Ceremony

The Commencement Ceremony is a celebration of the completion of one's degree program. Commencement is differentiated from graduation as graduation is the formal completion of the student's degree program (please refer to the Graduation Requirements section).

As such, we welcome those who have graduated to participate in Commencement. To signal your interest in participating in Commencement, you must complete the Commencement section of the Graduation Application. The Graduation Application must be submitted by the spring deadline listed in the academic calendar.

All students who have completed their programs prior to Commencement, held annually, and who have completed the Commencement section of the Graduation Application, are qualified to participate in the Commencement Ceremony.

Exceptions may be made for those students who were scheduled to graduate in the spring, but due to extenuating circumstances were unable to complete some of their spring courses. Students seeking this form of an exception may have no more than six (6) remaining credits, must be registered for these credits in the next term that the student will attend (summer or fall), and must submit a formal appeal to the Dean of Students. This appeal will be reviewed by the Registrar and the Dean of Students who will make a recommendation to the Provost and CAO.

## Teach-Out Policy

In the event that the University of Silicon Valley determines that a program is no longer viable, once it has begun, no new students will be admitted, and all current students will be notified. If the program closes, the University will honor its commitment to students and a teach-out plan for juniors, seniors, and/or graduate students will be implemented. Freshmen and Sophomore students will be encouraged to transfer to institutions offering a similar degree. A list of those institutions will be provided along with admissions requirements and deadlines. It is anticipated that a teach-out would take a minimum of two years to complete for an undergraduate program and six months to complete for a graduate program due to the length of those programs. If students elect to transfer to another institution, every effort will be made to support students to enable a smooth transition.

# Student Affairs

## New Student Orientation

The hosts a mandatory orientation for new students prior to the start of class. Orientation provides an opportunity for students to meet with faculty and staff. It also orients the student with regard to university policy and procedures, and their own rights and responsibilities. During the orientation, students receive user IDs and passwords to access the Student Portal.

## ID Cards

The IT Office issues student ID cards at the beginning of each term to new students. ID cards are required to gain access to the building and check out books from the University Library and equipment from the audio/video lab.

## Student Handbook

The Student Handbook provides students with information about campus resources, student life and various University procedures. The University makes this handbook available online to each student. It is our students' responsibility to familiarize themselves with its contents. When a student enrolls at The, he or she agrees to comply with all rules and regulations. Ignorance of a policy or regulation will not be considered an excuse for failure to observe it. The University reserves the right to alter the regulations and policies through normal channels. The Student Handbook can be found on our website.

## Tutoring

The University of Silicon Valley provides free tutoring for students who request or require assistance with academic subject matter. Academic tutoring is provided by the University of Silicon Valley students who have both excellent academic records and a high degree of professionalism. USV has traditionally maintained a robust student-driven peer tutoring program where carefully screened students will provide tutoring to those students who register. We have recently made a significant investment to integrate TutorMe into each Canvas course, so all students can access tutoring services via the Internet. TutorMe provides a real-time connection between the student and a screened, qualified tutor in the specific subject area related to the particular course. USV is coordinating with TutorMe to recommend senior USV students to become TutorMe tutors and provide the support services for some of our more specialized courses. In this way we can leverage our student community to provide the peer-to-peer tutoring in a digital environment.

Students interested in receiving or providing tutoring services may do so by emailing tutoring@usv.edu or by visiting the office of the Student Services Coordinator's office to make an appointment.

## Library

The USV Library connects the university to ideas and information through a variety of formats. The library holds print books, DVDs, magazines, and e-books. In addition, the library subscribes to academic databases, serving as the gateway to thousands of scholarly articles, digital journals, and electronic books. Wireless access, a scanner and a photocopier are also available, as well as a Librarian and staff to help the USV community find the best resources. More information on our library can be found on our website at: https://usv.edu/student-life/library/.

## Associated Student Body (ASB)

The Associated Student Body (ASB) is the general student membership organization of the University. The purpose of the ASB is to give students the opportunity to plan and direct their own activities, to become involved with co-curricular campus activities, and to influence the decisions that affect the quality of education and student life at the University. All enrolled students are members of the ASB. The general student membership provides feedback to the Associated Student Body Executive Board. The Associated Student Body Executive Board is comprised of elected and appointed officers. In conjunction with the ASB Advisor, the Executive Board is responsible for administering the ASB budget and coordinating student activities.

## Student Clubs

There are a number of active student clubs on campus. Club membership is open to all current students. Please see the Associated Student Body President for an application if you are interested in joining existing or starting a new club. Examples of clubs that have been active in the past include the Game Development Club, Engineering Society, Audio Engineering Society, Animation Club and Friday Night Magic.

## Student Housing

The University of Silicon Valley does not have dormitory facilities. The University utilizes local apartment complexes in which students are assigned to apartments with other students. Housing is for students who are enrolled in at least 12 credits per term. Alternatively, there are independent housing options available in the vicinity of the campus—but the University does not maintain relationships with these complexes and does not guarantee assistance to students in locating non-University-sponsored housing. Apartment complexes are within a five (5) mile radius and monthly rent ranges from $2,400 to $4,000 per month.

If you are interested participating in university housing, please contact the Dean of Students for more information. The University assumes no responsibility to assist, or find housing for, students who are ineligible for or not interested in participating in university-sponsored housing. Students attending mid-sessions may obtain housing at the cost of a full term.

## Student Lounge (Dragon's Den)

The student lounge features seating, tables, billiards and other games and recreational equipment. It offers a microwave oven and vending machines stocked with drinks and snack foods.

## Career Services

The University's Career Services Department provides services and resources to students and alumni to assist in career preparation. Career workshops and coaching are offered on topics such as interviewing, resumes, cover letters, job search strategies and portfolio preparation. Website resources, magazines, books, bulletins, job descriptions and salary information are among the resources available to students and alumni.

Below are the Standard Occupational Classification (SOC) Codes associated with each degree program. For more information on SOC Codes, please see one of our Career Services professionals.

| Program | SOC Code |
|---|---|
| Bachelor of Business Administration | 11-1021 - General and Operations Managers<br>11-9199 - Managers, All Others |
| BS in Computer Science | 15-1131 - Computer Programmers<br>15-1132 - Software Developers, Applications |
| BS in Software Development | 15-1132 - Software Developers, Applications<br>15-1133 - Software Developers, System Software<br>15-1134 - Web Developers |
| Certificate in Cloud Computing | 15-1132 - Software Developers, Applications<br>15-1134 - Web Developers |
| BA in Digital Art and Animation | 27-1014 - Multimedia Artists and Animators |
| BS in Digital Audio Technology | 27-4014 - Sound Engineering Technicians |
| BA in Game Art | 27-1014 - Multimedia Artists and Animators |
| BS in Game Engineering | 15-1131 - Computer Programmers<br>15-1132 - Software Developers, Applications<br>15-1133 - Software Developers, Systems Software |
| MA in Entrepreneurship and Innovation | 11-1021 - General and Operations Managers<br>11-9199 - Managers, All Others |
| MS in Management and Leadership in Creative Technologies | 11-1021 - General and Operations Managers<br>11-9199 - Managers, All Others |
| Graduate Certificate in Project Management | 11-1021 - General and Operations Managers<br>11-9199 - Managers, All Others<br>15-1199 - Information Technology Project Manager |

# EDUCATIONAL PROGRAMS AND INFORMATION

## INSTITUTIONAL LEARNING OUTCOMES

| ILO | Core Competency | Institutional Learning Outcome |
|---|---|---|
| ILO1 | Written and Oral Communication | USV graduates will be able to communicate professionally, accurately, and persuasively through both written and oral modalities. |
| ILO2 | Critical Thinking | USV graduates will be able to critically analyze ideas, issues, content, and events to formulate conclusions and make decisions individually or collaboratively. |
| ILO3 | Information Literacy | USV graduates will be able to identify, locate, evaluate, and responsibly use information from a range of sources. |
| ILO4 | Quantitative Reasoning | USV graduates will be able to apply quantitative analysis and methods to address a variety of issues. |
| ILO5 | Creative Thinking | USV graduates will be able to create, synthesize and combine ideas, content, and expertise in original and innovative ways. |
| ILO6 | Teamwork and Diversity | USV graduates will be able to work effectively and ethically in a diverse community. |
| ILO7 | Career Readiness | USV graduates will be able to demonstrate career readiness through field-appropriate professional presentations of their knowledge and skills. |

# BUSINESS ENTREPRENEURSHIP AND INNOVATION (BEI) DEPARTMENT

## BACHELOR OF BUSINESS ADMINISTRATION (BBA)

The Bachelor of Business Administration (BBA) degree program is designed to provide students with a solid foundation in core business functions. Students in the BBA program develop the business acumen and skills needed to prepare them to meet challenges in the global marketplace. The BBA program offers two concentration areas: Project Management and Digital Media Management. Each of these concentrations allows students to focus their studies on a curriculum geared toward leadership and business management success in a wide variety of industries. The program offers hands-on, experiential project-based learning to help students develop the competencies and practical skills needed to hit the ground running after graduation. The curriculum encourages students to discover creative and business solutions to address common business issues. It also provides a framework for understanding the various functional areas that influence the successful performance of companies.

### PROGRAM LEARNING OUTCOMES

Graduates in the Bachelor of Business Administration (BBA) program will:

- **BBA PLO1**: Critically analyze and synthesize information from diverse sources to inform business decision-making.
- **BBA PLO2:** Demonstrate professionalism in communicating using oral, written, and digital formats.
- **BBA PLO3:** Create and implement plans effectively within the context of available resources and goals.
- **BBA PLO4:** Innovate and creatively adapt to changes in the dynamic marketplace.
- **BBA PLO5**: Interpret and apply ethical and professional standards in business.
- **BBA PLO6**: Demonstrate leadership skills in professional and business settings.

| Bachelor of Business Administration (BBA) Curriculum | | |
|---|---|---|
| **Core Courses - 66 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS105 | Fundamentals of Accounting | 3 |
| BUS110 | Principles of Management and Entrepreneurship | 3 |
| BUS121 | Digital Technology and Communications | 3 |
| BUS125 | Business Law | 3 |
| BUS141 | Principles of Marketing | 3 |
| BUS150 | Principles of Economics | 3 |
| BUS210 | Global Entrepreneurship and Innovation | 3 |
| BUS220 | Advanced Cost Accounting | 3 |
| BUS235 | Leading Teams | 3 |
| BUS241 | Consumer and Market Behavior | 3 |
| BUS246 | Business Intelligence and Analytics | 3 |
| BUS250 | Finance | 3 |
| BUS270 | Project Management | 3 |
| BUS280 | Human Resource Management | 3 |
| BUS310 | Advanced Project Management | 3 |
| BUS340 | Social Media, Engagement and Analytics | 3 |
| BUS346 | Data and Decisions | 3 |
| BUS430 | Fundamentals of eCommerce | 3 |
| BUS450 | Operations and Technology | 3 |
| BUS490 | Strategic Management | 3 |
| RWPS480 | Senior Capstone Project 1 | 3 |
| RWPS485 | Senior Capstone Project 2 | 3 |
| **General Education Courses - 30 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS111 | The Entrepreneurship Mindset | 3 |
| BUS290 | Creating Strategic Plans | 3 |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Oral Communications | 3 |
| HUM100 | Disruptive Imagination | 3 |
| HUM361 | Contemporary Ethical Issues | 3 |
| HUM470 | Silicon Valley Challenge | 3 |
| MATH112 | College Algebra | 3 |
| SSC380 | The Silicon Valley Ecosystem | 3 |
| | Physical or Biological Science choice | 3 |
| **Electives - 24 Credits** | | |
| **Total 120 Credits** | | |

## GRADUATE CERTIFICATE IN PROJECT MANAGEMENT (GCPM)

The Graduate Certificate in Project Management program provides professionals in many fields with a thorough understanding of management principles and the skills necessary to guide projects from start to finish. The program includes industry-standard curricula on project management, as well as leadership, management, and fundamentals of business in creative and technical industries. Students have the opportunity to develop further skills in business and risk analysis. Graduates of this program are also well-positioned to transfer into one of our Master's degrees in Business, and to flourish in the innovative hub of business in Silicon Valley.

### PROGRAM LEARNING OUTCOMES

Upon completion of the Graduate Certificate in Project Management (GCPM) program, students will be able to:

- **GCPM PLO 1**: Demonstrate business acumen in a variety of professional contexts, including planning, decision-making, resource-allocation, and leadership.
- **GCPM PLO 2**: Demonstrate a well-developed understanding of project management terminology, practices, and methodologies.
- **GCPM PLO 3:** Gather, analyze, communicate, and apply diverse information in a business environment.

| Graduate Certificate in Project Management | | |
|---|---|---|
| **Core Courses** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS510 | Business Analysis | 3 |
| BUS520 | Risk Analysis and Management | 3 |
| BUS575 | Fundamentals of Project Management | 3 |
| BUS576 | Essentials of Agile and Scrum Project Management | 3 |
| **Total 12 Credits** | | |

## MA IN ENTREPRENEURSHIP AND INNOVATION (MA ENT)

The MA in Entrepreneurship and Innovation (MA ENT) degree program provides graduate students an opportunity to learn startup business lessons, techniques, and tools. It is designed for students seeking to pursue their own business ventures, transition to a new career, manage an entrepreneurial enterprise, or bring about innovations within a company. The courses cover the basic skills required to create, grow, and manage business ventures and innovations. The practicum serves as the capstone of the program. Members of the faculty will lend direction to the students' entrepreneurial plans and mentor students so that they benefit from the instructors' practical experiences. The MA ENT program is hands-on and project-based, using the students' own entrepreneurial ventures, ideas, and innovations as the springboard for learning.

### LEARNING OUTCOMES

Graduates in MA in Entrepreneurship and Innovation (MA ENT) program will:

- **ENT PLO 1**: Communicate effectively, logically, and compellingly in writing, meetings, and presentations.
- **ENT PLO 2**: Apply management and leadership best practices in an entrepreneurial setting.
- **ENT PLO 3:** Integrate business analysis and various tools into the discovery and implementation of innovative solutions to business problems.
- **ENT PLO 4:** Develop entrepreneurial marketing plans, business, and financial models.
- **ENT PLO 5:** Design a comprehensive strategic plan for a new venture and/or innovation.
- **ENT PLO 6:** Recognize and evaluate opportunities for promoting creativity and innovation in the global marketplace.

| MA ENT Curriculum | | |
|---|---|---|
| **Core Courses - 15 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS575 | Fundamentals of Project Management | 3 |
| ENT520 | Business Models and Planning | 3 |
| ENT525 | Legal Structures, Contracts and Risk Management | 3 |
| ENT530 | Finance and Accounting | 3 |
| ENT540 | Negotiation, Sources and Uses of Power | 3 |
| **Electives (Choose 3 courses / 9 credits from the list below)** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS510 | Business Analysis | 3 |
| BUS520 | Risk Analysis and Management | 3 |
| BUS576 | Essentials of Agile and Scrum Project Management | 3 |
| CTL541 | Leading and Managing Change | 3 |
| CTL543 | Conflict Management | 3 |
| CTL560 | Creative Design Thinking for Leaders | 3 |
| ENT535 | Entrepreneurial Marketing | 3 |
| ENT550 | Digital Transformation and Social Media | 3 |
| ENT555 | Leadership and Management | 3 |
| **Required Practicum (6 credits)** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENT590 or | Entrepreneurship and Innovation Practicum I | 3 |
| ENT591 and | Entrepreneurship and Innovation Practicum 1 | 1.5 |
| ENT592 | Entrepreneurship and Innovation Practicum 2 | 1.5 |
| ENT595 or | Entrepreneurship and Innovation Practicum II | 3 |
| ENT596 and | Entrepreneurship and Innovation Practicum 3 | 1.5 |
| ENT597 | Entrepreneurship and Innovation Practicum 4 | 1.5 |
| **Total 30 Credits** | | |

## MS IN MANAGEMENT AND LEADERSHIP IN CREATIVE TECHNOLOGIES (MS MLCT)

The MS in Management and Leadership in Creative Technologies program is designed to enable students to combine specific creative practice and skills with a rigorous business education customized for the creative industries. At the end of the program, graduates will be equipped with in-depth understanding, knowledge, and skills required to successfully realize value within the creative industry ecosystem.

The program is designed for individuals coming from different disciplines who have a strong motivation to look beyond their traditional boundaries, a readiness to participate in start-ups, and a willingness to work in a multi-disciplinary and experiential environment.

### LEARNING OUTCOMES

Graduates in MS in Management and Leadership in Creative Technologies (MS MLCT) program will:

- **MLCT PLO 1**: Demonstrate the ability to plan, prepare, organize, and present effectively in writing, meetings with individuals and presentations to large audiences.
- **MLCT PLO 2**: Practice whole-brain thinking in developing capabilities and build capacity to create, problem-solve, transform, innovate, and reframe challenges in organizations.
- **MLCT PLO 3:** Evaluate and synthesize information, evidence, arguments, theories, and perspectives within given contexts to draw inferences and reach reliable conclusions.
- **MLCT PLO 4:** Develop sets of practical skills and toolboxes to create an effective team environment in the workplace as a leader or as team member.
- **MLCT PLO 5:** Comprehend the interconnectedness and complexity of global processes such as economy, environment, society, and human services and critically examine these across diverse contexts.
- **MLCT PLO 6:** Articulate and appraise the ethical, social, and legal consequences that evolve when ethical practices and the law are overlooked or dismissed in favor of other objectives.
- **MLCT PLO 7:** Facilitate the development and management of human relationships by identifying, considering, and adapting to the needs, values, expectations, perspectives, and sensibilities of others.

| MS in Management and Leadership in Creative Technologies | | |
|---|---|---|
| **Core Courses - 21 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS575 | Fundamentals of Project Management | 3 |
| CTL511 | Understanding the Business of Creative Industries | 3 |
| CTL525 | Professional Ethics and the Law | 3 |
| CTL535 | Strategic Marketing in Creative Enterprises | 3 |
| CTL540 | Culture and Globalization | 3 |
| CTL581 | Metrics and Data Analytics | 3 |
| ENT555 | Leadership and Management | 3 |
| **Electives (Choose 3 courses / 9 credits from the list below)** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS510 | Business Analysis | 3 |
| BUS520 | Risk Analysis and Management | 3 |
| BUS576 | Essentials of Agile and Scrum Project Management | 3 |
| CTL541 | Leading and Managing Change | 3 |
| CTL543 | Conflict Management | 3 |
| CTL560 | Creative Design Thinking for Leaders | 3 |
| ENT520 | Business Models and Planning | 3 |
| ENT540 | Negotiation, Sources and Uses of Power | 3 |
| ENT550 | Digital Transformation and Social Media | 3 |
| **Capstone Courses** | | |
| **Course Number** | **Course Name** | **Credits** |
| CTL590 | Leadership Experience Lab | 1 |
| CTL595 | Leadership Capstone A | 2 |
| CTL596 | Leadership Capstone B | 2 |
| **Total 35 Credits** | | |

# Computer Science (CS) Department

## Certificate in Cloud Computing (CCC)

The Certificate in Cloud Computing (CCC) program offers students industry-driven training in computing, with a particular focus on concepts, techniques, and technology relevant to the rapidly expanding field of cloud computing. The program offers an introduction to fundamental concepts in computing and information technology, which is developed throughout the program. Students will learn valuable skills derived directly from industry-leading cloud providers such as Amazon Web Services. Graduates of the program will be well-positioned to succeed in the AWS Academy program and the Silicon Valley workforce.

### Program Learning Outcomes

Graduates in the Certificate in Cloud Computing (CCC) program will:

- **CCC PLO 1:** Articulate and implement a range of software development principles including computer hardware and software, networking, and cloud computing features.
- **CCC PLO 2:** Design and implement software in an industry-standard programming language, following design patterns and best-practices.
- **CCC PLO 3:** Design a distributed software system applicable to an industry-standard cloud platform, incorporating recognized best practices and architecture.
- **CCC PLO 4:** Develop further skills in a cloud-based development environment in one of: database design, storage, and analytics; or software development and configuration.

| Certificate in Cloud Computing (CCC) Curriculum | | |
|---|---|---|
| **Core Courses** | | |
| **Course Number** | **Course Name** | **Credits** |
| CS101 | Fundamentals of Computing | 4 |
| CS106 | Introduction to Scripting | 4 |
| CS362 | Software Development in the Cloud | 4 |
| **Electives - 4 credits (select one)** | | |
| **Course Number** | **Course Name** | **Credits** |
| CS261 | Systems Architecture in the Cloud | 4 |
| CS263 | SysOps for Cloud Computing | 4 |
| CS360 | Database Management Systems | 4 |
| **Total 16 Credits** | | |

## BS IN COMPUTER SCIENCE (CS)

The BS in Computer Science (CS) degree program combines the hands-on, practical side of programming with a theoretical knowledge of the basic concepts of computer science. The students thrive in a project-based setting, working on multidisciplinary teams of artists, game designers, animators, coders, and software architects with various backgrounds. They use essential, industry-standard open source and proprietary technologies and tools. In capstone project classes, upperclassmen develop their own ideas throughout two semesters. Capstone classes ground students solidly in real-world software development experience. Computer Science & Engineering students also have multiple concentration options: they can focus on Web and Mobile, Software Engineering, or Data Science; or, if they prefer, they can earn a generalist's degree with general concentration. The program's close-knit faculty consists of professionals with strong relationships in the software industry, who offer specialized, current, and relevant courses.

### PROGRAM LEARNING OUTCOMES

Graduates in the BS in Computer Science (CS) program will:

- **CS PLO 1:** Be able to identify, interpret, and apply key STEM concepts and solve engineering problems.
- **CS PLO 2:** Demonstrate and ability to design and develop software and hardware systems.
- **CS PLO 3:** Create optimal solutions for computer-based software systems using advanced concepts of algorithms and computer science theory.
- **CS PLO 4:** Acquire and develop new knowledge independently by conducting research and applying critical thinking.
- **CS PLO 5:** Demonstrate effective collaboration in engineering or multidisciplinary team projects.
- **CS PLO 6:** Successfully transform real-world customer specifications into software requirements and deliver working solutions.

| BS in Computer Science (CS) Curriculum | | |
|---|---|---|
| **Core Courses - 75 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS110 | Principles of Management and Entrepreneurship | 3 |
| CS101 | Fundamentals of Computing | 4 |
| CS111 | Code 0: Introduction to Programming and Logic | 4 |
| CS130 | Introduction to Cybersecurity | 3 |
| CS135 | Studio 1 | 3 |
| CS211 | Code 1: Intermediate Programming | 4 |
| CS221 | Linux Programming Environment | 3 |
| CS235 | Studio 2 | 3 |
| CS297 | Data Structures: Introduction to efficient data storage | 3 |
| CS311 | Code 2: Advanced Programming | 4 |
| CS320 | Operating Systems Concepts | 3 |
| CS325 | Algorithms: Memory and CPU Efficient Computing | 3 |
| CS335 | Studio 3 | 3 |
| CS341 | Network Systems | 3 |
| CS351 | Computer Architecture | 3 |
| CS360 | Database Management Systems | 4 |
| CS361 | Introduction to Compilers | 3 |
| CS421 | Systems Analysis and Design | 3 |
| CS459 | Big Data and Visualization | 3 |
| MATH295 | Discrete Mathematics | 3 |
| MATH315 | Mathematics for Computing | 4 |
| RWPS480 | Senior Capstone Project 1 | 3 |
| RWPS485 | Senior Capstone Project 2 | 3 |

| CS Program Approved Courses (PAC) - Select 15 credits from the list below | | |
|---|---|---|
| **Course Number** | **Course Name** | **Credits** |
| BUS246 | Business Intelligence and Analytics | 3 |
| CS106 | Introduction to Scripting | 4 |
| CS115 | Web Programming: HTML5, CSS and JavaScript | 3 |
| CS189 | Object-Oriented Programming with Python | 3 |
| CS200 | User Experience: Application Interface Design and Implementation | 3 |
| CS205 | Internet of Things: RaspberryPi and Arduino Development | 4 |
| CS212 | Java Programming | 4 |
| CS261 | Systems Architecture in the Cloud | 4 |
| CS263 | SysOps for Cloud Computing | 4 |
| CS300 | Computers That Listen: Introduction to Natural Language Processing | 3 |
| CS313 | C# Programming | 3 |
| CS316 | Advanced Web Programming | 3 |
| CS362 | Software Development in the Cloud | 4 |
| CS375 | Mobile Programming for iOS | 3 |
| CS376 | Mobile Programming for Android | 3 |
| CS446 | High Performance Computing | 3 |
| CS450 | Cryptography: Introduction to Modern Cybersecurity | 3 |
| CS451 | Introduction to Self-Driving Cars | 3 |
| CS457 | Machine Learning and Artificial Intelligence | 3 |
| DAT111 | Desktop Production Fundamentals | 4 |
| DAT116 | Desktop Audio Production | 4 |
| DAT211 | Digital Sound Synthesis | 3 |
| SWE449 | Tools Programming | 3 |
| **General Education Courses - 30 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Communication | 3 |
| HUM100 | Disruptive Imagination | 3 |
| MATH112 | College Algebra | 3 |
| MATH114 | Trigonometry | 3 |
| SSC380 | The Silicon Valley Ecosystem | 3 |
| | Arts / Humanities Choice | 3 |
| | Physical & Biological Sciences | 3 |
| | Social Sciences Choice | 3 |
| | Capstone Project Choice | 3 |
| **Total 120 Credits** | | |

## BS IN SOFTWARE DEVELOPMENT (SWD)

The BS in Software Development (SWD) degree program prepares students to engage in the dynamic world of computer software design and development. Students will investigate user needs, analyze systems, design, and propose solutions, and develop software projects. The program provides a solid technical understanding to support a central pillar of project studio courses designed to reflect real-world development practices and encourage collaboration between students. These projects are hands-on and realistic, leading to a portfolio of shipped code for students at multiple levels.

Students will develop and refine technical skills in user needs analysis, project planning, programming and development, software deployment and collaborative work processes. The program deploys industry-standard techniques and technology, including preparation for key professional certification programs which prepare students to transition immediately to our local Silicon Valley workforce.

**PROGRAM LEARNING OUTCOMES**

Graduates in the BS in Software Development (SWD) program will:

- **SWD PLO 1:** Apply software engineering concepts and sound reasoning to develop and deploy technical solutions for software solutions.
- **SWD PLO 2:** Evaluate computing resources and technologies in order to design and develop software solutions.
- **SWD PLO 3:** Create optimal solutions using algorithms and software methodologies.
- **SWD PLO 4:** Acquire and develop new knowledge independently by conducting research and applying critical thinking.
- **SWD PLO 5:** Work proficiently with diverse groups in collaborative project teams.
- **SWD PLO 6:** Successfully transform real-world customer specifications into software requirements and deliver a working solution.

| BS in Software Development (SWD) Curriculum | | |
|---|---|---|
| **Core Courses - 75 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS110 | Principles of Management and Entrepreneurship | 3 |
| CS101 | Fundamentals of Computing | 4 |
| CS111 | Code 0: Introduction to Programming and Logic | 4 |
| CS115 | Web Programming: HTML5, CSS and JavaScript | 3 |
| CS130 | Introduction to Cybersecurity | 3 |
| CS135 | Studio 1 | 3 |
| CS200 | User Experience: Application Interface Design and Implementation | 3 |
| CS211 | Code 1: Intermediate Programming | 4 |
| CS221 | Linux Programming Environment | 3 |
| CS235 | Studio 2 | 3 |
| CS297 | Data Structures: Introduction to Efficient Data Storage | 3 |
| CS311 | Code 2: Advanced Programming | 4 |
| CS316 | Advanced Web Programming | 3 |
| CS325 | Algorithms: Memory and CPU Efficient Computing | 3 |
| CS335 | Studio 3 | 3 |
| CS341 | Network Systems | 3 |
| CS360 | Database Management Systems | 4 |
| CS375 | Mobile Programming for iOS | 3 |
| CS421 | Systems Analysis and Design | 3 |
| MATH295 | Discrete Mathematics | 3 |
| MATH315 | Mathematics for Computing | 4 |
| RWPS480 | Senior Capstone Project 1 | 3 |
| RWPS485 | Senior Capstone Project 2 | 3 |

| CS Program Approved Courses (PAC) - Select 15 credits from the list below | | |
|---|---|---|
| **Course Number** | **Course Name** | **Credits** |
| BUS246 | Business Intelligence and Analytics | 3 |
| CS106 | Introduction to Scripting | 4 |
| CS189 | Object-Oriented Programming with Python | 3 |
| CS212 | Java Programming | 4 |
| CS261 | Systems Architecture in the Cloud | 4 |
| CS362 | Software Development in the Cloud | 4 |
| CS263 | SysOps for Cloud Computing | 4 |
| CS300 | Computers That Listen: Introduction to Natural Language Processing | 3 |
| CS313 | C# Programming | 3 |
| CS320 | Operating Systems Concepts | 3 |
| CS351 | Computer Architecture | 3 |
| CS361 | Introduction to Compilers | 3 |
| CS376 | Mobile Programming for Android | 3 |
| CS447 | GUI and Graphics Programming | 3 |
| CS450 | Cryptography: Introduction to Modern Cybersecurity | 3 |
| CS451 | Introduction to Self-Driving Cars | 3 |
| CS457 | Machine Learning and Artificial Intelligence | 3 |
| CS459 | Big Data and Visualization | 3 |
| DAT111 | Desktop Production Fundamentals | 4 |
| DAT116 | Desktop Audio Production | 4 |
| DAT211 | Digital Sound Synthesis | 3 |
| MATH290 | Linear Algebra and Transformations | 3 |
| SWE449 | Tools Programming | 3 |
| **General Education Courses - 30 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Communication | 3 |
| HUM100 | Disruptive Imagination | 3 |
| MATH112 | College Algebra | 3 |
| MATH114 | Trigonometry | 3 |
| SSC380 | The Silicon Valley Ecosystem | 3 |
| | Arts / Humanities Choice | 3 |
| | Physical & Biological Sciences | 3 |
| | Social Sciences Choice | 3 |
| | Capstone Project Choice | 3 |
| **Total 120 Credits** | | |

# Digital Art and Animation (DAA) Department

## BA in Digital Art and Animation (DAA)

The BA in Digital Art and Animation (DAA) degree program offers students preparation in four concentration areas: 3D Animation, 3D Modeling, Entertainment Design, and Technical Art. The coursework bridges traditional and digital arts classes and includes solid components of theory, production, and general education. Digital Art and Animation project classes provide many opportunities for collaborations with other programs at The, such as Digital Audio Technology. Portfolio classes provide a format for bringing together all of the elements of the concept-to-delivery pipeline as students collaborate on multidisciplinary teams to complete real world projects.

### Program Learning Outcomes

Graduates in the BA Digital Art and Animation (DAA) program will:

- **DAA PLO 1:** Demonstrate an effective application of design principles and color theory in student projects.
- **DAA PLO 2:** Employ creative aspects of experimentation and iteration in their designs.
- **DAA PLO 3:** Recognize and differentiate the critical components of a project.
- **DAA PLO 4:** Create expressive characters, environments and props using traditional tools and techniques of the industry.
- **DAA PLO 5:** Integrate inventive principles, techniques, and skills in student projects.
- **DAA PLO 6**: Contribute effectively their expertise to a collaborative project.

### 3D Animation Concentration

The 3D Animation concentration encompasses character, non-character, and experimental animation. Character animation fuses acting, performance and the principles of movement to create believable, genuine, emotive characters. Character design, story structure and strong animation fundamentals are used by students to create a short, animated film project in their senior year. Fundamentals and the development of the "craft" of animation are stressed. Students may produce animations fusing both traditional and computer techniques. Non-character animation focuses on visual effects, abstract animation, or the motion of inanimate objects. Students are encouraged to combine media to produce original, creative work and content.

### 3D Modeling Concentration

The Modeling concentration develops both 2D and 3D skills in modeling. It allows the student to focus on strong conceptual visual skills, hands-on model building, digitizing, texture mapping and other techniques necessary for model data set creation. These models find applications in movies, commercials, simulators and emulators, games, animation sequences, product design and product development.

### 3D Entertainment Design Concentration

The Entertainment Design concentration integrates a strong traditional art background with skills in digital imagery. The course of study includes drawing, painting, illustration, character design and concept art. It is geared toward students interested in concept design, storyboarding, digital painting, and 3-D model texturing. Issues of presentation and delivery are addressed. The ability to transform verbal and written directions into visual representations of characters and scenes is emphasized.

### Technical Art Concentration

The Technical Art concentration combines a student's artistic abilities with the technical toolkit of the CG world. Traditional courses like drawing, painting, and sculpting help the student develop an artistic eye. Industry standard software programs are used in 3D Modeling, 3D Animation, and Texturing and Lighting courses. Coursework includes computer programming classes that enable the student to customize tools in CG software programs. The concentration allows the student to focus on lighting and compositing or rigging and scripting. Students can complete their programs of study by working on one of the many large projects on campus.

| BA in Digital Art and Animation (DAA) Curriculum<br>3D Animation Concentration | | |
|---|---|---|
| **Core Courses - 36 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART100 | 2D Design 1 | 3 |
| ART105 | Color Theory | 3 |
| DAA106 | Digital Imaging Concepts | 3 |
| ART110 | Sketching | 3 |
| ART115 | Figure Drawing 1 | 3 |
| ART212 | Perspective and Rendering | 3 |
| DAA240 | Introduction to 3D Modeling | 3 |
| DAA244 | Introduction to 3D Animation Principles | 3 |
| CS100 | Introduction to Scripting: Python | 3 |
| DAA480 | Portfolio 1 | 3 |
| DAA 476 or DAA483 | Animated Film Production or MediaWorks | 3 |
| DAA474 or DAA476 or DAA477 or DAA483 or DAA485 | Animated Film Pre-Production or Animated Film Production or Animated Film Post-Production or MediaWorks or Portfolio 2 | 3 |
| **3D Animation Concentration Courses - 36 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| DAA200 | Acting | 3 |
| DAA221 | Motion Graphics and Editing | 3 |
| DAA264 | Drawing Animation 1 | 3 |
| DAA265 or DAA312 | 2D Animation 1 or Animal Drawing and Motion | 3 |
| DAA267 | Character Rigging | 3 |
| DAA310 | Storyboarding | 3 |
| DAA321 | Quadruped Animation | 3 |
| DAA360 | 3D Animation 1 | 3 |
| DAA365 | 3D Animation 2 | 3 |
| DAA465 | 3D Animation 3 | 3 |
| DAA425 | Advanced Motion Graphics | 3 |
| GAM360 | Game Animation | 3 |
| **General Education Courses - 45 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG105 | Critical Reading, Thinking and Writing | 3 |
| ENG250 | Speech and Oral Communications | 3 |
| HUM100 | Disruptive Imagination | 3 |
| HUM400 | Research and Writing Capstone Project | 3 |
| MATH112 | College Algebra | 3 |
| | Arts / Humanities Choice 1 | 3 |
| | Arts / Humanities Choice 2 | 3 |
| | Physical or Biological Sciences Choice 1 | 3 |
| | Physical or Biological Sciences Choice 2 | 3 |
| | Social Sciences Choice 1 | 3 |
| | Social Sciences Choice 2 | 3 |
| | Social Sciences Choice 3 | 3 |
| | 300+ Level Arts & Sciences Choice | 3 |
| | Written Communication Choice | 3 |
| **Electives - 6 credits** | | |
| **Total 123 Credits** | | |

| BA in Digital Art and Animation (DAA) Curriculum<br>3D Modeling Concentration | | |
|---|---|---|
| **Core Courses - 36 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART100 | 2D Design 1 | 3 |
| ART105 | Color Theory | 3 |
| DAA106 | Digital Imaging Concepts | 3 |
| ART110 | Sketching | 3 |
| ART115 | Figure Drawing 1 | 3 |
| ART212 | Perspective and Rendering | 3 |
| DAA240 | Introduction to 3D Modeling | 3 |
| DAA244 | Introduction to 3D Animation Principles | 3 |
| CS100 | Introduction to Scripting: Python | 3 |
| DAA480 | Portfolio 1 | 3 |
| DAA 476 or DAA483 | Animated Film Production or MediaWorks | 3 |
| DAA474 or DAA476 or DAA477 or DAA483 or DAA485 | Animated Film Pre-Production or Animated Film Production or Animated Film Post-Production or MediaWorks or Portfolio 2 | 3 |
| **3D Modeling Concentration Courses - 36 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART230 | Introduction to Sculpture | 3 |
| DAA250 | Digital Sculpture | 3 |
| DAA267 | Character Rigging | 3 |
| DAA245 | Texturing | 3 |
| DAA248 | Lighting and Layout 1 | 3 |
| DAA340 | Modeling 1 | 3 |
| DAA345 | Modeling 2 | 3 |
| DAA370 | Concept Design | 3 |
| DAA440 | Modeling 3 | 3 |
| DAA326 or DAA442 | Advanced Texturing or Advanced Lighting and Layout | 3 |
| GAM250 | Game 3D Asset Creation | 3 |
| GAM370 | Environment Art | 3 |
| **General Education Courses - 45 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG105 | Critical Reading, Thinking and Writing | 3 |
| ENG250 | Speech and Oral Communications | 3 |
| HUM100 | Disruptive Imagination | 3 |
| HUM400 | Research and Writing Capstone Project | 3 |
| MATH112 | College Algebra | 3 |
| | Arts / Humanities Choice 1 | 3 |
| | Arts / Humanities Choice 2 | 3 |
| | Physical or Biological Sciences Choice 1 | 3 |
| | Physical or Biological Sciences Choice 2 | 3 |
| | Social Sciences Choice 1 | 3 |
| | Social Sciences Choice 2 | 3 |
| | Social Sciences Choice 3 | 3 |
| | 300+ Level Arts & Sciences Choice | 3 |
| | Written Communication Choice | 3 |
| **Electives - 6 credits** | | |
| **Total 123 Credits** | | |

| BA in Digital Art and Animation (DAA) Curriculum<br>Entertainment Design Concentration | | |
|---|---|---|
| **Core Courses - 36 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART100 | 2D Design 1 | 3 |
| ART105 | Color Theory | 3 |
| DAA106 | Digital Imaging Concepts | 3 |
| ART110 | Sketching | 3 |
| ART115 | Figure Drawing 1 | 3 |
| ART212 | Perspective and Rendering | 3 |
| DAA240 | Introduction to 3D Modeling | 3 |
| DAA244 | Introduction to 3D Animation Principles | 3 |
| CS100 | Introduction to Scripting: Python | 3 |
| DAA480 | Portfolio 1 | 3 |
| DAA 476 or DAA483 | Animated Film Production or MediaWorks | 3 |
| DAA474 or DAA476 or DAA477 or DAA483 or DAA485 | Animated Film Pre-Production or Animated Film Production or Animated Film Post-Production or MediaWorks or Portfolio 2 | 3 |
| **Entertainment Design Concentration Courses - 36 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART210 | Figure Drawing 2 | 3 |
| DAA245 | Texturing | 3 |
| DAA250 | Digital Sculpture | 3 |
| DAA270 | Illustration 1 | 3 |
| DAA264 | Drawing Animation 1 | 3 |
| DAA320 | Digital Painting | 3 |
| DAA340 | Modeling 1 | 3 |
| DAA370 | Concept Design | 3 |
| DAA310 | Storyboarding | 3 |
| DAA221 | Editing and Motion Graphics | 3 |
| DAA425 | Advanced Motion Graphics | 3 |
| DAA435 | Matte Painting | 3 |
| **General Education Courses - 45 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG105 | Critical Reading, Thinking and Writing | 3 |
| ENG250 | Speech and Oral Communications | 3 |
| HUM100 | Disruptive Imagination | 3 |
| HUM400 | Research and Writing Capstone Project | 3 |
| MATH112 | College Algebra | 3 |
| | Arts / Humanities Choice 1 | 3 |
| | Arts / Humanities Choice 2 | 3 |
| | Physical or Biological Sciences Choice 1 | 3 |
| | Physical or Biological Sciences Choice 2 | 3 |
| | Social Sciences Choice 1 | 3 |
| | Social Sciences Choice 2 | 3 |
| | Social Sciences Choice 3 | 3 |
| | 300+ Level Arts & Sciences Choice | 3 |
| | Written Communication Choice | 3 |
| **Electives - 6 credits** | | |
| **Total 123 Credits** | | |

| BA in Digital Art and Animation (DAA) Curriculum<br>Technical Art Concentration | | |
|---|---|---|
| **Core Courses - 36 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART100 | 2D Design 1 | 3 |
| ART105 | Color Theory | 3 |
| DAA106 | Digital Imaging Concepts | 3 |
| ART110 | Sketching | 3 |
| ART115 | Figure Drawing 1 | 3 |
| ART212 | Perspective and Rendering | 3 |
| DAA240 | Introduction to 3D Modeling | 3 |
| DAA244 | Introduction to 3D Animation Principles | 3 |
| CS100 | Introduction to Scripting: Python | 3 |
| DAA480 | Portfolio 1 | 3 |
| DAA 476 or DAA483 | Animated Film Production or MediaWorks | 3 |
| DAA474 or DAA476 or DAA477 or DAA483 or DAA485 | Animated Film Pre-Production or Animated Film Production or Animated Film Post-Production or MediaWorks or Portfolio 2 | 3 |
| **Technical Art Concentration Courses - 36 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| DAA245 | Texturing | 3 |
| DAA248 | Lighting and Layout | 3 |
| DAA326 | Advanced Texturing | 3 |
| DAA267 | Character Rigging | 3 |
| DAA340 | Modeling 1 | 3 |
| DAA325 or DAA442 | Advanced Character Rigging or Advanced Lighting and Layout | 3 |
| DAA358 | Dynamics | 3 |
| DAA400 | Compositing and Special Effects | 3 |
| CS189 | Object-Oriented Programming with Python | 3 |
| SWE449 | Tools Programming | 3 |
| MATH215 | Mathematics for Computer Graphics | 3 |
| GAM430 | Real-Time Visual Effects | 3 |
| **General Education Courses - 45 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG105 | Critical Reading, Thinking and Writing | 3 |
| ENG250 | Speech and Oral Communications | 3 |
| HUM100 | Disruptive Imagination | 3 |
| HUM400 | Research and Writing Capstone Project | 3 |
| MATH112 | College Algebra | 3 |
| | Arts / Humanities Choice 1 | 3 |
| | Arts / Humanities Choice 2 | 3 |
| | Physical or Biological Sciences Choice 1 | 3 |
| | Physical or Biological Sciences Choice 2 | 3 |
| | Social Sciences Choice 1 | 3 |
| | Social Sciences Choice 2 | 3 |
| | Social Sciences Choice 3 | 3 |
| | 300+ Level Arts & Sciences Choice | 3 |
| | Written Communication Choice | 3 |
| **Electives - 3 credits** | | |
| **Total 123 Credits** | | |

# Audio and Music Technology (AMT) Department

## BS in Digital Audio Technology (DAT)

The BS in Digital Audio Technology (DAT) degree program introduces students to the broad discipline of music and audio production, from music composition and recording through to digital sound design and interactive audio applications. This highly technical and hands-on program covers principles of sound synthesis, music and acoustics, and applies that theory in collaborative and individual recording and production projects. Students are immersed in a recording studio environment as well as purely digital production pipelines. Projects are often interdisciplinary, with teams of students from different programs at Cogswell working on realistic productions for audio and screen-based projects, in linear and interactive media.

**Program Learning Outcomes**

Graduates in BS in Digital Audio Technology (DAT) program will:

- **DAT PLO1:** Articulate and apply key audio, musical, and sound design principles and practices.
- **DAT PLO2**: Execute individual audio works from concept to delivery according to the industry standards.
- **DAT PLO3:** Demonstrate technical skill and efficiency in a range of audio production techniques relevant to a successful career in audio industry.
- **DAT PLO4**: Employ diverse aesthetic principles to produce engaging content for audio or multimedia projects.
- **DAT PLO5:** Work collaboratively in group projects and demonstrate professionalism and ethical conduct in a development team.
- **DAT PLO6:** Demonstrate creativity and curiosity through research, analysis and synthesis of information from various sources.

| BS in Digital Audio Technology (DAT) Curriculum | | |
|---|---|---|
| **Core Courses - 81 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS110 | Principles of Management | 3 |
| DAT103 | Music Theory | 4 |
| DAT104 | Audio, Technology, and Innovation | 4 |
| DAT111 | Desktop Production Fundamentals | 4 |
| DAT116 | Desktop Audio Production | 4 |
| DAT204 | Songwriting | 4 |
| DAT211 | Digital Sound Synthesis | 4 |
| DAT213 | Introduction to Game Audio | 4 |
| DAT214 | Live Sound for Virtual Events | 3 |
| DAT221 | Studio Recording Techniques | 4 |
| DAT239 | Principles of Room Acoustics | 4 |
| DAT281 | Audio & Music Industry Business Principles | 3 |
| DAT321 | Studio Mixing Techniques | 4 |
| DAT327 | Sound Design | 4 |
| DAT328 | Advanced Audio Production | 3 |
| DAT331 | Programming for Audio Production | 3 |
| DAT335 | Music Perception & Cognition | 3 |
| DAT340 | Film Scoring | 3 |
| DAT342 or DAT355 | Interactive Game Composition or Game Audio Implementation | 3 |
| DAT405 | The Ultimate Electronic Music Production | 4 |
| DAT485 | Digital Audio Technology Portfolio | 3 |
| RWPS480 | Capstone Project 1 | 3 |
| RWPS485 | Capstone Project 2 | 3 |
| **General Education Courses - 30 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Oral Communication | 3 |
| HUM100 | Disruptive Imagination | 3 |
| MATH112 | College Algebra | 3 |
| SCI101 | Basic Physics 1 | 3 |
| SCI102 | Basic Physics 2 | 3 |
| | Arts / Humanities Choice | 3 |
| | Social Sciences Choice | 3 |
| | 300 Level Arts & Sciences Choice | 3 |
| | 400 Level Arts & Sciences Capstone Choice | 3 |
| **Electives - 9 Credits** | | |
| **Total 120 Credits** | | |

# Game Design and Development (GDD) Department

## Degrees in Game Design and Development (GDD)

The Game Design and Development degree programs at the University of Silicon Valley best exemplify the intersection of engineering and art for games and various forms of interactive technology. As the market for computer games and gamification demands visually high detail with fun, interactive, compelling stories, and dynamic gameplay, there is a need for highly skilled people with specialized expertise. The Game Design and Development Department offers two degree programs which represent the two sides of game development teams. The BA in Game Art (GA) degree program is focused on art and content creation. The BS in Game Engineering (GE) degree program is focused on engineering and the more technical aspects of game creation.

## BA in Game Art (GA)

The BA in Game Design Art (GA) students will graduate with education in the creative aspects of game design. Students within the GA program focus on topics such as 2D art, 3D art, level design, storytelling, and team-oriented project creation for multiple platforms. Students in the GA Game Writing concentration learn game and level design while taking a deep dive into the narrative side of game development. GA classes provide many opportunities for collaborations with students in other programs at USV, including Digital Audio Technology and Game Engineering. Portfolio classes provide a format for bringing all elements of a concept to the delivery pipeline as students collaborate on multidisciplinary teams to complete real world projects. Students learn to work on teams that mirror real development teams consisting of artist, writers, engineers, audio specialists, and management.

### Program Learning Outcomes

Graduates in the Game Design and Development (GDD) programs will:

- **GA PLO1:** Articulate and demonstrate game design principles and best practices through the development of engaging, interactive media.
- **GA PLO2**: Develop and express a unique aesthetic and demonstrate clear comprehension of visual design principles.
- **GA PLO3**: Implement, test, and critique user-centered design experiences and interfaces within interactive media.
- **GA PLO4:** Collaborate effectively and ethically as part of multidisciplinary projects and demonstrate professionalism in diverse team environments.
- **GA PLO5**: Demonstrate a career-ready understanding of game design and production through a published portfolio and professional identity.

### Game Writing Concentration

The Game Writing concentration of the BA in Game Art (BA) program immerses students in the narrative side of game design and development. It emphasizes a strong foundation in traditional storytelling concepts – including story structure, character development and world-building – then focuses on the best methods of applying these principles to the interactive game space. Students explore unique narrative elements such as player agency, dynamic dialogue, branching storylines and others, learning to create engaging, interactive stories that could only be experienced in a video game.

| BA in Game Art (GA) Curriculum | | |
|---|---|---|
| **Core Courses - 75 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART102 | Principles of Drawing & Rendering | 4 |
| ART103 | Elements of Visual Design | 4 |
| ART115 | Figure Drawing 1 | 3 |
| CS101 | Fundamentals of Computing | 4 |
| DAA101 | Foundations of Digital Art for Production | 4 |
| DAA244 | Introduction to 3D Animation Principles | 3 |
| GAM255 | Modeling 1 | 4 |
| GAM265 | Texture & Lighting | 4 |
| GAM310 | Character Rigging | 4 |
| GAM101 | Foundations of Interactive Design | 4 |
| GAM135 | Game Studio 1: Production Pipeline | 3 |
| GAM200 | Foundations of Interactive Sound Design | 4 |
| GAM220 | Introduction to Game Storytelling | 3 |
| GAM231 | Introduction to Game Engines | 4 |
| GAM233 | Level Design for Single Player Games | 3 |
| GAM236 | Game Studio 2: Interactive Design | 3 |
| GAM300 | Game 3D Asset Creation | 4 |
| GAM365 | Environment Art | 4 |
| GAM400 | Game Studio 3: Portfolio | 3 |
| RWPS480 | Senior Capstone Project 1 | 3 |
| RWPS485 | Senior Capstone Project 2 | 3 |
| **General Education Courses - 30 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Oral Communication | 3 |
| HUM100 | Disruptive Imagination | 3 |
| HUM228 | Videogames and Society | 3 |
| HUM470 | Silicon Valley Challenge | 3 |
| MATH112 | College Algebra | 3 |
| MATH114 | Trigonometry | 3 |
| | Physical Science Choice | 3 |
| | Social Sciences Choice | 3 |
| | 300 Level Arts & Sciences Choice | 3 |
| **Program Approved Courses (PAC) - 15 Credits** | | |
| **Total 120 Credits** | | |

| BA in Game Art (GA) Curriculum<br>Game Writing Concentration | | |
|---|---|---|
| **Core Courses - 75 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART102 | Principles of Drawing & Rendering | 4 |
| ART103 | Elements of Visual Design | 4 |
| ART115 | Figure Drawing 1 | 3 |
| CS101 | Fundamentals of Computing | 4 |
| DAA101 | Foundations of Digital Art for Production | 4 |
| DAA244 | Introduction to 3D Animation Principles | 3 |
| GAM255 | Modeling 1 | 4 |
| GAM265 | Texture & Lighting | 4 |
| GAM310 | Character Rigging | 4 |
| GAM101 | Foundations of Interactive Design | 4 |
| GAM135 | Game Studio 1: Production Pipeline | 3 |
| GAM200 | Foundations of Interactive Sound Design | 4 |
| GAM220 | Introduction to Game Storytelling | 3 |
| GAM231 | Introduction to Game Engines | 4 |
| GAM233 | Level Design for Single Player Games | 3 |
| GAM236 | Game Studio 2: Interactive Design | 3 |
| GAM300 | Game 3D Asset Creation | 4 |
| GAM365 | Environment Art | 4 |
| GAM00 | Game Studio 3: Portfolio | 3 |
| RWPS480 | Senior Capstone Project 1 | 3 |
| RWPS485 | Senior Capstone Project 2 | 3 |
| **Game Writing Concentration Courses – 15 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG227 | Scriptwriting | 3 |
| ENG228 | Creative Writing | 3 |
| GAM260 | Game Writing 1 | 3 |
| GAM340 | Game Writing 2 | 3 |
| GAM420 | Narrative Design and Leadership | 3 |
| **General Education Courses - 30 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Oral Communication | 3 |
| HUM100 | Disruptive Imagination | 3 |
| HUM228 | Videogames and Society | 3 |
| HUM470 | Silicon Valley Challenge | 3 |
| MATH112 | College Algebra | 3 |
| MATH295 | Discrete Mathematics | 3 |
| | Physical Science Choice | 3 |
| | Social Sciences Choice | 3 |
| | 300 Level Arts & Sciences Choice | 3 |
| **Total 120 Credits** | | |

## BS IN GAME ENGINEERING (GE)

The BS in Game Engineering (GE) students will graduate with knowledge in game design, game programming languages, tools programming, scripting languages and software development on the engineering side. These skills are essential in the computer gaming, simulation, visualization, and game engine programming industries. Since the industry also places high importance on teamwork, USV's coursework offers numerous opportunities to participate in multidisciplinary team projects. Students learn to work in groups mirroring real development teams that consist of artists, engineers, audio, and management.

### PROGRAM LEARNING OUTCOMES

Graduates in the Game Design and Development (GDD) programs will:

- **GE PLO1:** Articulate and demonstrate game design principles and best practices through the development of engaging, interactive media.
- **GE PLO2**: Analyze and solve complex game engineering problems by applying principles of logic, programming, science, and mathematics.
- **GE PLO3**: Implement, test, and critique user-centered design experiences and interfaces within interactive media.
- **GE PLO4:** Collaborate effectively and ethically as part of multidisciplinary projects and demonstrate professionalism in diverse team environments.
- **GE PLO5**: Demonstrate a career-ready understanding of game design and production through a published portfolio and professional identity.

| BS in Game Engineering (GE) Curriculum | | |
|---|---|---|
| **Core Courses - 75 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| CS101 | Fundamentals of Computing | 4 |
| CS111 | Code 0: Introduction to Programming and Logic | 4 |
| CS211 | Code 1: Intermediate Programming | 4 |
| CS297 | Data Structures: Introduction to Efficient Data Storage | 3 |
| CS313 | C# Programming | 3 |
| CS325 | Algorithms: Memory and CPU Efficient Computing | 3 |
| CS360 | Database Management Systems | 4 |
| CS447 | GUI and Graphics Programming | 3 |
| DAA101 | Foundations of Digital Art for Production | 4 |
| GAM101 | Foundations of Interactive Design | 4 |
| GAM135 | Game Studio 1: Production Pipeline | 3 |
| GAM200 | Foundations of Interactive Sound Design | 4 |
| GAM220 | Introduction to Game Storytelling | 3 |
| GAM231 | Introduction to Game Engines | 4 |
| GAM233 | Level Design for Single Player Games | 3 |
| GAM236 | Game Studio 2: Interactive Design | 3 |
| GAM314 | Gameplay Programming | 3 |
| GAM400 | Game Studio 3: Portfolio | 3 |
| MATH295 | Discrete Mathematics | 3 |
| MATH315 | Mathematics for Computing | 4 |
| RWPS480 | Senior Capstone Project 1 | 3 |
| RWPS485 | Senior Capstone Project 2 | 3 |
| **General Education Courses - 30 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Oral Communication | 3 |
| HUM100 | Disruptive Imagination | 3 |
| HUM228 | Videogames and Society | 3 |
| HUM470 | Silicon Valley Challenge | 3 |
| MATH112 | College Algebra | 3 |
| MATH114 | Trigonometry | 3 |
| | Physical Science Choice | 3 |
| | Social Sciences Choice | 3 |
| | 300 Level Arts & Sciences Choice | 3 |
| **Program Approved Courses (PAC) - 15 Credits** | | |
| **Total 120 Credits** | | |

## VIRTUAL REALITY AND AUGMENTED REALITY (VRAR)

The Virtual Reality and Augmented Reality (VRAR) certificate program addresses the development of content for virtual reality (VR) and augmented reality (AR). VR is a new human-user interaction paradigm utilizing computer-generated immersive environments. AR overlays interaction with the physical world with computer-generated three-dimensional visual and auditory sensory information to provide an enriched experience without excluding the surrounding environment.

This program is a six-course set of specialized classes that will be offered weekday evenings and weekends to accommodate the schedules of industry professionals. The purpose of this certificate program is to provide professionals in the computer graphics industry knowledge and skills needed to create VR or AR content.

| Virtual Reality / Augmented Reality (VRAR) Curriculum | |
|---|---|
| **Course Number** | **Course Name** |
| VRAR400 | Perception, Cognition and Presence in VR/AR |
| VRAR450 | Human Computer Interface and Interaction Design |
| VRAR500 | VR/AR Design Principles 1 |
| VRAR525 | VR/AR Design Principles 2 |
| VRAR550 | VR/AR Studio Project 1 |
| VRAR555 | VR/AR Studio Project 2 |

# Arts and Sciences (A&S) Department

The mission of the Arts & Sciences (A&S) Department at the University of Silicon Valley is to provide students with the following: a basic knowledge of key subjects as a foundation for further learning, the written and oral communication skills necessary to function in a professional environment, the experience to find and evaluate sources of required information, the critical thinking and quantitative analysis skills to make reasoned judgments, the ethical awareness to make principled decisions as responsible members of a global society**,** and the inspiration to continue exploring new areas of interest for the rest of their lives.

## General Education Course Requirements

| PREPARATORY COURSES | | | |
|---|---|---|---|
| *Preparatory Courses may be required in certain subjects. These course credits DO NOT count towards degree completion* | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| ENG050 | Grammar and Composition | 3 | Placement Exam |
| ENG060 | Writing Support Lab | 2 | Placement Exam |
| MATH050 | Basic Algebra | 3 | Placement Exam |
| MATH060 | Success in College Algebra | 2 | Placement Exam |
| DAT050 | Music Fundamentals | 3 | Placement Exam |
| **BASIC SKILLS** | | | |
| **CRITICAL THINKING** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| HUM100 | Disruptive Imagination | 3 | None |
| **WRITTEN COMMUNICATION** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| ENG100 | English Composition | 3 | ENG050 or Placement Exam |
| **MATHEMATICS AND QUANTITATIVE REASONING** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| MATH112 | College Algebra | 3 | MATH050 or Placement Exam |
| **ORAL COMMUNICATION** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| ENG250 | Speech and Oral Communication | 3 | ENG100 |
| **ARTS and HUMANITIES** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| BUS111 | The Entrepreneurship Mindset | 3 | ENG100 |
| HUM120 | The Nature and History of Western Art | 3 | None |
| HUM122 | World Music | 3 | None |
| HUM225 | The Horror Film | 3 | ENG100 |
| HUM226 | Science Fiction Cinema | 3 | ENG100 |
| HUM227 | Film History | 3 | ENG100 |
| HUM228 | Video Games and Society | 3 | ENG100 |
| HUM230 | History of Animation | 3 | ENG100 |
| ENG280 | Apocalypse and The American Imagination | 3 | ENG100 |
| ENG285 | Visions of American Dystopias | 3 | ENG100 |
| ENG310 | Classics of Western Drama | 3 | ENG100 |
| HUM361 | Contemporary Ethical Issues | 3 | ENG100 |

| WRITTEN COMMUNICATION II | | | |
|---|---|---|---|
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| ENG220 | Technical and Professional Writing | 3 | ENG100 |
| ENG227 | Scriptwriting | 3 | ENG100 |
| ENG228 | Creative Writing | 3 | ENG100 |
| BUS290 | Creating Strategic Plans | 3 | ENG100 |
| ENG301 | Writing to be Read | 3 | ENG250 |
| **SOCIAL SCIENCES** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| SSC180 | Introduction to Psychology | 3 | None |
| SSC227 | Architecture and World Societies | 3 | ENG100 |
| SSC225 | Fashion and Culture | 3 | ENG100 |
| HUM200 | History of the Modern World | 3 | ENG100 |
| SSC200 | U.S. Government | 3 | ENG100 |
| SSC332 | Global Political Economics | 3 | ENG100 |
| SSC380 | The Silicon Valley Ecosystem | 3 | ENG100 and HUM100 |
| **MATHEMATICS AND PHYSICAL SCIENCES** | | | |
| **MATHEMATICS AND QUANTITATIVE REASONING** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| MATH114 | Trigonometry | 3 | MATH112 |
| MATH143 | Calculus 1 | 4 | MATH114 or Higher |
| MATH145 | Calculus 2 | 4 | MATH143 |
| MATH215 | Mathematics for Computer Graphics | 3 | DAA244 and CS106 and MATH114 or Higher |
| MATH295 | Discrete Mathematics | 3 | MATH114 or Higher |
| MATH315 | Mathematics for Computing | 4 | MATH295 |
| **PHYSICAL AND BIOLOGICAL SCIENCES** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| SCI101 | Basic Physics 1 | 3 | MATH112 or Higher |
| SCI102 | Basic Physics 2 | 3 | MATH112 or Higher |
| SCI110 | Science of Motion: Humans, Animals, Objectives | 3 | MATH112 or Higher |
| SCI120 | Basic Biology | 3 | None |
| SCI125 | Introduction to Astronomy | 3 | None |
| SCI130 | Basic Concepts of Anatomy and Physiology | 3 | MATH112 or Higher |
| SCI145 | College Physics 1 | 4 | MATH143 |
| SCI245 | College Physics 2 | 4 | SCI145 |
| **ARTS and SCIENCES CAPSTONE COURSES** | | | |
| **Course Number** | **Course Name** | **Credits** | **Prerequisites** |
| HUM400 | Research and Writing Capstone Project | 3 | Senior Status |
| HUM470 | Silicon Valley Challenge | 3 | Senior Status |

# COURSE DESCRIPTIONS

## COURSE NUMBERING TAXONOMY

Courses are designated with a number, which indicates the level of the course:

- 000—099 Preparatory Coursework
- 100–299 Lower-division courses primarily for freshman and sophomores
- 300–499 Upper-division courses primarily for juniors and seniors
- 500 or higher Graduate Courses

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| ART100 | 2D Design | 3 | None |
| Students are introduced to the principles of two-dimensional image making with an emphasis on visual communication. They utilize the elements and principles of design while working with traditional and digital media. Students will analyze the form and function of design, various principles of perception and Gestalt theory. The importance of presentation and craftsmanship is emphasized. | | | |
| ART102 | Principles of Drawing & Rendering | 4 | None |
| This course provides students with a structured approach to drawing. Students learn the skills and techniques of representational drawing from observation. Fundamental skills of rendering, perspective, and composition are developed. Analysis of drawings, critiques and classroom discussions build vocabulary and enrich the students' understanding of drawing. | | | |
| ART103 | Elements of Visual Design | 4 | None |
| This course provides students with an introduction to fundamental elements of visual design and color theory. Students will work with various media to create works that put the principles of color, shape, line, proportion and other elements of composition and visual communication. | | | |
| ART105 | Color Theory | 3 | None |
| This course is an introduction to color theory. Color properties and color relationships are studied through formal exercises and creative thinking. Additive and subtractive color principles are addressed using a variety of media. Students build a vocabulary for analyzing and identifying color phenomena. Color use in a variety of fields is examined to understand the application of color theory. | | | |
| ART108 | Introduction to Photography | 3 | ART100 |
| This course serves as an introduction to traditional photographic image making with the addition of a digital perspective. Through a combination of lectures, demonstrations, assignments, and critiques students learn the technical issues of photography and learn to control the photographic medium. Students examine various photographic approaches and philosophies to explore how photographic imagery can be used for personal artistic expression. | | | |
| ART110 | Sketching | 3 | None |
| This course introduces the fundamentals of drawing. Students learn basic skills and techniques for drawing from direct observation using subjects such as still life, landscape, and architecture. Perceptual skills and the use of line, shade, perspective, and composition are developed. Analysis of drawings, critiques and classroom discussions build vocabulary and enrich the students' understanding of drawing. | | | |
| ART115 | Figure Drawing 1 | 3 | ART110 |
| Students will study life-drawing from unclothed models. The course addresses the structure and anatomy of the human form, proportion, volumes, light and shade. Students will develop a basic understanding of the figure in motion. Drawing skills developed in previous courses are further refined by using a variety of drawing media. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| ART120 | Traditional Painting | 3 | ART105 and ART110 |
| This course in painting emphasizes perception development through specific painting exercises. Students will develop an orderly approach and disciplined perception. Students learn about painting materials and their specific uses. This course increases the student's understanding of color theory. DAA320 Digital Painting may be used to satisfy course requirement in lieu of ART120 Traditional Painting for certain educational programs. | | | |
| ART210 | Figure Drawing 2 | 3 | ART115 |
| This course serves as a continuation of Figure Drawing 1. Students study life with professional unclothed models. Students study techniques in contour and gesture drawing. The course addresses advanced human anatomy and structure of the human form. Students refine their drawing skills with techniques in proportion, volume, light and shade using a variety of drawing media. | | | |
| ART212 | Perspective and Rendering | 3 | ART110 |
| This course provides an in-depth study of perspective and the application of light and dark values to convey a sense of form. Students learn to create core shadows and shadow projections to achieve believable grounding in space. The course covers multiple visualization techniques to create the desired shape and material finish. | | | |
| ART230 | Introduction to Sculpture | 3 | ART115 |
| In this course, students develop their understanding of three-dimensional gesture and form. Students study concept development, expression, and spatial concepts of representational 3D space. Coursework includes the exploration of primary, secondary, and tertiary form for humans, animals, and environments. Students learn the techniques and tools used to create representational sculpture in traditional clay media. | | | |
| ART299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Art. May be used as elective and repeated as topic changes. | | | |
| ART330 | Figure Sculpture | 3 | ART230 |
| This course develops the student's understanding of the gestural, constructive, and anatomical structures of the human figure. Students apply this knowledge to unique character and figurative sculpture in traditional sculpting media. Coursework includes advanced study of human skeletal and muscle systems. ART330 Figure Sculpture may be used to satisfy course requirement in lieu of ART335 Portrait Sculpture for certain educational programs. | | | |
| ART335 | Portrait Sculpture | 3 | ART230 |
| In this course, students explore portrait sculpture for character development. The emotive qualities of human expression are sculpted using Plastalina modeling clay. Students focus on the anatomy of the head and neck as critical to the development of emotionally convincing characters. | | | |
| ART499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Art. May be used as elective and repeated as topic changes. | | | |
| BUS105 | Financial Accounting | 3 | None |
| Students study corporate financial accounting concepts and theories. Coverage involves the process of analyzing, processing, interpreting and ethically communicating financial information to aid in decision making. | | | |
| BUS110 | Principles of Management and Entrepreneurship | 3 | None |
| Students develop skills and knowledge needed to successfully manage businesses and organizations. This course is an intensive and comprehensive introductory study and analysis of the processes required to make effective business decisions in the areas of marketing, operations, human resources management, finance, business viability and execution of strategies. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| BUS111 | The Entrepreneurship Mindset | 3 | None |
| In this course, students learn about specific human behaviors and mindset that enable entrepreneurs to motivate, mobilize and influence others as a positive change maker in an organization. Students develop an understanding how the entrepreneurial mindset creates value for stakeholders and society. | | | |
| BUS121 | Digital Technology and Communications | 3 | None |
| Modern organizations rely on technology and use digital tools to communicate effectively. This course is designed to provide students with an understanding of the impact of digital technologies and media in business communication. | | | |
| BUS125 | Business Law | 3 | None |
| This course provides students with foundational information about the U.S. legal system, dispute resolutions and their impact on businesses. Major content areas will include general principles of law, legal types and structures of businesses, relationship between law and ethics, intellectual property, trademark, contracts, and business law. | | | |
| BUS141 | Principles of Marketing | 3 | None |
| Students examine marketing concepts and apply these using traditional and digital media tools. Students are introduced to strategic marketing through segmentation, positioning, market analysis, marketing mix, metrics, as well as the social and ethical responsibilities. | | | |
| BUS150 | Principles of Economics | 3 | MATH112 or MATH115 or MATH116 |
| Students explore concepts of supply and demand, purchasing behavior, circular flow, interest rates, inflation, unemployment, supply and demand curves, and factors of production, international trade, monetary and fiscal policy. Students are introduced to the basic tools of economic forecasting. | | | |
| BUS210 | Global Entrepreneurship and Innovation | 3 | BUS110 |
| Entrepreneurs create value through their ventures not only locally but globally. This course examines how entrepreneurs adapt to and succeed in a global economy. | | | |
| BUS220 | Advanced Cost Management | 3 | BUS105 |
| This course builds on the knowledge, skills and values established I introductory management accounting courses. The course will broaden and deepen students' knowledge and competencies in applying management accounting techniques to help in planning and decision-making processes. | | | |
| BUS230 | Contracts and Procurement | 3 | BUS110 or BUS141 |
| Students learn the basic foundations and processes of the contract management process, contracts, and legal issues, contracting methods, roles and responsibilities of the negotiating team members, and e-procurement. This course develops students' skills in investigating contracts as a means for individuals and companies to do business. The course will examine actions winning companies are utilizing to secure strategic partnerships, manage expectations and build trust between organizations. | | | |
| BUS235 | Leading Teams | 3 | BUS110 |
| Students learn and explore multiple aspects of collaboration and team work as they create and test their own leadership styles. Team building is explored through case studies and role plays of team formation, brainstorming and collaboration. | | | |
| BUS241 | Consumer and Marketing Behavior | 3 | BUS141 and MATH112 or higher |
| Students are introduced to the evolving field of consumer behavior, which includes information from social psychology, sociology, and cultural anthropology, sociology, and cultural anthropology. This course involves examination of the important concepts underlying consumer behavior; how and why consumers make purchase decisions, how they think, feel and act before, during and after the purchase. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| BUS245 | Market Research | 3 | BUS141 and MATH112 or higher |
| Students study the concepts and techniques useful in the solution of marketing problems and in the identification of marketing opportunities. This course emphasizes the design of information acquisition, evaluation, and interpretation of research findings. | | | |
| BUS246 | Business Intelligence and Analytics | 3 | BUS110 and MATH112 or HIGHER |
| This course introduces the fundamental quantitative methods using statistical software and spreadsheets. Students learn the importance of using modern technology tools for effective model building and decision-making. | | | |
| BUS250 | Finance | 3 | BUS110 and MATH112 or HIGHER |
| Students learn how to measure, analyze, and manage business through the creation and collection of financial data. Students will learn the fundamentals of decision making on the basis of financial statements and key return metrics. | | | |
| BUS270 | Project Management | 3 | ENG100 |
| Students learn the discipline of project management. Students will become fluent in project management tools through the creation and management of timetables, schedules, project completion, progress tracking and results evaluation. | | | |
| BUS275 | Managerial Accounting | 3 | BUS105 |
| Students learn the managerial applications of accounting information. Students are introduced to traditional cost behavior concepts, cost-volume-profit (CVP) analysis, product costing, basic cost analysis, decision definitions, relevant information formatting, and how to use this information to make informed decisions to achieve the business goals of the organization. | | | |
| BUS280 | Human Resources Management | 3 | BUS235 |
| Students are familiarized with major topics in Human Resource Management. The course highlights important challenges facing managers and employees in the modern business environment. | | | |
| BUS290 | Creating Strategic Plans | 3 | BUS110 and ENG100 or Faculty Approval |
| Students gain the tools necessary to produce powerful business and project plans. The course will focus on achieving rhetorical effectiveness through a consideration of communication styles and strategic writing process. | | | |
| BUS299 | Special Topic | 3 | As Appropriate |
| Course on a special topic in Business Management. May be used as an elective and repeated as topic changes. | | | |
| BUS310 | Advanced Project Management | 3 | BUS270 |
| Develop skills to effectively manage individual and portfolio projects. Students will translate and relate organizational mission and goals into strategic decisions with plans for implementation and resource allocation. | | | |
| BUS340 | Social Media, Engagement and Analytics | 3 | BUS110 or BUS141 |
| Students will study social media, social engagement and various social media value and funding models for a range of entities, including not-for-profits and social enterprises as well as commercial organizations. Principles and practice of effective social and conventional media engagement are presented, as well as techniques for measuring and analyzing metrics. | | | |
| BUS346 | Data and Decisions | 3 | BUS110 and BUS246 |
| Students understand the role of data and how statistical analysis improve decision-making. The course will draw on a variety of business and social science applications. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| BUS350 | Project Performance and Quality Assurance | 3 | BUS270 |
| Students learn about the current trends and best practices in quality management. The course introduces students to performance excellence approaches in manufacturing or service organizations. The course will cover the fundamental quality management principles, project performance and quality assurance criteria, as well as their historical foundations. | | | |
| BUS410 | Strategic Brand Management | 3 | BUS141 and BUS340 |
| Students learn concepts, models, and methods to address building and maintaining strong brands. Students explore brand equity as well as the management of brands across multiple market segments. | | | |
| BUS415 | Project Risk Management | 3 | BUS270 and BUS310 |
| Students learn risk management in the project environment and enhance the understanding of how these factors may affect the project both positively and negatively. This course is designed to provide students with the processes, tools, and techniques they need to develop teams and workable project risk management plans. | | | |
| BUS430 | Fundamentals of E-Commerce | 3 | BUS121 and BUS141 |
| Students will become familiar with publishing software, server technologies and transaction systems. The goal of this course is to provide the students with an implementation perspective of how technology supports digital media development and distribution. | | | |
| BUS440 | Business Storytelling and Brand Development | 3 | BUS121 and BUS141 and ENG100 |
| Students are trained on the ability both to recognize and communicate effectively in speech or writing in order to garner the enthusiasm and support of others. Provides practice in presenting oneself, one's organization, and one's ideas orally, in writing, social media and marketing materials. | | | |
| BUS450 | Operations and Technology | 3 | BUS110 and BUS246 |
| Students will explore the design, scheduling and control of systems that efficiently use human and capital inputs to create products and services for companies and consumers. Coursework will explore the growth cycles of a company and gain an understanding of different issues, options, and strategies to consider as the company reaches each growth cycle. | | | |
| BUS490 | Strategic Management | 3 | BUS141 and BUS250 and BUS280 |
| Students develop skills in identifying problems, evaluating possible solutions and making recommendations in situations representative of real companies. Students simulate the role of managers of the organization. | | | |
| BUS499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Business Management. May be used as an elective and repeated as topic changes. | | | |
| BUS510 | Business Analysis | 3 | None |
| Successful project delivery in organizations often start with a comprehensive understanding of stakeholder requirements based on evidence and data. Once these requirements are identified and validated, recommendation of solutions and implementation strategies follow. This course provides an introduction to the foundations of business analysis, and the processes and methods used to conduct needs assessment, identify stakeholders, document requirements, and facilitate implementation. Students will develop skills to make better and more informed decisions to achieve improved business and organization outcomes. | | | |
| BUS520 | Risk Analysis and Management | 3 | None |
| Risk management is increasingly becoming an important function in leading projects and organizations. An effective risk management process helps companies mitigate losses, improve overall performance, and increase employee engagement. This course is designed to provide students with a thorough understanding of risk analysis and management. Students learn various industry techniques, methods and models enabling them to anticipate, assess, minimize, manage, and communicate risks. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| BUS575 | Fundamentals of Project Management | 3 | None |
| The course is designed for individuals who want to pursue a fundamental understanding of project management. The curriculum is focused on best project management practices guided by the PMI PMBOK (Project Management Body of Knowledge). Students develop industry-recognized project management skills needed to lead and supervise complex projects, manage resources, and communicate effectively with project stakeholders. This course is also intended to prepare students for the PMP certification examination. For students who do not meet eligibility requirement for the PMP exam, this course is also a good preparation course for the CAPM certification exam. | | | |
| BUS576 | Essentials of Agile and Scrum Project Management | 3 | None |
| In this dynamic business environment, project managers are increasingly expected to utilize Agile and Scrum methodologies to manage complex, team-based projects. This course provides students a better understanding of these frameworks and goes beyond the technicalities of managing agile projects. Students develop valuable and marketable skills they can use to effectively deliver projects. This course is also designed to help students prepare for the PMI ACP (Project Management Institute Agile Certified Practitioner) examination. | | | |
| CS100 | Introduction to Scripting: Python | 3 | None |
| This class is a practical introduction to programming using the Python programming language. Topics include the concepts of declarative ("what") versus imperative ("how") programming, problem breakdown, and solution techniques. Basic subjects and terms in computer science will be introduced, such as data structures, efficiency of a program and object-oriented programming. Emphasis is put on the syntax of the programming language, and the process of starting with a problem and writing a program to solve it. Students will implement several small programming projects during the course. | | | |
| CS101 | Fundamentals of Computing | 4 | None |
| This course introduces students to the history of computing as well as fundamental computing concepts such as Boolean logic, data and data types, structured programming fundamentals, documentation and debugging. Students will learn to design and diagram software programs using flowcharts and pseudocode before implementing simple programming techniques in a development environment. Students will also be introduced to the basics of computer hardware and components, binary calculations, combinational and sequential circuits, and undertake basic research into computing technology and its relationship with human users. This course will also include content from the AWS Academy Cloud Foundations course and prepare students for the relevant AWS Academy examination. | | | |
| CS106 | Introduction to Scripting | 4 | None |
| This class is a practical introduction to programming using the scripting programming language. Topics include the concepts of declarative ("what") versus imperative ("how") programming, problem breakdown, and solution techniques. Basic subjects and terms in computer science will be introduced, such as data structures, efficiency of a program and object-oriented programming. Emphasis is put on the syntax of the programming language, and the process of starting with a problem and writing a program to solve it. Students will implement several small programming projects during the course. | | | |
| CS110 | C Programming | 4 | CS101 and MATH112 or higher |
| An introduction computer programming using the C programming language. Students learn practical hardware topics such as CPU, memory, disks, and files as well as lexical elements, operators, fundamental data types, flow of controls, functions, recursions, arrays, pointers, strings, bitwise operators, structures, union, and file manipulation. The standards of program development flow and structured programming paradigm are also covered. | | | |
| CS111 | Code 0: Introduction to Programming and Logic | 4 | CS101 and MATH112 or higher |
| In this course, students are introduced to the procedural computer programming paradigm, including a foundation in Boolean logic. Students learn practical hardware topics such as CPU, memory, disks, and files as well as lexical elements, operators, fundamental data types, flow of controls, functions, recursions, arrays, pointers, strings, bit-wise operators, structures, unions, file manipulation. Standards of program development flow and structured programming paradigm are also covered. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| CS115 | Web Programming: HTML5, CSS and JavaScript | 3 | None |
| An introduction to the internet, emergence of the web (World Wide Web, www). Students learn how websites work as well as the basic anatomy of a webpage, different tags/elements of HTML and their syntax and usage, and styling using CSS. Students are introduced to JavaScript and how to combine it with HTML5 and CSS to develop very useful and intelligent web pages/applications. Hands on web development provides practical insights into these concepts. | | | |
| CS130 | Introduction to Cybersecurity | 3 | CS111 |
| In this class, students are introduced to simple historical cryptosystems, Caesar cypher, scytal spartan cypher, egyption cryptosystems, basic substitution & permutation ciphers, one-time pad, and some hacking concepts. Students learn how these systems work in a puzzle solving fashion by sending cryptographic and plain text messages to each other. Students are introduced to the concepts & principles of ethical "white" hacking and study past and current articles and topics related to this. Interesting articles on malicious hacking may also be included as part of this course. Modern and current cryptography techniques are not covered in this course. | | | |
| CS135 | Studio 1 | 3 | CS111 |
| Student teams will work according to a detailed project brief to produce workable designs and software solutions to problems. Faculty will act as team leaders, producers or project managers depending on the requirements of the project. Student work will be presented at the end of semester, and a post-mortem reflection will develop critical thinking skills. | | | |
| CS189 | Object-Oriented Programming with Python | 3 | None |
| This class provides an overview of OOP (Object-Oriented Programming) techniques using Python. The Concepts of classes, objects, object managers, encapsulation, polymorphism, and inheritance are explored in depth. Students are introduced to these OOP concepts in a highly visual environment, using the pygame extension along with a library of pre-built user interface widgets. Students will work on a project making use of OOP techniques to build their software solutions. | | | |
| CS190 | Digital Systems | 3 | MATH143 |
| Students learn the basics of Boolean algebra and digital systems, logic, abstract logic gates, operations of flip-flops, Karnaugh maps and optimizations of digital circuits. | | | |
| CS200 | User Experience: Application Interface Design and Implementation | 3 | CS111 |
| Students learn the critical fundamental concepts and theory behind good user interface design. These interface design principles are taken into code where students learn a user interface framework, toolset, and language to implement interfaces. Students program and develop user interfaces that work on multiple platforms (web, pc, and/or mobile) using standard industry techniques and tools. The course may deploy frameworks such as Qt, JavaScript, React, Java, and other middleware or backend tools. | | | |
| CS205 | Internet of Things: RaspberryPi and Arduino Development | 4 | CS111 |
| In this course, students are exposed to the Internet of Things through application of development and programming on Raspberry Pi and/or Arduino devices. Students learn the importance and skills needed to properly deploy and develop software on these devices. Students learn the theory and get the development practice needed to prototype Internet of Things (IoT) solutions. | | | |
| CS211 | Code 1: Intermediate Programming | 4 | CS111 and MATH114 |
| This course introduces students to object-oriented programming languages, methods, and techniques. Students will develop a working knowledge of at least one object-oriented language, including: constructors and destructors, type conversion, friends overloading functions and operators, references, polymorphism, I/O streams, multiple inheritances, templates memory management and related techniques appropriate to an intermediate programmer. | | | |
| CS212 | Java Programming | 4 | CS111 |
| Students develop a working understanding of Java Programming and the object-oriented paradigm. Topics include primitive types, strings, classes, objects, methods, references, polymorphisms, inheritance, exception handling, streams and file I/O, arrays, vectors, and applets. Students are also introduced to multi-threaded programming. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| CS221 | LINUX Programming Environment | 3 | CS111 |
| Students learn the principles needed to program in the Linux environment. Through practical, hands-on programming, students develop an understanding of the structure of Linux file systems, shell programming, filters and Linux system calls. Other topics include standard I/O library, shell programming, awk programming language, and sed editor. | | | |
| CS235 | Studio 2 | 3 | CS135 and CS211 |
| Student teams will work according to a project brief to produce workable designs and software solutions to problems of intermediate complexity. Faculty will act as team leaders, producers or project managers depending on the requirements of the project. Teams will further develop technical and project-management skills, demonstrating greater independence than in CS135. Student work will be presented at the end of semester, and a post-mortem reflection will develop critical thinking skills. | | | |
| CS261 | Systems Architecture in the Cloud | 4 | CS101 and CS106 |
| This course introduces students to system architecture in a cloud-based context. Students will analyze different business system needs and follow a range of cloud-based best practices to design and compare potential solutions for each challenge. Students will focus on designing for manageability and performance of large-scale systems. This course will include content from the AWS Academy Cloud Architecting course and prepare students for the relevant AWS Academy examination. | | | |
| CS262 | Software Development in the Cloud | 4 | CS101 and CS106 |
| This course explores hands-on development and configuration of cloud-based software applications. Students will understand and implement design and development processes in a cloud platform and explore the principles of cloud computing. A range of common principles will be identified along with key features of the proprietary platform used in the course. This course will include content from the AWS Academy Cloud Developing course and prepare students for the relevant AWS Academy examination. | | | |
| CS263 | SysOps for Cloud Computing | 4 | CS101 and CS106 |
| This course introduces students to system operation concepts in a cloud-based environment. Students will learn best practices and design patterns in order to develop automatable and repeatable deployments of networks and systems in an industry-standard cloud environment. Students will analyze case studies to gain insight into infrastructure design and implementation. This course will include content from the AWS Academy Cloud Operations course and prepare students for the relevant AWS Academy examination. | | | |
| CS285 | C++ Programming: Object Oriented Programming | 4 | CS111 and MATH114 |
| Students learn the common features of C as well as C++. Objected Oriented features of C++. Constructors and Destructors. Type Conversions. Friends. Overloading functions and operators. References. Polymorphisms. I/O streams. Multiple inheritances. Templates. Memory Management. Students practice the structured programming paradigm as well as the objected oriented paradigm. | | | |
| CS295 | Data Structures and Algorithms | 4 | CS211 |
| Data Structures: Stacks. Queues. Linked lists. Circular linked lists. Double linked lists. Circular double linked lists. Binary search trees. Searching and sorting algorithms. Introduction to graph algorithms. Huffman codes, AVL trees. Hashing. B-trees. Students practice concepts of structured programming and discrete mathematical concepts in data structures and analysis of algorithms. | | | |
| CS297 | Data Structures: Introduction to Efficient Data Storage | 3 | CS211 |
| Efficient data performance is critical to good software development. In this course, students learn how to store data efficiently and the pros and cons of different data structures. Students quickly review the fundamental use and storage considerations of scalar data types. Students use object-oriented programming techniques to learn and implement abstract data types like stacks, queues, linked list, hash tables, binary search trees, huffman codes, and other tree-based data structures. Students gain the ability to know when, why, and where each data type should be used and their data storage characteristics for memory efficient software development. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| CS299 | Special Topic - Programming on Raspberry Pi | 3 | Faculty approval |
| This course will introduce you to programming on Single Board Computers. In the course of time, you will be familiar with Hardware (H/W), Software (S/W), Architecture, and Operating System (OS) concepts in the context of Raspberry Pi i3 (RPi3) and in general Single Computer Boards (SBCs) work. | | | |
| CS300 | Computers That Listen: Introduction to Natural Language Processing | 3 | CS211 and CS297 |
| In this course, students learn introductory concepts and technologies for natural language processing technology that allows computers to listen and understand speech. The course covers such topics as text classification, named entities recognitions, duplicates detection, sentiment analysis, summarization, and dialogue state tracking. Students learn about practical application of this natural language processing (NLP) technology to real problems. | | | |
| CS311 | Code 2: Advanced Programming | 4 | CS211 |
| This is an advanced class in object-oriented programming. Topics include multiple inheritance, virtual base class, virtual functions, smart pointers, run time type information, templatized data structures, generic programming, and concurrency. | | | |
| CS313 | C# Programming | 3 | CS211 |
| Program in C# programming language with object-oriented programming principles. Emphasis is placed on object-oriented principles including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug and implement objects using Visual Studio IDE at the beginning level. | | | |
| CS316 | Advanced Web Programming | 3 | CS211 or CS212 and CS115 |
| Students learn different JavaScript frameworks, Java servlets and architectural concepts of a web applications. Students also learn about security of web applications. | | | |
| CS320 | Operating Systems Concepts | 3 | CS221 and CS325 |
| Students learn how UNIX, LINUX, and Windows operating systems are designed. Students practice data structures in operating systems design. Topics include general multitasking operating systems, scheduling algorithms, deadlocks, concurrency problems and solutions, process management, thread management, disk management, memory management, virtual memory, file system organization, and security. | | | |
| CS325 | Algorithms: Memory and CPU Efficient Computing | 3 | CS297 and MATH315 |
| Software CPU performance and the ability to write fast software is a critical skill for all developers. In this course, students learn the essential techniques and analysis required to write high-performance software. Students learn about the mathematical fundamentals to analyzing algorithm performance: Big O and Big Omega. They learn how to apply this mathematical analysis to various algorithms. Algorithms and topics covered include sorting, searching, text-pattern matching, string searching, graph-based tree traversal algorithms, and other algorithms that have performance. Students learn techniques to transform and conquer problems and to mentally map one problem into another. Recursive algorithm techniques are studied ranging from Greedy Algorithms to Dynamic Programming techniques. Students explore and vastly improve on their creative-technical skills & ability to solve challenging problems needed to create CPU efficient software. | | | |
| CS335 | Studio 3 | 3 | CS235 and CS325 |
| Student teams will work according to a project brief or develop their own project pitch in order to produce workable designs and software solutions to problems of increasing complexity. Faculty will act as team leaders, producers or project managers depending on the requirements of the project and will expect greater leadership from the student team. Teams will further develop technical and project-management skills, demonstrating greater independence than in CS235. Student work will be presented at the end of semester, and a post-mortem reflection will develop critical thinking skills. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| CS340 | Software Engineering Methods and Project 1 | 3 | CS285 |
| Students develop an advanced understanding of the software life cycle. Software development methods top down and bottom-up. Reusability and portability. Documentation development: analysis, specification, design, implementation, testing, operational documents, Inspection walk-through and design review. Students practice project management through software life cycle. Object oriented analysis and design. Managing complexity with abstraction. | | | |
| CS341 | Network Systems | 3 | CS325 |
| This course introduces the ideas and different protocols and tools used in computer communication. It covers the OSI model and functions of different layers in that model. Students are also introduced to the TCP/IP. Students will learn to write programs (either C or Java) that communicate with each other. The course will also cover some network technologies like ATM. | | | |
| CS351 | Computer Architecture | 3 | CS325 |
| This course provides a strong foundation in modern computer architecture structured around processors and memory. It introduces students to instructions sets (like CISC and RISC), principles of pipelining, memory management, and computer arithmetic algorithms and number representations. | | | |
| CS352 | Embedded Software Systems | 3 | CS190 and CS295 and MATH143 |
| Technologies used in the design and implementation of embedded systems. Introduction to software tools such as compilers, schedulers, code generators, and system-level design tools. Introduction to computer organization: CPU, I/O, Memory. INTEL/MIPS Assembly language. Linking C and Assembly Language. | | | |
| CS360 | Database Management Systems | 4 | CS325 |
| Students apply concepts from data structures and compiler design in database management. Topics include file organization, indexing techniques, data models, query languages, B-trees, B*-trees, Study design and implementation of a relational database. | | | |
| CS361 | Introduction to Compilers | 3 | CS325 |
| This course familiarizes students with the concepts involved in writing a compiler such as parsing and lexical analysis and different types of grammars and syntax tree, code generation and optimization. Students will learn by writing different parts of a compiler. | | | |
| CS362 | Software Development in the Cloud | 4 | CS101 and CS106 |
| This course explores hands-on development and configuration of cloud-based software applications. Students will understand and implement design and development processes in a cloud platform and explore the principles of cloud computing. A range of common principles will be identified along with key features of the proprietary platform used in the course. This course will include content from the AWS Academy Cloud Developing course and prepare students for the relevant AWS Academy examination. | | | |
| CS375 | Mobile Programming for iOS | 3 | CS211 |
| This course involves hands-on application and implementation for the iOS mobile platform. Mobile is everywhere, and programming for mobile devices has specific characteristics that set it apart from conventional programming, including small displays, small code footprint, adherence to View-Control-Model architecture, availability on different platforms, use of location-aware services and other sensors. | | | |
| CS376 | Mobile Programming for Android | 3 | CS212 or CS211 |
| This course involves hands-on application and implementation for the Android mobile platform. Mobile is everywhere, and programming for mobile devices has specific characteristics that set it apart from conventional programming, including small displays, small code footprint, adherence to View-Control-Model architecture, availability on different platforms, use of location-aware services and other sensors. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| CS421 | Systems Analysis and Design | 3 | CS325 |
| This course further develops students' understanding of human-computer systems and the needs and constraints each system contains. Understanding of user needs and technical capacity will be further developed so students can apply this knowledge to the development of project proposals and design work. | | | |
| CS442 | Software Engineering Methods and Project 2 | 3 | CS340 |
| Students apply object-oriented principles in a large project and analyze case studies of object-oriented analysis and design. Other topics include design patterns, component architecture, and component frameworks. | | | |
| CS445 | Advanced C ++ Programming | 3 | CS285 |
| An advanced class in C++ and object-oriented programming. Multiple Inheritance. Virtual base class. Virtual functions. Smart pointers. Run time type information. Template Meta Programming, Generic Programming. Concurrency in C++. Applications to game engine. | | | |
| CS446 | High Performance Computing | 3 | CS325 |
| This advanced course covers new paradigms in High Performance Computing (HPC) applications. Topics covered include numerical and scientific modules and just-in-time compiler optimization technology that is available for Python .This course will provide the students with essential strategies, libraries, and performance best practices to achieve High Performance Computation using Python. The course assumes prior Python programming experience, working knowledge of Unix, general programming concepts and basic knowledge of Linear Algebra. | | | |
| CS447 | GUI and Graphics Programming | 3 | CS211 |
| Principles of user interface design. Input elements: keyboard, mouse. Memory management. Icons. Menus. Dialog boxes. Graphics device interface. OpenGL. Transformations. Bresenham's Lines and Circles Algorithms. Ellipses. Hidden line Algorithms. Clipping Algorithms. Spline curves. Bezier curve. B-splines surface and Bezier surfaces. Hidden lines and surfaces algorithms. Hidden line and surface removal methods. Students learn GUI and practice concrete mathematics concepts in computer graphics. | | | |
| CS450 | Cryptography: Introduction to Modern Cybersecurity | 3 | CS135 and CS325 |
| In this course, students learn modern cryptography techniques and the mathematical techniques they are founded on. Students learn modern encryption/decryption ciphers such as symmetric and asymmetric ciphers, key exchange algorithms, digital signatures, AES, DES, Diffie-Hellman, & ElGamal algorithms. Students learn to solve challenging crypto problems by hand. Students may also learn to use standard libraries or write software for encryption and decryption of cryptographic data. | | | |
| CS451 | Introduction to Self-Driving Cars | 3 | CS325 |
| Students are introduced to self-driving cars (autonomous vehicle) systems and technology. Students learn how to operate and apply this technology. Students will gain and understanding of localization, sensor fusion, perception, detection, segmentation, scene understanding, tracking, prediction, path planning, control, routing, and decision making. | | | |
| CS457 | Machine Learning and Artificial Intelligence | 3 | CS325 |
| This course will acquaint students with basics of machine learning and pattern recognition and different learning techniques like generative, discriminative, and parametric. Some applications of machine learning to data mining, speech-recognition, and robotics will also be discussed. | | | |
| CS459 | Big Data and Visualization | 3 | CS325 |
| Data Mining will introduce students to the science of recognizing patterns and structures in large complex data sets and applying tools from statistics to do predictions. | | | |
| CS499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Computer Science. May be used as elective and repeated as topic changes. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| CSE480 | Senior Project 1: Planning | 3 | Senior Status |
| Students select a relevant problem or task to address in the Senior Project, build the project plan, and acquire knowledge needed for the specific task, including generating 'proof-of-concept' cases to demonstrate the viability of the suggested solution. At the conclusion of this phase the senior project will have clear written product specifications, engineering specifications, and a project plan. | | | |
| CSE485 | Senior Project 2: Execution | 3 | CSE480 |
| Students implement the project plan and deliver a working solution. Being a real-world project, this involves iterative refinement of the approach to solution, and trade-offs according to constraints. In addition, this part will emphasize the proper documentation of the whole project and will combine parts from the previous session with a full description of the solution and the process. | | | |
| CTL511 | Understanding the Business of Creative Industries | 3 | None |
| This course provides students an overview of the creative industries and their contribution to the overall economy. Students will examine how businesses and organizations in the creative industry operate and thrive, as well as critical factors that drive success in this industry. Students will explore the relationship between creativity, business, technology, and other key operating environments. | | | |
| CTL525 | Professional Ethics and the Law | 3 | None |
| Ethics and law play prominent roles in the workplace. In order to be successful, leaders and managers need to understand how to integrate legal considerations into their strategic planning and operations. This course intends to familiarize students with the tools of ethical decision-making within the context of the legal environment of business. | | | |
| CTL535 | Strategic Marketing in Creative Enterprises | 3 | None |
| Managers and leaders in the creative industry must understand the structure and functions of the creative market and ecosystem to capture economic value. Students will examine the particular demands and techniques of marketing media products characterized by very short shelf lives such as movies, games, books, electronic magazines, etc. Students will explore strategies in marketing of creative talent and packaging and selling of creative work within the context of a rapidly evolving environment for promotion, distribution, and consumption. | | | |
| CTL540 | Culture and Globalization | 3 | None |
| The course explores different aspects of intercultural management and is designed to develop students' understanding of how culture shapes leadership practices around the world. Students examine the concept of culture as applied to organization and location-based perspectives. Students study the characteristics found among high-performing teams, as well as the traits needed for success in leading virtual, multicultural teams. | | | |
| CTL541 | Leading and Managing Change | 3 | None |
| Change is a constant in organizations and people in leadership positions are expected to help lead and manage it. In this course, students develop foundational skills in change management enabling them to analyze and navigate the dynamic landscape of business. Students explore various strategies for championing changes amid uncertainty, while resolving conflicts and resistance to the change. Students develop skills in analyzing change factors, assessing the organization's readiness, evaluate stakeholder dynamics then plan and implement strategies to achieve desired organizational outcomes. | | | |
| CTL543 | Conflict Management | 3 | None |
| Conflict is a natural part of everyday life. Effective conflict management is an essential skill for every person in a leadership position. When managed effectively, conflict can be a positive force in building a stronger organizational culture and competitive advantage. In this course, students explore ways to successfully navigate challenging situations with team members when positive outcomes are critical. Students learn skills needed to assess, scope, and analyze issues from multiple perspectives and develop approaches to find workable resolutions that strengthen relationships and lead to positive organizational impact. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| CTL560 | Creative Design Thinking for Leaders | 3 | None |
| Design thinking helps people develop practical and innovative approaches to problems. This course develops students' understanding of the fundamental phases and methods in design thinking. Through experiential learning, students explore techniques and methods to solve problems creatively and collaboratively. | | | |
| CTL581 | Metrics and Data Analytics | 3 | None |
| Businesses and organizations are increasingly relying on data to drive strategic decisions. This course is designed to provide a fundamental literacy in critical business metrics and analytics. This course explores best practices on using metrics to create value for organizations and businesses Students learn how to recognize the most critical data and metrics used in various types of organizations and companies. | | | |
| CTL590 | Leadership Experience Lab | 1 | CTL511 and CTL525 and CTL535 |
| This course offers students the opportunity to participate in an intensive group experiential learning experience in leadership. Students will go through a series of reflective and feedback-based activities designed to provide the foundation necessary to design a leadership situation case study within the creative industry for subsequent graduate capstone courses. The student will develop and propose the case study plan that chronicles and informs the student's passage through the program. | | | |
| CTL595 | Leadership Capstone A | 2 | CTL590 |
| Part 1 of the Capstone course. Leaders often encounter challenging and complex issues and opportunities to effect positive change that require carefully planned and well-thought through solutions. Effective leaders must be able to analyze information, assumptions, theories, then prioritize potential solutions. In the capstone courses, students will prepare and submit a professional electronic capstone portfolio as a graduate requirement. Students will plan, conduct research, and collect information for an applied learning project that includes theory, concepts, practices, knowledge, and skills covered during the program and their application to a real-life or simulated situation. Students study the creative industry, develop the leadership situations, its proposed solutions, then start developing the research outline of their proposed leadership case study. | | | |
| CTL596 | Leadership Capstone B | 2 | CTL595 |
| Part 2 of the Capstone course. Leaders often encounter challenging and complex issues and opportunities to effect positive change that require carefully planned and well-thought through solutions. Effective leaders must be able to analyze information, assumptions, theories, then prioritize potential solutions. In the capstone courses, students will prepare and submit a professional electronic capstone portfolio as a graduate requirement. Students will plan, conduct research, and collect information for an applied learning project that includes theory, concepts, practices, knowledge, and skills covered during the program and their application to a real-life or simulated situation. Students will complete and submit the case study through an eportfolio to fulfill the final requirements for the program. An oral presentation of the case study is required. | | | |
| DAA101 | Foundations of Digital Art for Production | 4 | None |
| This course introduces the student to the stages of production found in 3D pipelines for pre-rendered and real-time content. Students will be able to contrast 2D and 3D content creation and how they fit in production. Students are introduced to industry-standard best practices and tools for 3D content delivered to various platforms such as broadcast, film, and games. | | | |
| DAA106 | Digital Imaging Concepts | 3 | None |
| This course explores advanced image processing using image editing software and graphics tablets. Coursework addresses image creation and manipulation, color and contrast adjustment, compositing, image matching, and non-destructive editing techniques. An emphasis is placed on creating photorealistic illusions. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAA109 | Web Design | 3 | DAA100 or ART100 |
| Students are introduced to web concepts, visual and technical website design, information management and delivery. Covering topics including, building content for the web, HTML, preparation of graphics for the web, Cascading Style Sheets (CSS), information architecture, interface design students practice basic principles of interactivity. Students create, publish, and maintain a multipage interactive website. | | | |
| DAA200 | Acting | 3 | None |
| Basic concepts of acting for stage and screen. Students explore the actor's relationship to other players as well as to the camera. Aspects of performance as they relate to different modes of production are investigated, including acting for the effects-heavy production and non-linear media. | | | |
| DAA221 | Editing and Motion Graphics | 3 | ART100 |
| Basic concepts of digital video editing, theory and techniques of motion picture editing, post-production methods, media file management, sound editing, and effects are covered in this course. Students are introduced to the use of titling in theatrical and broadcast graphics. Students will produce title sequences and montages integrating image manipulation applications and other image processing support. Uses video editing software. Can be used to fulfill the requirement of DAA220 Video Editing. | | | |
| DAA240 | Introduction to 3D Modeling | 3 | DAA106 |
| Creation of 3D organic and industrial models using one or more software modeling packages. Topics include modeling construction using polygon and/or spline-based techniques, texture mapping, lighting, shading, and rendering. Students apply these techniques to the creation of 3D models. | | | |
| DAA244 | Introduction to 3D Animation Principles | 3 | DAA240 |
| In this course, students study the principles of 3D animation using the latest 3D software applications. Topics include using the user interface and the basics of motion. Coursework introduces the principles of animation as applied to 3D computer animation. Students learn professional working practices in a production pipeline environment. | | | |
| DAA245 | Texturing | 3 | DAA240 |
| This course involves the use of layering color maps on digital surfaces to create specific material shaders. Texture map painting in 2 D is covered extensively. Analysis through physical observation on the light gathering of surfaces teaches students how to digitally reproduce any material. Students learn UV texture layout and projection techniques for shader creation. Procedural versus painted shader maps are explored along with complex layering. Emphasis is spent on specular, diffuse, color, bump, displacement, and normal mapping to achieve the desired result. | | | |
| DAA248 | Lighting and Layout 1 | 3 | DAA245 |
| Storytelling and mood are emphasized by the use of light on digital scenes. Six-point lighting techniques are demonstrated in cinematic terms through their digital equivalents. Color, mood, and time of day are expressed through lighting and scene composition. Blocking is utilized to set the actors and sets to convey the desired intent. Camera knowledge, lens choice and exposure are applied to shot composition. Various rendering styles and engines will be used. | | | |
| DAA250 | Digital Sculpting | 3 | DAA240 |
| Students will utilize fast and simple modeling techniques for creating meshes without UVs. Students will design in 3D quickly as possible to aid in concept design. Students will cover various lighting, texturing, and painting techniques. Discussion of UV unwrapping and retopologizing the models built with Dynamesh and Shadowbox for production will also be covered. | | | |
| DAA264 | Drawing Animation 1 | 3 | ART115 |
| Introduces the principles of animation drawing: gesture, simplified geometric construction for anatomy, technique to capture movement and weight. Students develop the graphic language to maximize expression and movement for animation and learn methods for using line to convey overlap, form, torque/compression, and the line of action. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAA265 | 2D Animation 1 | 3 | DAA264 |
| Introduction to the basic principles of traditional, hand-drawn animation: squash and stretch, anticipation, secondary action, staging, easing in and out, arcs, timing, exaggeration, solid drawing, and character appeal. The study of motion to understand mass, movement through space, and reaction to external forces. Concepts of keys, in-betweens, and breakdowns, along with methods for recording drawings for playback, pegging, and using exposure sheets to record/adjust timing. The process for creating moving and sequential imagery from a bouncing ball thru a basic walk cycle. Students produce an animated scene that demonstrates mastery of principles. | | | |
| DAA267 | Character Rigging | 3 | CS100 and DAA244 |
| Introduction to animation software modules with emphasis on character rigging techniques: joints, surface binding, articulation, forward and inverse kinematics (FK and IK), and hierarchical node structures. Students apply these techniques to develop 3D characters. Includes a summary of the animation software module, graph editor, setting key frames, and tangents for basic animation. | | | |
| DAA270 | Illustration 1 | 3 | ART105 |
| This course is designed to present the student with the fundamentals of illustration for professional application. Primarily, vector media are used. The course will cover illustration theory but will emphasize studio practice and skill development. | | | |
| DAA299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Digital Art and Animation. May be used as an elective and repeated as topic changes. | | | |
| DAA310 | Storyboarding | 3 | ART115 and ART212 |
| This class focuses on principles of Storytelling in a visual medium and concentrates on film or editorial boards used to pre-visualize animation or live action film. Topics include scale and camera angle, camera movement, character staging, composition, and basic editing processes. Students pitch their ides in class and get feedback on projects that include dialogue and action sequences from selected scripts as well as building animatics and story reels. | | | |
| DAA312 | Animal Drawing and Motion | 3 | DAA264 |
| This class takes the basics of core animation and illustration courses and applies them to the practice of drawing animals through zoo trip and in class lesson and projects. Topics include emphasis on gesture, constructive drawing, and proportion of selected animal as well as stride and motion patterns. Students will complete 10 to 30 second traditional animation final or illustrated book involving their chosen animal. | | | |
| DAA320 | Digital Painting | 3 | DAA106 |
| The course in painting emphasizes perception development through specific digital painting exercises to develop an orderly approach. Students learn about painting textures for shaders and fully realized scenes. Students increase their understanding of color theory through visual development and matte painting. | | | |
| DAA321 | Quadruped Animation | 3 | DAA267 and DAA360 |
| An introduction to animating four legged creatures. Basic approach to animating a quadruped animal will be studied in a simplified step by step format. Students will study anatomy and locomotion of quadrupeds and learn to apply animation principles in achieving different Gaits on a quadruped animal. Animal behavior will be studied, and students will learn to pair behavior patterns with locomotion. Students will also learn to animate transitions between Gaits. Feature and Game animations will be routinely examined to study style and aesthetics. | | | |
| DAA325 | Advanced Character Rigging | 3 | DAA267 |
| Advanced class in animation software modules with emphasis on character rigging techniques: joints, surface binding, articulation, forward and inverse kinematics (FK and IK), and hierarchical node structures. Students apply these techniques to develop 3D characters. Includes a summary of the animation software module, graph editor, setting key frames, and tangents for basic animation. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAA326 | Advanced Texturing | 3 | DAA245 |
| This course focuses on look development using advanced techniques in texturing and shader creation with industry-standard software. Students will create high-quality texture maps and use them in complex shader networks. Surface detail sculpting will be utilized to create bump, norma, grayscale displacement, and vector displacement maps. Students analyze a large collection of reference material in order to accurately create a photorealistic look for projects. | | | |
| DAA340 | Modeling 1 | 3 | DAA240 |
| Introduces hard and organic surface modeling pertaining to control and refinement of form. Reproduction of machine-made forms and detailed organic shapes. Advanced texturing for enhancement of models. Students apply these techniques to develop 3D models. | | | |
| DAA345 | Modeling 2 | 3 | DAA340 |
| Explores the modeling of man-made forms for sets and props in cinematic work and interactive applications such as games. Includes transferring maquettes and other analog representations to digital form while maintaining fidelity in the reproduction of artwork and real objects. Texturing and lighting, reproduction of logotypes and molded textures. Students practice parameterization for animation and digital transfer. | | | |
| DAA356 | Production Pipeline | 3 | DAA240 and CS100 |
| Workflow for efficient production in a multi-person environment. Distributed computing for high- throughput rendering. File and asset management and environment control. Scripting and programing for pipeline implementation and customization. User interfaces, reporting, notification tools for a render farm. | | | |
| DAA357 | Project Avatarah | 3 | Faculty approval |
| In this course students will create assets for animation production. Students will focus on various components of the pipeline such as concept art, modeling, texturing, rigging and animation. Students will utilize individual specialized sills towards creating industry standard character rigs. Emphasis is given on good communication skills and effective delivery. Character rigs produced in this class will be used in various classes at USV and will be released periodically to the public for download. | | | |
| DAA358 | Dynamics | 3 | DAA244 and CS100 |
| Introduction to particle systems, sprites, soft and rigid bodies. Dynamic techniques for hair, cloth, and fluids. Dynamics for games. Students will create professional grade particle simulation effects for CG production and game. | | | |
| DAA360 | 3D Animation 1 | 3 | DAA244 |
| This course covers the basics of character animation and acting in 3D computer animation. Coursework emphasizes storytelling and the mechanics of biped motion. Students analyze real time motion and apply it to 3D animation. | | | |
| DAA364 | Drawing Animation 2 | 3 | DAA264 |
| A continuation of Drawing Animation 1. Further life studies of human figures and animals emphasizing anatomical simplification, clarity, and motion. Introduction to facial construction and expression. Students learn to incorporate layout, perspective, and backgrounds into character drawing.<br><br>DAA312 Animal Drawing and Motion may be used to satisfy course requirement in lieu of DAA364 Drawing Animation 2 for certain educational programs. | | | |
| DAA365 | 3D Animation 2 | 3 | DAA360 |
| Students in this course focus on the creation of a 3D animated character performance. Coursework covers character development, facial animation, and pantomime acting. Students use the 3D camera for shot composition and visual narrative.<br><br>DAA321 Quadruped Animation may be used to satisfy course requirement in lieu of DAA365 3D Animation 2 for certain educational programs. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAA370 | Concept Design | 3 | ART115 and ART212 |
| This course focuses on development and design practices used by concept designers. Students apply professional marker and/or CG techniques and media as an approach to concept drawings and renderings. | | | |
| DAA399 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Digital Art and Animation. May be used as an elective and repeated as topic changes. | | | |
| DAA400 | Compositing and Special Effects | 3 | DAA245 |
| Explores the digital motion picture production environment as 'illusion factory'. Both naturalistic/realistic and experimental modes of digital effects will be examined. The course will focus on the role played by storyboarding, scripting, and how these relate to the combination of live action with computer- generated images (CGI). Students work in teams to create video projects using special effects, match/moving lighting, blue/green screen compositing, color correction, and motion graphics. The relationship of 'pre-visualization' to a finished work will also be explored, and how these techniques are affecting the traditional working approach to movie making. | | | |
| DAA410 | Storyboarding 2 | 3 | DAA310 |
| This class is a continuation of Storyboarding 1. Students will continue to board and pitch to pre- selected scripts as well as create boards for advertising, in-game progressions, and work with other students to build a solid pre-visualized script short. Topics include developing quality emotion boards, value and color scripts and their implied meanings. Students must have a solid foundation in drawing skill and film and editorial methodology. | | | |
| DAA421 | Advanced Quadruped Animation | 3 | DAA321 |
| This course will offer an extended study into animating a four-legged creature. Students will work on different types of animals, and relative modes of transportation. They will study anatomy and locomotion specific to body types and will learn how to develop appeal through subtle gestures. Students will work on character development in animals, creating visual appeal and balance nature of animals with anamorphic qualities of character. Feature and Game animations will be routinely examined to study style and aesthetics. | | | |
| DAA425 | Advanced Motion Graphics | 3 | DAA221 |
| In this course, students will further develop skills and techniques in theatrical and broadcast motion graphics. Projects are designed to cover a broad spectrum of potential applications of the technology while focusing on the strengths of motion theory, typography, color, composition, animation, and other elements of design. | | | |
| DAA435 | Matte Painting | 3 | DAA212 and DAA106 and DAA240 |
| This course applies industry techniques to create digital representations of a landscape, interior or distant location in order to generate the illusion of an environment. Theories and techniques of color correction, space, perspective, light and shadow will be covered. Students will explore digital painting techniques and tools. | | | |
| DAA440 | Modeling 3 | 3 | DAA340 |
| Explores modeling of creatures and humans for interactive applications including games and cinematic work. Maintaining fidelity to reproduction of artwork and observed subjects, texturing, and lighting. Students learn to parameterize for animation and muscular flow. | | | |
| DAA442 | Advanced Lighting and Layout | 3 | DAA248 |
| Advanced lighting techniques are mastered to convey storytelling through light. Students apply techniques attained in Lighting and Layout further mastering their artistic expression. Cinematography in the digital realm is used to convey dramatic storytelling through shot composition. Advanced camera usage along with lighting are combined into unified sequences of shots to tell a story that connects with audiences. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAA460 | 2D Animation 2 | 3 | DAA265 |
| Continuation of 2D Animation 1. Students design and develop characters which they animate in a scene. Advanced study of facial animation and expression with introduction to animal characters and animation. Pantomime, silhouette, strong acting and posing are emphasized, along with careful timing to maximize expression and personality. Analysis of what makes a character look like it is thinking and what makes an expressive pose. Students produce an animated scene using their character in a layout. | | | |
| DAA465 | 3D Animation 3 | 3 | DAA365 or DAA321 |
| This course explores the creation of a 3D animated character performance involving dialogue and facial animation. Coursework incudes multiple character interaction and acting in a multi-shot sequence. | | | |
| DAA468 | VR Animation Production | 3 | Faculty approval |
| Students work in teams to create a short, animated film. Focus will be working as an effective team while delivering individual specialized skills. The animation pipeline, project management, and communication skills are covered in depth. The course will engage both theory and practice of HCI with hands-on VR and/or AR projects. Training in all of these fields is comprehensive and will prepare student for entry into the job market. | | | |
| DAA470 | Illustration 2 | 3 | DAA270 |
| Students explore personal style in illustration. Course focuses on development of a cohesive body of work. Symbolic and narrative concept development is central. Various digital applications will be used. | | | |
| DAA474 | Animated Film Pre-Production | 3 | Faculty approval |
| Students work on a team to create the previsualization of a short, animated film. Focus is on working as effective team while delivering individual specialized skills. The animation pipeline, project management, and communication skills are covered in depth. Students may work on storyboards, concept art, matte paintings, texture paintings or creature design. Training in all of these fields is comprehensive and will prepare student for entry into the job market. May be repeated once for credit. | | | |
| DAA476 | Animated Film Production | 3 | Faculty approval |
| Students work in teams to create a short, animated film. Focus is on working as effective team while delivering individual specialized skills, the animation pipeline, project management, and communication skills are covered in depth. Students may enter as any of the following, concept artist, modeler, rigger, animator, technical director, and compositor. Training in all of these fields is comprehensive and will prepare student for entry into the job market. | | | |
| DAA477 | Animated Film Post-Production | 3 | Faculty approval |
| Students work on a team to finish the production of a short, animated film. Focus is on working as effective team while delivering individual specialized skills. The animation pipeline, project management, and communication skills are covered in depth. Students may work on lighting, shading, composting, rendering, and editing. Training in all of these fields is comprehensive and will prepare student for entry into the job market. May be repeated once for credit. | | | |
| DAA478 | Star Thief Studio | 3 | Faculty approval |
| This course continues the opportunity to learn from professionals and mentors to develop a professional level animated short and interactive book. Students may enter as any of the following: concept artist pre-vis, modeler, rigger, animator, technical director, and compositor. Project based- training will prepare the student for entry into the job market. Prior approval required. | | | |
| DAA479 | Star Thief Studio | 3 | Faculty approval |
| This course continues the opportunity to learn from professionals and mentors to develop a professional level animated short and interactive book. Students may enter as any of the following: concept artist pre-vis, modeler, rigger, animator, technical director, and compositor. Project based- training will prepare the student for entry into the job market. Prior approval required. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAA480A | Animation Portfolio 1 | 3 | Senior Status |
| Students write a project proposal and production schedule as they develop an animated short film that will be completed in Animation Portfolio 2. Students proceed through the film making process: concept development, storyboards, animatics, layouts, audio, and production scheduling. Students assemble a rough demo reel that demonstrates competency in the discipline. | | | |
| DAA480E | Entertainment Design Portfolio 1 | 3 | Senior Status |
| Portfolio 1 is the preparatory class for Portfolio 2, the final element in the DAA program. Students will use their skills in traditional and digital painting, texturing, and lighting of 3D models, and portfolio preparation to scope and design a finished portfolio that demonstrates their abilities in Entertainment Design. The portfolio will have a recognizable aesthetic and professional presentation quality. | | | |
| DAA480M | Modeling Portfolio 1 | 3 | Senior Status |
| Students produce a demo reel to demonstrate an understanding of the concepts of modeling and proficiency in its techniques. | | | |
| DAA480T | Technical Art Portfolio 1 | 3 | Senior Status |
| This course allows the student to develop portfolio pieces in rigging, lighting, texturing and/or compositing. Students will define the scope of the portfolio and develop a timeline for completion. | | | |
| DAA483 | MediaWorks | 3 | Faculty approval |
| MediaWorks is a collaborative, interdisciplinary, practical project. It may include a live project with real-life clients and strict deadlines. Student work on one or two full-cycle audiovisual productions in a visual production team, where they fulfill various roles including storyboard artist, concept designer, texture artist, 3D modeler, animator, motion graphics designer, compositor, video editor, colorist, and project manager. Full-cycle production may include client meetings, concept development, production, post-production, and delivery of final product. The deliverables of the course can be integrated into individual student portfolios. | | | |
| DAA485A | Animation Portfolio 2 | 3 | DAA480A |
| Continuation of Animation Portfolio 1. Production of animated short film begun in Animation Portfolio 1. Final animated film along with expanded final proposal is completed. Students present their project to the DAA faculty and discuss the production process and their challenges. Students assemble a finished demo reel that demonstrates competency in the discipline. | | | |
| DAA485E | Entertainment Design Portfolio 2 | 3 | DAA480E |
| Portfolio 2 is the final element in the DAA program. Students will use their skills in traditional and digital painting, texturing, and lighting of 3D models, and portfolio preparation to create a finished portfolio that demonstrated their abilities in Entertainment Design. The portfolio will have a recognizable aesthetic and professional presentation quality. | | | |
| DAA485M | Modeling Portfolio 2 | 3 | DAA480M |
| Continuation of Portfolio 1 to complete the Modeling capstone project. Students learn to demonstrate their competency through the development of a demo reel. | | | |
| DAA485T | Technical Art Portfolio 2 | 3 | DAA480T |
| This course is a continuation of Portfolio 1. Students will complete portfolio pieces in rigging, lighting, texturing, and/or compositing. Students will complete a professional level portfolio and present it on a website. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAA489 | MediaWorks2 | 3 | DAA483 |
| MediaWorks 2 will allow students the opportunity to perform new production tasks such as lead other production team members as a project manager, or to assist in the on-boarding of students new to the MediaWorks workflow. This course is a collaborative, interdisciplinary, practical project. It may include a live project with real-life clients and strict deadlines. Students work on one or two full-cycle audiovisual productions in a visual production team, where they fulfill various roles including storyboard artist, concept designer, texture artist, 3D modeler, animator, motion graphics designer, compositor, video editor, colorist, and project manager. Full-cycle production may include client meetings, concept development, production, post-production, and delivery of final product. The deliverables of the course can be integrated into individual student portfolios. | | | |
| DAA499 | Special Topic | TBD | As appropriate |
| Advanced course on a special topic in Digital Art and Animation. May be used as an elective and repeated as topic changes. | | | |
| DAT050 | Music Fundamentals | 3 | None |
| Basics of musical literacy: Clefs, staves, pitch and rhythmic notation. Time signatures, key signatures and dynamics. Articulation and phrase marks. Basic scale patterns. Music manuscript practices. Other rudiments of music notation as needed to prepare for Music Theory. | | | |
| DAT102 | Music Theory 1 | 3 | Satisfactory completion of Music Fundamentals Placement Test or DAT050 or DAT051 |
| Thorough exercise in rudiments of music (major and minor scales, intervals, triads and seventh chords, key signatures, diatonic modes, elements of rhythm, common music notation practices, dynamics and articulations, phrase structure, diatonic chord function). Beginning ear training and harmonic analysis. Beginning solfege, rhythmic studies, and keyboard musicianship. | | | |
| DAT103 | Music Theory | 4 | Placement Test or DAT050 |
| Thorough exercise in rudiments of music (major and minor scales, intervals, triads and seventh chords, key signatures, diatonic modes, elements of rhythm, common music notation practices, dynamics and articulations, phrase structure, diatonic chord function). Beginning harmonic analysis and rhythmic studies. | | | |
| DAT104 | Audio, Technology, and Innovation | 4 | None |
| The course examines and introduces the history, culture, and aesthetics of music and sound through the lens of technological innovation. Students will explore the development of recording technology, sound synthesis, sound design, and interactive audio in the music and audio industry from the 19th century to the present with some hands-on projects in a digital audio workstation. | | | |
| DAT107 | Music Theory 2 | 3 | DAT102 |
| Chord progressions, melodic shape, song forms, bass lines, and drumming patterns, introductory musical analysis, and instrumental arranging. Focuses on mainstream musical styles (pop, rock, Hip Hop, etc.). Includes ear training and aural analysis. Solfege, keyboard musicianship and rhythmic studies with focus on mainstream music are also covered. | | | |
| DAT110 | Desktop Production Fundamentals | 3 | None |
| Introduction to the software, methods and practices of desktop audio and music production, video editing and content delivery. Topics include an overview of computing basics, managing, and processing of media, content creation and rendering audio and video files to disk. Methods for online publishing and preparation for on-the-air broadcasting are explored. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAT111 | Desktop Production Fundamentals | 4 | None |
| Introduction to professional desktop audio and music production with hands-on exercises in recording, editing, arranging, mixing, and producing audio and MIDI files in a professional workflow. Topics include an overview of computing basics, managing, and processing of media, content creation and rendering audio and video files to disk. | | | |
| DAT115 | Desktop Audio Production | 3 | DAT110 |
| Application of the principles, methods, and essential tools of audio production in a desktop workstation environment. Topics include the seven basic elements of music (pitch, rhythm, timbre, texture, form, dynamics and spatialization), the methods and practices of MIDI sequencing and digital orchestration, elements of MIDI 1.0 Standard, Standard MIDI Files, fundamental concepts of digital audio, digital audio production techniques, audio file formats, effects processing and plug-ins, and basic concepts of soundtrack creation. | | | |
| DAT116 | Desktop Audio Production | 4 | DAT111 |
| Application of the principles, methods, and essential tools of audio production in a professional desktop workstation environment. Topics include digital signal processing, synthesis design, sampling instruments, and basic concepts of soundtrack creation. | | | |
| DAT120 | Introduction to the Techniques of Digital Signal Processing | 3 | MATH112 or MATH115 or MATH116 |
| This course offers a non-calculus approach to understanding the fundamental concepts of Digital Signal Processing. Topics include Using trigonometric functions to represent musical sounds; Sampling and quantization; Digital signals; Spectra; the Discrete Fourier Transform; Convolution; Z- transform; Digital Filtering. | | | |
| DAT203 | Songwriting | 3 | DAT107 |
| Exercising creativity through songwriting in a project-based format. Discussion of musical techniques, sound choices, and growth models. All aspects of song writing are considered, from the initial creative spark to musical development and presentation, collaboration, making demos, and publishing. This course can be used to fulfill the requirement of dAT202 Music Theory 3. | | | |
| DAT204 | Songwriting | 4 | DAT103 |
| Exercising creativity through songwriting in a project-based format. Discussion of musical techniques, sound choices, and growth models. All aspects of song writing are considered, from the initial creative spark to musical development and presentation, collaboration, making demos, and publishing. | | | |
| DAT208 | Live Sound | 3 | DAT115 or DAT116 |
| Introduction to the set up and operation of a live sound installation. Basic electrical and hearing safety in the presence of live sound. The acoustics of live sound. Live sound components and their uses. Mixing and monitoring live performances. Ethical conduct in a live sound setting. Basic business transactions and contracts associated with technical services for live productions. | | | |
| DAT209 | Music Composition | 3 | DAT107 |
| Music Composition will provide the technical and creative means to compose short-format musical pieces or sections of longer musical works. The emphasis will be on musical texture, form, and tonal design. The analysis of existing compositional models will be a regular exercise and students will be exposed to diverse musical styles and idioms. Completed projects will be presented utilizing either digital or live performance. This course can be used to fulfill the requirement of dAT207 Music Theory 4. | | | |
| DAT210 | Digital Sound Synthesis | 3 | DAT115 |
| Introduction to the methods and techniques of digital waveform synthesis. Digital synthesis instrument design concepts. Waveforms and spectra, wavetable synthesis, additive synthesis, digital filters, and subtractive synthesis. Noise and random event generation. Tuning and intonation systems. Linear and exponential envelopes, modulation techniques. Vibrato and tremolo, amplitude modulation, frequency modulation. Waveshaping, granular synthesis, basic physical modeling synthesis. Audio processing. Timbral consonance and dissonance. Synthesis and musical style. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAT211 | Digital Sound Synthesis | 4 | DAT116 |
| Introduction to the methods and techniques of digital waveform synthesis. Digital synthesis instrument design concepts. Waveforms and spectra, wavetable synthesis, additive synthesis, digital filters, and subtractive synthesis. Noise and random event generation. Tuning and intonation systems. Linear and exponential envelopes, modulation techniques. Vibrato and tremolo, amplitude modulation, frequency modulation. Waveshaping, granular synthesis, basic physical modeling synthesis. Audio processing. Timbral consonance and dissonance. Synthesis and musical style. | | | |
| DAT212 | Introduction to Game Audio | 3 | DAT115 |
| Application of tools and methods of audio asset production to interactive media. Creating and using an audio design document. Audio compression formats, audio middleware tools and game audio production practices. Adaptive audio techniques and design. This course is previously known as DAT212 Interactive Audio Production. | | | |
| DAT213 | Introduction to Game Audio | 4 | DAT116 |
| Application of tools and methods of audio asset production to interactive media. Creating and using an audio design document. Audio compression formats, audio middleware tools and game audio production practices. Adaptive audio techniques and design. | | | |
| DAT214 | Live Sound for Virtual Events | 3 | DAT116 |
| Introduction to the art and science of live sound technology in the context of virtual events and live streams. The course will cover basic sound system theory, signal flow and IT components. Students will design, maintain and troubleshoot a sound solution that works effectively in the professional delivery of live event production. | | | |
| DAT220 | Studio Production 1 | 3 | DAT110 |
| Introduction to recording in a studio environment. Use of a digital audio workstation in a studio production environment. Basics of recording and editing. Introduction to microphone selection and placement. Signal flow in the analog and digital domains. Audio processing with outboard hardware and plug-ins. File management. | | | |
| DAT221 | Studio Recording Techniques | 4 | DAT111 |
| Introduction to the concepts, fundamental technologies, and techniques of modern recording and production. Use of a digital audio workstation for audio recording, editing, and processing. Topics also include microphone selection and placement, signal flow in the analog and digital domains, multi-tracking, audio processing with plug-ins, and file management. | | | |
| DAT238 | Principles of Room Acoustics | 3 | SCI100 or SCI101 or SCI102 or SCI145 |
| Principles of Room Acoustics offers practical knowledge of acoustics that can be applied to the needs of the audio professional. Beginning with the fundamentals of sound such as wavelength and frequency, complex waves, and wave motion, it proceeds to more complex topics, including comb filter effects, reverberation, absorption, and modal resonances. The final range of topics addresses the practical aspects of measuring and managing room acoustics, including the use of diffusers, absorptive panels, acoustic isolation, and the management of acoustic distortion. The course includes practical exercises and projects to enable an audio professional to address many common problems of room acoustics and to set up an effective space for audio production. | | | |
| DAT239 | Principles of Room Acoustics | 4 | SCI100 or SCI101 or SCI102 or SCI145 |
| Principles of Room Acoustics offers practical knowledge of acoustics that can be applied to the needs of the audio professional. Beginning with the fundamentals of sound such as wavelength and frequency, complex waves, and wave motion, it proceeds to more complex topics, including comb filter effects, reverberation, absorption, and modal resonances. The final range of topics addresses the practical aspects of measuring and managing room acoustics, including the use of diffusers, absorptive panels, acoustic isolation, and the management of acoustic distortion. The course includes practical exercises and projects to enable an audio professional to address many common problems of room acoustics and to set up an effective space for audio production. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAT260 | Audio Theater Production | 3 | DAT115 or BUS270 or ENG227 |
| Audio Theater Production focuses on the creation of recorded narrative or dramatic works for audio only. This entails the creation or selection of a suitable script, casting actors to play assigned roles, rehearsing actors, and recording their parts, editing, and mixing dialogue to create a suitable narrative flow, creating a sound design, composing, or selecting appropriate music, both for underscoring and introducing scenes, and final mixing to create the finished product. The course is intended to offer opportunities for audio students to gain experience in a variety of soundtrack tasks and to encourage Cogswell writers who seek a dynamic outlet for their writing skills. | | | |
| DAT281 | Audio & Music Industry Business Principles | 3 | DAT110 or DAT111 and BUS110 |
| An introduction to the principles of business and employment, specific to the audio and music industries. The course discusses music copyright, performance rights, licensing, contracts for music releases and publishing, and the basics of for-hire contract work. It also introduces students to professional networking, industry players, trends, approaches to growing a client base and to find work opportunities, client and career management. Finally, it explores the prerequisites and consequences to assuming roles in specific audio fields as a freelancer, small business owner and employee, by putting students through realistic career scenarios. | | | |
| DAT285 | Second-Year Portfolio | 3 | DAT212 and DAT220 |
| Introduction to audio and music industry career-related topics. Second Year Portfolio guides students through a series of exercises and reflections designed to educe a personal career narrative, silence inner negativity, encourage completion of projects and initiatives and identify one's entrepreneurial capacity. The course addresses career-related soft skills such as building a professional network, learning how to research positions and employers, writing an effective resume, performing well in interviews and client meetings, and negotiating rates, salaries and raises. The course culminates in the construction and presentation of a web-based professional portfolio that features the best of the student's audio and music production work to date. This course can be used to fulfill the requirements of DAT282 Professional Practices Seminar. | | | |
| DAT299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Digital Audio Technology. May be used as an elective and repeated as topic changes. | | | |
| DAT303 | Cultural Trends and Musical Style | 3 | DAT202 or DAT203 |
| A study of selected musical genres and the strategies needed to reproduce musical elements characteristic of those genres. Focus on cultural forces, stylistic influences, music theory analysis, performance techniques, and technological developments. Production of original music in a given style along with written commentary. | | | |
| DAT320 | Studio Production 2 | 3 | DAT220 |
| Intermediate level of recording and editing. Music production, audio production for advertising. Production approaches, mixing techniques, intermediate use of compression, equalization. Spatial positioning and stereo image. Critical listening, frequency analysis, mix analysis. Creating sub-mixes, mix automation, in-depth coverage of the use of plug-ins. Session management. | | | |
| DAT321 | Studio Mixing Techniques | 4 | DAT221 |
| Intermediate level of recording and editing. Music production, audio production for advertising. Production approaches, mixing techniques, intermediate use of compression, equalization. Spatial positioning and stereo image. Critical listening, frequency analysis, mix analysis. Creating sub-mixes, mix automation, in-depth coverage of the use of plug-ins. Session management. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAT324 | Studio Production 3 | 3 | DAT320 or DAT321 |
| Advanced recording, editing and mixing techniques. Client communication and production management. Mixing under pressure. High track-count mixing. Mix analysis in diverse environments, mix conflict management, vocal sub-mixing, parallel- and serial processing. Working with MIDI- and virtual instruments, pitch- and time processing. Students at this level should work on complex projects that demonstrate knowledge and experience in a full-cycle studio production, including pre- production, managing a recording session, various mixing approaches, etc. | | | |
| DAT325 | Audio Production Project | 4 | DAT220 |
| The purpose of DAT325 Audio Production Project is to provide DAT students a setting in which to conceive and execute an individual audio project. The choice of an audio or music project should follow a process which balances vision and feasibility. Planning for the project should include written milestones and objectives. Execution of the project should reflect industry best practices and demonstrate creativity and thoughtful aesthetic judgement. The final project deliverables should include planning and production documents, a final artifact such as a recording, performance or application, a web portfolio presentation and an oral presentation given during finals week. | | | |
| DAT326 | Digital Sound Design | 3 | DAT320 |
| Application of studio production skills to sound effect sourcing and generation for film and video production and post-production. Analysis of the soundtrack, sound map and visual map generation, ADR, and Foley. Use of professional sound effect libraries. Advanced studio- and location recording, audio editing and processing techniques, synchronization, audio post mixing, project management and delivery formats for audio for film and video. | | | |
| DAT327 | Sound Design | 4 | DAT320 or DAT321 |
| Application of audio production skills and creative approaches to sound effect sourcing and generation for film and video production and post-production. Analysis of the soundtrack, sound map and visual map generation, ADR, and Foley. Use of professional sound effect libraries. Advanced location recording, audio editing and processing techniques, synchronization, audio post mixing, project management and delivery formats for audio for film and video. | | | |
| DAT328 | Advanced Audio Production | 3 | DAT321 |
| Advanced recording, editing and mixing techniques. Client communication and production management. Mixing under pressure. High track-count mixing. Mix analysis in diverse environments, mix conflict management, vocal sub-mixing, parallel and serial processing. Working with MIDI and virtual instruments, pitch and time processing. Students at this level should work on complex projects that demonstrate knowledge and experience in a full-cycle studio production, including pre-production, managing a recording session, various mixing approaches, etc. | | | |
| DAT331 | Programming for Audio Production | 3 | DAT210 or DAT211 or DAT212 or DAT213 |
| Introduction to the application of programming methods to audio production. This course introduces a limited set of programming language elements that can be immediately applied to audio production techniques. Representative audio programming techniques include simple and complex waveform generation, reversing a sample sequence, applying gain, changing mono to stereo, controlled clipping, bit crush, and others, as well as importing and exporting audio data from files. The course will also introduce basic MIDI messaging techniques. The course culminates in a final audio production programming project. This course can be used to fulfill the requirements of DAT150 Beginning Audio Programming. | | | |
| DAT335 | Music Perception and Cognition | 3 | SCI100 or SCI101 or SCI102 or SCI145 |
| Survey of research on perceptual and cognitive theories of sound and music. Topics include characteristics of sound, anatomy of the ear, hearing function, cognitive skills related to music perception, and memory in music. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAT336 | Psychoacoustics for Audio | 3 | SCI100 or SCI101 or SCI102 or SCI145 |
| Psychoacoustics addresses both the physical and perceived aspects of sounds. Physical properties include waves and wave propagation, sound pressure level and measurement, reflection, absorption, and diffusion, as well as spectral content. Perceptual properties include pitch, loudness, timbre, Hass Effect, and spatial cues. The course includes topics on the anatomy of the ear as well as an introduction to the aural pathways in the human brain. In addition, basics of hearing protection are explained. | | | |
| DAT340 | Film Scoring | 3 | DAT203 or DAT204 and DAT320 or DAT321 |
| Analysis of acclaimed film scores, examination of the role of music and sonic textures based on traditionally and digitally orchestrated film scores. Application of composition, arrangement and digital audio production techniques to the creation of original music for motion pictures. Music spotting, setting up sync points, tempo map, scoring to picture. Students work with sampled instruments to support setting, narrative, characters and action. | | | |
| DAT342 | Interactive Game Composition | 3 | DAT203 or DAT204 and DAT212 or DAT213 |
| Advanced composition of videogame music. Analysis of settings, characters, and gameplay for music support. Designing for adaptive evolution of musical themes. Orchestrational aspects of adaptive music. Students will score model interactive projects. | | | |
| DAT350 | Audio Programming | 3 | CS295 |
| Introduction to programming plug-ins for audio applications. Study of features of commercial plug- ins. Introduction to plug-in architecture. Implementation of basic DSP operations. Course culminates in a final project. | | | |
| DAT355 | Game Audio Implementation | 3 | DAT212 or DAT213 |
| Design and development of audio resources for real-time interactive systems. Focus on technical aspects of audio integration into a game build. Adaptive audio techniques. Requires a collaborative project that successfully applies course concepts. | | | |
| DAT360 | Digital Signal Processing | 3 | MATH245 |
| Introduction to digital signal processing, sampling and quantization, A/D and D/A converters, discrete time systems, Discrete Fourier Transform, convolution, z-transforms, transfer functions, digital filter realizations, and fast Fourier transforms. Introduction to digital filter design and digital audio applications. | | | |
| DAT365 | Digital Filter Design | 4 | DAT360 |
| Design of digital FIR and IIR filters. Analysis of impulse response. Z-transform and geometric methods of filter design. Design and implementation of Elliptical, Bessel, Butterworth, and Chebyshev filter types. Windowing. Applications to audio. | | | |
| DAT366 | Digital Audio Filters | 3 | DAT360 |
| Digital Audio Filters presents the principles of digital FIR and IIR filter design along with an introduction to their implementation for audio. Beginning with the analysis of impulse response, the course proceeds to the Z-transform and then an introduction to the numerical methods required of filter design. Representative filter response types include Elliptical, Bessel, Butterworth, and Chebyshev. Other topics include consideration of the problems associated with windowing. Issues specific to audio application, and some advance audio filter topics. The course concludes with a final project. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAT404 | The Ultimate Electronic Music Production | 3 | DAT210 |
| A study of a selection of electronic musical genres, production practices and the reproduction of elements characteristic to a set of genres. Focus on cultural forces, stylistic influences, music theory analysis and technological developments unique to the production of electronic music. Project work includes the re-production of several ground-breaking musical works, advanced sound synthesis using hardware and software, specialized sequencing and mixing practices, remixing. Production of original music in a given style along with a presentation of the history, stylistic characteristics, and evolution of a sub-genre. | | | |
| DAT405 | The Ultimate Electronic Music Production | 4 | DAT211 |
| A study of a selection of electronic musical genres, production practices and the reproduction of elements characteristic to a set of genres. Focus on cultural forces, stylistic influences, music theory analysis and technological developments unique to the production of electronic music. Project work includes the re-production of several ground-breaking musical works, advanced sound synthesis using hardware or software, specialized sequencing and mixing practices, remixing. Production of original music in a given style along with a presentation of the history, stylistic characteristics and evolution of a sub-genre. | | | |
| DAT412 | Interactive Audio Lab | 3 | Faculty approval |
| A Project that guides a team of sound designers and audio engineers through the development of an interactive-audio-driven product. The course focuses on the establishment of effective workflow and efficient teamwork to complete the development cycle within one semester. The end product is a functional interactive audio product that demonstrates the advancement of student technical and artistic skill. | | | |
| DAT420 | Audio Mastering | 3 | DAT320 |
| Final preparation of a recording for disk manufacture. Advanced use of audio compression and EQ for mastering. Crest factor. Critical listening. Understanding of manufacturing standards for optical media. | | | |
| DAT450 | Audio Software Development | 3 | DAT360 |
| Design and implementation of software applications for MIDI and digital audio. Subsystem architecture. Real-time MIDI playback and recording engines, audio streams, and audio capture. Sample processing and plug-in design. Course project will include implementation of a real-time MIDI and digital audio application. | | | |
| DAT455 | Game Audio Programming | 3 | DAT360 |
| Implementation of audio assets into a game build. Low- and high-level audio system architecture, decoding audio compression formats, adaptive audio software design, interactivity. | | | |
| DAT475 | Audio Software Development Collaborative Project | 3 | CS340 |
| The ASD Collaborative Project is offered to give students the opportunity to develop a software product, whether an app, a plugin, a library, or a utility, that has an audio application. The project should follow standard software development best practices and demonstrate students' capacities for designing and implementing a working product. The stages of development within the project should be thoroughly documented and a presentation, along with a product demonstration should be given at the end of the semester. | | | |
| DAT480 | Portfolio 1 | 3 | DAT324 or DAT326 |
| Part I of the senior capstone project. The practical focus will be on topic research, identifying relevancy, practicality, resources, challenges, competitive analysis and marketable advantages, project planning and gathering resources. Students will complete a rapid prototyping assignment based on their chosen project. Requirements and deliverables of the course will be customized based on the individual needs of each student's chosen portfolio product or service, and may include a marketing plan, an artist one-sheet, or a business plan. The lecture part of the course will be also customized and may include topics ranging from intellectual property, distribution, and licensing, as they apply to audio production. The course will culminate with a written progress report, a Portfolio 2 production plan and timeline. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| DAT481 | Audio Engineering Project 1 | 3 | DAT350 |
| The first semester capstone project for the Audio Software Development and Engineering track. Planning stage of a major year-long development project, such as an audio application, plugin, or app. This phase of the project should culminate in a written project plan and oral presentation. | | | |
| DAT482 | Game Studio 1 | 3 | DAT342 or DAT355 |
| Practical application of game audio design and techniques in a multi-disciplinary team working on an instructor-led game project. Opportunities to compose a game score, design sound effects, write, record, and edit dialogue, manage audio assets, and program game audio. | | | |
| DAT483 | MediaWorks 1 | 3 | DAT320 |
| A collaborative, potentially interdisciplinary, practical project. May be a live project with real-life client(s) and strict deadlines. Students work on two 7-week, or one 15-week full-cycle audio- or audiovisual production in an audio production team, where student may be required to fulfill various roles, typically that of an audio engineer, sound designer, composer, and project manager. Full-cycle production may include client meetings, concept development, production, and delivery. The lecture part of the course will include client communications, team management- and communication principles, the EER approach and file management practices. The deliverables of the course can be integrated into individual student portfolios. Prior approval required. | | | |
| DAT485 | Digital Audio Technology Portfolio | 3 | None |
| Students will further their understanding of a chosen field of the audio and music industries, and demonstrate their preparedness via an employment- or audio business-focused portfolio. The production of both required portfolio materials and content will be guided by reviews and frequent feedback from instructor. The lecture part of the course will focus on product- or service presentation for potential employees and clients, market positioning. Final deliverables of the course will include an oral presentation, a physical media and a web-based media-rich portfolio, featuring a previously agreed-upon number and range of audio work. | | | |
| DAT487 | Audio Engineering Project 2 | 3 | DAT481 |
| The completion and implementation phase of the capstone project for the Audio Software Development and Engineering track. This project will culminate in a completed project along with write-up and oral presentation. | | | |
| DAT488 | Game Studio 2 | 3 | DAT482 |
| Continuation of a project begun in DAT482 or a separate project. This course offers the opportunity to advance beyond the accomplishments of DAT482 in a multi-disciplinary team setting. | | | |
| DAT489 | MediaWorks 2 | 3 | DAT483 |
| MediaWorks 2 will allow students the opportunity to perform new production tasks such as lead other production team members as a project manager, or to assist in the on-boarding of students new to the MediaWorks workflow. This course presents a full production cycle that may include client meetings, concept development, production, and delivery. The deliverables of the course can be integrated into individual student portfolios. | | | |
| DAT490 | Media Works 3 | 3 | DAT489 |
| Media Works 3 allows students the opportunity to perform new production tasks such as a Project Manager and/or Assistant Audio Director, and lead production team members, including Visual Team members, in the concept generation, production and presentation phases of Media Works. This course presents a full production cycle that may include client meetings, concept development, production, and delivery. The deliverables of the course can be integrated into individual student portfolios. | | | |
| DAT499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Digital Audio Technology. May be used as an elective and repeated as topic changes. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| ENG050 | Grammar and Composition | 3 | Placement Exam |
| Extensive written work stressing correct spelling, accurate sentence structure, and logical paragraph development. Credit earned does not count toward a degree. (Preparatory Course – Does not carry degree credit.) | | | |
| ENG060 | Writing Support Lab | 2 | Placement Exam |
| This course is designed to provide additional support to students in ENG100 - English Composition by providing additional time with an instructor to develop and refine skills in reading and writing. Students will be guided through exercises and material based on the ENG100 syllabus, in order to develop the necessary competencies to pass the course. | | | |
| ENG100 | English Composition | 3 | Placement Exam or ENG050 |
| This course introduces students to the challenges and demands of college-level writing; clear language that explains, describes, or informs. It explores basic critical thinking, as well as the techniques and practices of expository and argumentative writing. Students learn to generate ideas for writing based on readings, to organize and support their ideas, and to apply revision strategies to the production of polished work with accurately cited sources. The course emphasized content, format and correct grammatical structure and requires students to write and revise a minimum of 6,000 words. | | | |
| ENG105 | Critical Reading, Thinking and Writing | 3 | ENG100 |
| This course is designed to advance students' critical reading, thinking, and writing skills beyond ENG100: English Composition. It builds upon students' understanding of the demands and conventions of academic reading and writing through a focus on textual analysis and the use of evidence and secondary source materials to build effective arguments. Students learn to differentiate fact from opinion; draw sound inferences from variegated data forms; identify and avoid logical fallacies. They practice inductive and deductive reasoning via the examination, evaluation, and synthesis of written work. They practice argumentation through the creation of multiple drafts of research-based, expository writing. | | | |
| ENG199 | Special Topic | TBD | As Appropriate |
| Course on a special topic in English. May be used as an elective and repeated as topic changes. | | | |
| ENG220 | Technical and Professional Writing | 3 | ENG100 |
| Technical and Professional Writing prepares students to communicate effectively with stakeholders who may not be technically savvy. Emphasis is on improving basic writing skills through the creation of technical and non-technical documents. Creating clear and concise sentences and paragraphs, using correct punctuation and mechanics, using graphs and figures and the citation of sources are stressed. To support these writing tasks, the course guides students through the drafting and revision processes and ensures readability and accessibility for technical and non-technical audiences. | | | |
| ENG227 | Scriptwriting | 3 | ENG100 |
| An introduction to the techniques used by screenwriters in film, animation, and video game development. Students will learn the basics of how a writer formulates and executes a story concept. Emphasis will also be placed on the writer's role on a production team. | | | |
| ENG228 | Creative Writing | 3 | ENG100 |
| This course examines the craft of creative writing through the lenses of prose and poetry. Discussion topics include identifying purpose and audience, matching structure to content, prewriting and editing techniques, applying, and providing constructive feedback, critical thinking within the literary context and the U.S. literary industry. Students will learn how to submit work for publication. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| ENG229 | Cog: The Publishing Experience | 3 | ENG100 |
| This course provides students with the nuts-and-bolts experience of staffing a multimedia publication with print and online components. Students comprise the editorial staff of Cog, published by Cogswell Polytechnical College. Cog considers submissions from authors working in the United States and beyond. Students' production tasks include manuscript selection, editing, layout, promotion, vendor/printer relations and adjudicating first-round literary contest submissions and adapting the winning piece as a short, animated film in collaboration with the Digital Art and Animation program. | | | |
| ENG230 | Classics of the World Stage | 3 | ENG100 |
| This course will study significant dramas from around the world, helping to put into a global perspective the evolution of this form of art and entertainment. The focus will be on analyzing the work of dramatists and playwrights who saw universal themes in the lives of people around them. In addition to reading, discussing, and writing about six plays, students will also examine their structure as performance, including the differing interpretations of each play. | | | |
| ENG250 | Speech and Oral Communication | 3 | ENG100 |
| Development and improvement of effective oral communication skills in formal and informal settings. Emphasis on preparation of topics, development of student as effective communicator, and clear presentation of research. | | | |
| ENG280 | Apocalypse and The American Imagination | 3 | ENG100 |
| Apocalypse and The American Imagination explores the role apocalypse plays in American culture. The course teaches students to isolate and analyze memes and tropes in popular culture and media and develop a deeper understanding of American culture in the process. The seminar is additionally designed to increase students' ability to express themselves in both writing and oral presentations. | | | |
| ENG285 | Visions of American Dystopia | 3 | ENG100 |
| Visions of American Dystopias explores possible modes of future human existence. The class teaches students to recognize themes and tropes in utopian and dystopian literature and develop a deeper understanding of American culture in the process. The seminar is additionally designed to increase students' ability to express themselves in both writing and oral presentations. | | | |
| ENG299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in English. May be used as an elective and repeated as topic changes. | | | |
| ENG300 | Essentials of Written Communication | 3 | ENG100 |
| A course in expository writing available to students who have completed their lower division writing and research skills to meet the demands of upper-division college writing. This course provides the additional opportunity for students to college level writing. This course provides the additional opportunity for students to review, reassess, and further develop their writing skills. | | | |
| ENG301 | Writing to be Read | 3 | ENG250 |
| Students will practice their writing skills in order to produce work that targets specific audiences to tell compelling stories about a topic developed in collaboration with faculty. This course concentrates on research-based non-fiction genres, including blog posts, research essays, investigative reporting, and creative non-fiction. Students will work with faculty and their peers to devise a topic, research, draft, and revise significant pieces of writing from different genres or for different audiences. Students will present their work in a variety of formats, including outside the classroom. | | | |
| ENG310 | Classics of Western Drama | 3 | ENG100 |
| Man has always looked to theatre as a form of entertainment. Drama has also been used to address religious, political, social, and cultural issues and to shape people's thoughts. Through reading plays, attending lectures, participating in class discussions, writing papers, and watching performances, this course will examine the evolution of the dramatic art. It will also focus attention on the foundations of modern animation and scriptwriting as they were established centuries ago by great dramatists and playwrights who saw universal themes in the lives of people around them. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| ENG399 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in English. May be used as an elective and repeated as topic changes. | | | |
| ENG499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in English. May be used as an elective and repeated as topic changes. | | | |
| ENT520 | BUSINESS MODELS AND PLANNING | 3 | None, Co-requisite: None |
| How do you launch an innovative idea? Learn about the components of business model innovations focused on developing and driving competitive value for new businesses or ideas. Get inspired to rethink and redesign your business assumptions, strategies, and innovative ideas. | | | |
| ENT525 | LEGAL STRUCTURES, CONTRACTS AND RISK MANAGEMENT | 3 | None, Co-requisite: None |
| This course is designed for students to understand the legal considerations involved with starting new business ventures or bringing an idea to market. In this course, students learn about business structures, key contract components, liability and risk management, non-disclosure agreements, intellectual property such as patents, copyrights, trademarks, trade secrets, etc., as well as federal and state employment and labor law. The course also provides an overview of taxation and other key regulations as they pertain to start-ups. | | | |
| ENT530 | FINANCE AND ACCOUNTING | 3 | None, Co-requisite: None |
| Business leaders need to understand the economics of innovative ideas and the financial resources needed to support them. Learn foundational knowledge in finance and accounting to deepen your skill in financial information analysis. Develop the ability to interpret and apply financial information to the decision-making process. Course materials and hands-on practice will help explain core financial concepts and clarify frameworks. | | | |
| ENT535 | ENTREPRENEURIAL MARKETING | 3 | None, Co-requisite: None |
| Successful execution of an innovative idea requires a sound marketing plan. Learn how to use basic marketing tools to realize the potential of a new business venture or idea. Understand the nature of marketing challenges facing entrepreneurs and innovators, and then develop implementable solutions to address these. | | | |
| ENT540 | NEGOTIATION, SOURCES AND USES OF POWER | 3 | None, Co-requisite: None |
| Negotiation is a process that involves building trust and relationships. This is also the starting point for influencing and shaping mutually beneficial agreements. Learn how to develop strategies to plan and execute successful negotiations while maintaining positive relationships with stakeholders. Coursework based on real-life workplace dynamics will help you assess your own skills and inclinations to increase your power and confidence in challenging situations. Strategies learned in this course may immediately be applied to your job and daily life. | | | |
| ENT550 | DIGITAL TRANSFORMATION AND SOCIAL MEDIA | 3 | None, Co-requisite: None |
| The modern digital age presents unfamiliar challenges to business leaders and entrepreneurs. Examine and understand trends that shape new market realities. Learn about the causes and consequences of digital disruption, and how to manage marketing efforts in the digital world. Course materials provide context and practical methodologies for navigating and managing the digital ecosystem. | | | |
| ENT555 | LEADERSHIP AND MANAGEMENT | 3 | None, Co-requisite: None |
| Leading and managing successful companies has changed. Today's business landscape is more uncertain and volatile. Learn how leadership and management look in flourishing, innovative organizations. Understand why internal structures and traditional systems need to evolve and be agile in adapting to today's competitive environment. Course materials provide research findings for improving organizations and strategies for developing performance-driven cultures. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| ENT590 | ENTERPRENEURSHIP AND INNOVATION PRACTICUM 1 | 3 | ENT520 and ENT530 |
| Part 1 of the capstone course. This capstone course provides opportunities to apply skills and knowledge learned in the program. This course enables students to gain real-life, practical experience in an entrepreneurial or innovative organization. Students, under the guidance of the practicum faculty team, will identify and work with a business, public or non-profit organization to address an identified business challenge, research a new opportunity, or achieve a defined organizational objective. Students may also work on their own innovative ideas or new business ventures. | | | |
| ENT591 | ENTERPRENEURSHIP AND INNOVATION PRACTICUM 1 | 1.5 | ENT520 and ENT530 |
| Part 1 of the capstone course. This capstone course provides opportunities to apply skills and knowledge learned in the program. This course enables students to gain real-life, practical experience in an entrepreneurial or innovative organization. Students, under the guidance of the practicum faculty team, will identify and work with a business, public or non-profit organization to address an identified business challenge, research a new opportunity, or achieve a defined organizational objective. Students may also work on their own innovative ideas or new business ventures. | | | |
| ENT592 | ENTERPRENEURSHIP AND INNOVATION PRACTICUM 2 | 1.5 | ENT591 or Faculty Approval, Co-requisite: None |
| Part 2 of the capstone course. This capstone course provides opportunities to apply skills and knowledge learned in the program. This course enables students to gain real-life, practical experience in an entrepreneurial or innovative organization. Students, under the guidance of the practicum faculty team, will identify and work with a business, public or non-profit organization to address an identified business challenge, research a new opportunity, or achieve a defined organizational objective. Students may also work on their own innovative ideas or new business ventures. | | | |
| ENT595 | ENTERPRENEURSHIP AND INNOVATION PRACTICUM 2 | 3 | ENT590 or Faculty Approval, Co-requisite: None |
| Part 2 of the capstone course. This capstone course provides opportunities to apply skills and knowledge learned in the program. This course enables students to gain real-life, practical experience in an entrepreneurial or innovative organization. Students, under the guidance of the practicum faculty team, will identify and work with a business, public or non-profit organization to address an identified business challenge, research a new opportunity, or achieve a defined organizational objective. Students may also work on their own innovative ideas or new business ventures. | | | |
| ENT596 | ENTERPRENEURSHIP AND INNOVATION PRACTICUM 3 | 1.5 | ENT592 and ENT525 and ENT575 |
| Part 3 of the capstone course. This capstone course provides opportunities to apply skills and knowledge learned in the program. This course enables students to gain real-life, practical experience in an entrepreneurial or innovative organization. Students, under the guidance of the practicum faculty team, will identify and work with a business, public or non-profit organization to address an identified business challenge, research a new opportunity, or achieve a defined organizational objective. Students may also work on their own innovative ideas or new business ventures. | | | |
| ENT597 | ENTERPRENEURSHIP AND INNOVATION PRACTICUM 4 | 1.5 | ENT596 or Faculty Approval, Co-requisite: None |
| Part 4 of the capstone course. This capstone course provides opportunities to apply skills and knowledge learned in the program. This course enables students to gain real-life, practical experience in an entrepreneurial or innovative organization. Students, under the guidance of the practicum faculty team, will identify and work with a business, public or non-profit organization to address an identified business challenge, research a new opportunity, or achieve a defined organizational objective. Students may also work on their own innovative ideas or new business ventures. | | | |
| GAM101 | Foundations of Interactive Design | 4 | None |
| Introduction to the fundamentals of interactive design through lectures and the building of analog games in a collaborative project-based environment. Topics covered include history of computer games, writing rules, play balance, statistics and probabilities, layout and level design, psychology and replayability, atmosphere, design documents and multiplayer issues. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| GAM135 | Game Studio 1: Production Pipeline | 3 | None |
| Introduction to video game development and various project production models and team structures through lectures, discussions, and simple game projects. Lessons learned from studying project post-mortems, case studies, and employing various tools, techniques, and strategies will develop skills in ideation, iteration, troubleshooting, risk assessment, adaptation, communication, team management, organization, and leadership. | | | |
| GAM200 | Foundations of Interactive Sound Design | 4 | GAM101 |
| This course introduces students to the art and science of creating and adding audio elements to video games. Students will gain an understanding of how audio creates a fully immersive player experience and the technical requirements of implementing audio. | | | |
| GAM220 | Introduction to Game Storytelling | 3 | ENG100 or Instructor Approval |
| This course provides an overview of Western-style fiction development as seen through the lens of story-driven video games. Starting with general theories of story such as the Monomyth and progressing to characterization tips and storytelling best practices, the course segues into an exploration of how these principles have been and can be applied by game developers to their own craft. Through a combination of lectures, readings, writing assignments, case studies, analytical exercises, and storytelling problem-solving, students will gain a better understanding of what it can take to bring a video game story to vibrant life. | | | |
| GAM225 | Introduction to Game Production | 3 | None |
| Introduction to video game development and various project production models and team structures through lectures, discussions, and simple game projects. Lessons learned from studying project post- mortems, case studies and employing various tools, techniques and strategies will develop skills in ideation, iteration, troubleshooting, risk assessment, adaptation, communication, team management, organization, and leadership. | | | |
| GAM230 | Introduction to Game Engines | 3 | DAA240 |
| This course introduces students to industry standard game engines. Students will gain an understanding of how these game engines function, their commonalities, and differences. Students will produce simple games with two popular engines. | | | |
| GAM231 | Introduction to Game Engines | 4 | CS101 and GAM101 |
| This course introduces students to industry-standard game engines. Students will gain an understanding of how a game engine functions, its asset pipelines, as well as best practices for content and gameplay creation. Students will create simple games from concept to executable. | | | |
| GAM233 | Level Design for Single Player Games | 3 | GAM231 |
| Introduction to level design for video games from developing level ideas into executable level maps to implementation, playtesting, and iteration. Exposure to level editors will provide hands-on experience in building levels. Level design principles include pacing, balance, difficulty ramping, level flow, hooks, and level progression. Proper level design methodology will be used to build single player game levels. | | | |
| GAM235 | Game Usability | 3 | GAM225 |
| This course introduces assessment and analysis of game usability throughout game production. Students run usability and quality assurance testing sessions for games from other project classes. Topics include focus testing, moderated discussion groups, roles and processes in quality assurance, bug reporting and regression, player psychology and observation, and measuring and quantifying subjective experiences. | | | |
| GAM236 | Game Studio 2: Interactive Design | 3 | GAM135 and GAM233 |
| Students will create playable video game prototypes. Topics include game design concepts, theory and methodologies, storytelling, game analysis, player engagement, player immersion, gamification, and techniques for monetization. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| GAM250 | Game 3D Asset Creation | 3 | DAA240 |
| Students learn the technical and creative skills involved in creating high quality 3D art assets for video games on various platforms. Students develop in-game assets from concept to model and texture with an emphasis on the production pipeline and delivery to current game engines. GDA students can use this course to fulfill the requirement of DAA340 Modeling 1. | | | |
| GAM255 | Modeling 1 | 4 | DAA101 |
| Introduces hard and organic surface modeling pertaining to control and refinement of form. Reproduction of machine-made forms and detailed organic shapes. Advanced texturing for enhancement of models. Students apply these techniques to develop 3D models. | | | |
| GAM260 | Game Writing 1 | 3 | ENG227 and GAM220 |
| This writing-intensive course is designed to prepare students for a junior writing role in the video game industry. Students will become familiar with and practice basic, in-the-trenches game narrative development, including cutscenes, branching stories, systemic dialogue and more. Students will also learn how their efforts fit in with the rest of a typical game development process, with a particular emphasis on working within the concepts and constraints of pre-existing intellectual properties. | | | |
| GAM265 | Texture & Lighting | 4 | GAM255 |
| This course will cover best practices on the creation of cg textures for real-time platforms. Students will learn to create and implement various maps and material shaders using industry-standard tools. Analysis through physical observation on the light gathering of surfaces teaches students how to digitally reproduce any material. Students learn UV texture layout, projection techniques, procedural shader maps, and painted shader maps. | | | |
| GAM295 | Game Design 1 | 3 | ENG100 |
| Introduction to the fundamentals of game design through lectures and the building of board games in a collaborative workshop environment. Topics covered include history of computer games, writing rules, play balance, statistics and probabilities, layout and level design, psychology and replayability, atmosphere, design documents and multiplayer issues. | | | |
| GAM299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Game Design and Development. May be used as an elective and repeated as topic changes. | | | |
| GAM300 | Game 3D Asset Creation | 4 | GAM231 and GAM265 |
| Students learn the technical and creative skills involved in creating high-quality 3D art assets for video games on various platforms. Students develop in-game assets from concept to model and texture with an emphasis on the production pipeline and delivery to current game engines. | | | |
| GAM310 | Character Rigging | 4 | DAA244 |
| Introduction to animation software modules with emphasis on character rigging techniques: joints, surface binding, articulation, forward and inverse kinematics (FK and IK), and hierarchical node structures. Students apply these techniques to develop 3D characters. Includes a summary of the animation software module, graph editor, setting keyframes, and tangents for basic animation. | | | |
| GAM314 | Gameplay Programming | 3 | CS313 and GAM231 |
| In this course, students will utilize industry-standard game engines and their associated languages to create functional code. Students will explore principles of game programming such as in-game graphics, user input, sound, animation, and collision detection. Students will learn to program their own games and gain a better understanding of game design and development. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| GAM340 | Game Writing 2 | 3 | GAM260 |
| Having experienced a simulation of acting as a junior game writer working on existing intellectual properties (IP) in Game Writing 1, students now step up to the role of lead writer on a major simulated game project featuring a totally original IP. Participants in this course will pitch and develop original characters, world, and story to match existing, proven gameplay mechanics. | | | |
| GAM355 | Level Design 1 | 3 | DAA240 and CS100 |
| Introduction to level design for video games from developing level ideas into executable level maps to implementation, playtesting, and iteration. Exposure to level editors will provide hands-on experience in building levels. Level design principles include pacing, balance, difficulty ramping, level flow, hooks, and level progression. Proper level design methodology will be used to build game levels. | | | |
| GAM360 | Game Animation | 3 | DAA244 |
| In this course students will create In-Game animations such as Cycles, Hit Reacts, Melees and Prototypes. Students will get familiar with the animation pipelines, tools, and game engine. Project Management and Version Control system will be used during production. Students will work in teams as well as individually as they produce assets through a typical video game development production cycle with guidelines similar to those in the industry. Students will also have opportunities to network with industry professionals. | | | |
| GAM365 | Environment Art | 4 | GAM231 and GAM265 |
| In this course, students will learn to create immersive spaces that reinforce the story, level design, and gameplay for real-time applications. Students will build and refine the content that defines the aesthetic and visual language of their game world. The creative and technical requirements of the environment art pipeline from concept to implementation within an industry-standard game engine will be covered. | | | |
| GAM370 | Environment Art | 3 | DAA340 or GAM250 |
| Covers all aspects of environment art for real-time applications (current-gen games, virtual worlds, and 3D mobile/flash games). The technical requirements and conventions of general games modeling will be covered, with a focus on translating the student's general modeling and texturing skills to the more technical and systematic world of environment art for use in a widely used game engine. | | | |
| GAM376 | Game Design 2 | 3 | GAM350 |
| Students will create playable video game prototypes. Topics include game design concepts, theory and methodologies, storytelling, game analysis, player engagement, player immersion, gamification, and techniques for monetization. | | | |
| GAM400 | Game Studio 3: Portfolio | 3 | RWPS480 |
| In this course, students will build a portfolio that demonstrates their abilities with the relevant work they've done for their desired job role. Students will prepare their marketing materials such as a resume, cover letters, and an online presence. | | | |
| GAM415 | Level Design 2 | 3 | GAM355 |
| Focus on the design and implementation of immersive player experiences using commercial game engines and level editors. Advanced level design topics are covered including scripting interactive level sequences, level lighting, material editing, particle systems, development and use of custom assets, animation, user interface, in-game cinematics, and choreography. | | | |
| GAM420 | Narrative Design and Leadership | 3 | GAM340 |
| Video game story development involves not only writing but also what is known in the industry as "narrative design." In this course we will examine the increasingly common role of the narrative designer and its relationship to storytelling, game design, systems planning, scope analysis, scheduling, and more. Students will also take on the lead narrative role on a large, simulated video game project, learning how to allocate resources, mentor junior writers, react to changing circumstances, and make crucial storytelling decisions. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| GAM430 | Real-Time Visual Effects | 3 | GAM355 or DAA358 |
| Students will generate hand-crafted visual effects using procedural techniques inside game engines. Students will use these techniques to create custom geometry, shaders, and particle simulations. Students will apply these techniques to create real-time visual effects like weapon trails, fire, smoke, explosions, rain, water splashes, moving cloth and custom effects. Students will create shaders in both HLSL (High Level Scripting Language) and also node-based systems. | | | |
| GAM475 | Game Studio 1 | 3 | Faculty approval |
| A multi-disciplinary team is guided through a typical video game development production lifecycle. The focus is on working as an effective and efficient development team to produce a capstone game project on schedule. Skillsets are tested and knowledge is directly applied. Team members assume roles similar to those in the video game industry and will have opportunities to work and network with industry professionals. Prior approval required. | | | |
| GAM476 | Game Studio 2 | 3 | Faculty approval |
| A multi-disciplinary team is guided through the second half of a typical video game development production lifecycle. The focus is on working as an effective and efficient development team to produce a capstone game project on schedule. Skillsets are tested and knowledge is directly applied. Team members assume roles similar to those in the video game industry and will have opportunities to work and network with industry professionals. Prior approval required. | | | |
| GAM477 | Game Studio: Post Production | 3 | None |
| A small "core" multi-disciplinary team is guided through completion and "shipping" of a video game. The focus is on the last 10% of work that often takes 90% of the time to complete. Students work on an agile development team where quick response and problem solving is necessary. Students learn to deploy games for several platforms, go through testing, debugging cycles, device specific optimizations, and become intimately familiar with the innards and more complex functionality in the game. Artists and Designers learn to polish and to revise other people's work to ship a game while also focusing on maintaining quality. Team members assume roles similar to those in the video game industry. | | | |
| GAM480 | Game Studio 1 | 3 | Senior Status or Faculty Approval |
| A multi-disciplinary team is guided through a typical video game development production lifecycle. The focus is on working as an effective and efficient development team to produce a capstone game project on schedule. Skillsets are tested and knowledge is directly applied. Team members assume roles similar to those in the video game industry and will have opportunities to work and network with industry professionals. | | | |
| GAM485 | Game Studio 2 | 3 | Senior Status or Faculty Approval |
| A multidisciplinary team is guided through the second half of a typical video game development production lifecycle. The focus is on working as an effective and efficient development team to produce a capstone game project on schedule. Skillsets are tested and knowledge is directly applied. Team members assume roles similar to those in the video game industry and will have opportunities to work and network with industry professionals. | | | |
| GAM499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Game Design and Development. May be used as an elective and repeated as topic changes. | | | |
| HUM100 | Disruptive Imagination | 3 | None |
| While some courses ask students to "think outside the box," Disruptive Imagination encourages students to reimagine the concept of a "box." Through a series of team-based projects, students will apply the concepts of design-thinking as they harness the power of imagination in exploring solutions to challenges in numerous facets of their academic, creative, and personal life. With a special focus on the types of collaborative skills needed in today's work environments, students will learn to critically analyze situations, propose, and develop solution strategies, and present their findings and results in a professional manner. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| HUM120 | The Nature and History of Western Art | 3 | None |
| This course provides a broad introduction to the nature, vocabulary, media, and historical development of the visual arts. Major categories are architecture, sculpture, painting, and printmaking. Exposure to major art works in Western tradition from Paleolithic times to present. Students develop criteria for answering the question "what is art?" | | | |
| HUM122 | Music That Moves The World | 3 | None |
| Study of representative music and instruments from world cultures including Middle Eastern, Asian/Pacific, Indian, African, Latin American, North American, and Western. Emphasis is on world music's impact and influence on contemporary American musical styles and performance. | | | |
| HUM125 | Music in Western Culture | 3 | None |
| Study of musical examples and compositional techniques evolving from the Medieval period to the present. Characteristic forms and styles, analysis and listening examples of each era, and leading composers are explored. Students examine the significance of music for people and social bases for the development of music. | | | |
| HUM130 | Modern Art History | 3 | None |
| This course examines the history of Western art from the advent of the avant-garde to post- modernism. Emphasis is given to the social/political and theoretical developments coinciding with the changes in culture. | | | |
| HUM140 | Modern Art History and Film | 3 | None |
| This course examines the history of Western art from the advent of the avant-garde to Postmodernism. Emphasis is given to the social/political and theoretical developments coinciding with changes in culture. The class will focus on films that capture the spirit of their times. | | | |
| HUM199 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Humanities. May be used as an elective and repeated as topic changes. | | | |
| HUM200 | History of the Modern World | 3 | ENG100 |
| This course explores outstanding political, intellectual, philosophical, military, social and economic trends, movements, and events from the Enlightenment to the present. Major focus is on analysis of the larger forces that have shaped the contemporary world, while the course also examines the role of influential individuals from Anthony (Susan B.) to Zola (Emile). | | | |
| HUM225 | The Horror Film | 3 | ENG100 |
| Course traces the development of the horror film genre from “The Cabinet of Dr. Caligari” and Universal’s “Frankenstein” cycle today’s deconstructive entries, such as “Funny Games” and “What WE Do in the Shadows”. Emphasis is placed on the evolution of literary and filmic roots in the genre and in the wider context of film and visual storytelling. | | | |
| HUM226 | Science Fiction Cinema | 3 | ENG100 |
| A genre survey course emphasizing socio-political and literary roots of classic science fiction films. Emphasis is also placed on evolving special effects, from Méliès’s in-camera tricks to the latest CG. | | | |
| HUM227 | Film History | 3 | ENG100 |
| Surveys the history of film from 1945 to the present. Students learn about the evolution of film technology as well as the social and cultural relevance of the various periods. | | | |
| HUM228 | Video Games and Society | 3 | ENG100 |
| Over the span of just a few decades, video games have gone from being a niche hobby to one of the world's most profitable, pervasive, and influential entertainment forms. In this course we will explore the history, major companies, market realities, controversies, and future of this dynamic industry. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| HUM230 | History of Animation | 3 | ENG100 |
| Exposes students to the historical development of animation as an art form and the techniques, technologies, and personalities responsible for the creation of animated forms and characters. Includes the social and economic content behind the development and popularity of characters and approaches. | | | |
| HUM299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Humanities. May be used as an elective and repeated as topic changes. | | | |
| HUM329 | COG2: Advanced Literary Studies | 3 | ENG100 |
| This course comprises an in-depth examination of the literary genre and industry. Working alongside classmates enrolled in ENG229, students comprise that staff of COG – a multimedia literary journal published by Cogswell Polytechnical College – while gaining exposure to major American literary works, movements, and trends. Students mine the current literary landscape to uncover correlations between contemporary content, culture, and industry. Topics include literary analysis techniques, brand archetypes, representation, and identity politics within today's American literary community, as well as how technology and market factors affect literary creation and distribution. | | | |
| HUM361 | Contemporary Ethical Issues | 3 | ENG100 |
| Examines philosophical foundations of ethical theory and applied ethics. Students discuss historical approaches and contemporary case studies in relation to ethical theory and personal values. | | | |
| HUM399 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Humanities. May be used as an elective and repeated as topic changes. | | | |
| HUM400 | Research and Writing Capstone Project | 3 | Senior Status |
| Students develop an in-depth knowledge in a particular topic. They apply their skills of topic development, critical reading, research techniques, use of sources in arguments, and advanced composition to write a comprehensive research paper. | | | |
| HUM470 | Silicon Valley Challenge | 3 | Senior Status or Faculty Approval |
| This course is an individual capstone experience for seniors. It is designed for students to develop skills as innovative thinkers by applying their skills of topic development, critical reading, research techniques, use of sources in arguments, and advanced composition. Students will decide on an individual research project or an innovative proposal which can take a variety of forms, including a case study, feasibility study, comprehensive research paper, business plan, or similar as agreed to by faculty. At the end of the course, students will present their projects to colleagues and a panel. Students are encouraged to undertake research relevant to their career interests in Silicon Valley and beyond. | | | |
| HUM499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Humanities. May be used as an elective and repeated as topic changes. | | | |
| IND201 | Independent Study | 3 | None |
| Under supervision of a faculty member, this course will enable a student to pursue for course credit on an academic topic of interest. Instructor Approval is required. | | | |
| IND401 | Independent Study | 3 | None |
| Under supervision of a faculty member, this course will enable a student to pursue for course credit on an academic topic of interest. Instructor Approval is required. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| IND501 | Independent Study | 3 | None |
| Under supervision of a faculty member, this course will enable a student to pursue for course credit on an academic topic of interest. Instructor Approval is required. | | | |
| INT401 | Internship 1 | 3 | Junior Status |
| Academic internships are online three-credit classes that run concurrently with external work-based experiential learning. As a faculty run course, students are required to complete academic assignments specifically designed to enhance the learning experience through in-depth reflection and critical analysis of the work environment. Students are expected to log on to canvas and/or meet weekly to complete assigned activities and interact with faculty assigned to the course. Along with the faculty interaction and assignments students are required to complete 135 hours contact hours with the internship site. | | | |
| INT402 | Internship 2 | 3 | Junior Status |
| Academic internships are online three-credit classes that run concurrently with external work-based experiential learning. As a faculty run course, students are required to complete academic assignments specifically designed to enhance the learning experience through in-depth reflection and critical analysis of the work environment. Students are expected to log on to canvas and/or meet weekly to complete assigned activities and interact with faculty assigned to the course. Along with the faculty interaction and assignments students are required to complete 135 hours contact hours with the internship site. | | | |
| INT403 | Internship 3 | 3 | Junior Status |
| Academic internships are online three-credit classes that run concurrently with external work-based experiential learning. As a faculty run course, students are required to complete academic assignments specifically designed to enhance the learning experience through in-depth reflection and critical analysis of the work environment. Students are expected to log on to canvas and/or meet weekly to complete assigned activities and interact with faculty assigned to the course. Along with the faculty interaction and assignments students are required to complete 135 hours contact hours with the internship site. | | | |
| MATH003 | Intermediate Algebra | 3 | None |
| Intermediate Algebra including exponents and polynomials, equations, and systems of equations in one and two variables, functions and graphs, and exponential and logarithmic functions. (Preparatory Course – Does not carry degree credit.) | | | |
| MATH050 | Basic Algebra | 3 | Placement exam |
| Topics include operation on integers, rational numbers, polynomials, and exponents; algebraic expressions, one variable linear equations, straight line, graphs of linear equations, linear inequalities, and solving systems of linear equations in two variables; factoring linear and quadratic equations. (Preparatory Course – Does not carry degree credit.) | | | |
| MATH060 | Success in College Algebra | 2 | Placement exam |
| This course serves as a preparation for MATH 112. In this course, students have the opportunity to develop skills needed to succeed in MATH 112, College Algebra, through group discussion and extra practice handouts. (Preparatory Course – Does not carry degree credit.) | | | |
| MATH112 | College Algebra | 3 | Placement Exam or MATH050 |
| Topics include principles and applications of factoring, rational expression, radicals, solutions and graphs or linear, quadratic equations and inequalities; polynomials, rational, exponential, and logarithmic functions; matrices, determinants, complex numbers. | | | |
| MATH114 | Trigonometry | 3 | MATH112 |
| This course covers the fundamentals of analytic trigonometry. Topics include identities, trigonometric equations, inverse trigonometric functions, graphs of trigonometric functions, and solutions of right and oblique triangles with applications. Vectors, operations, and the dot product are also covered. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| MATH115 | College Algebra and Trigonometry | 3 | Placement Exam or MATH050 |
| Principles and applications of inequalities, functions and graphs, polynomials and rational functions, systems of equations and inequalities, matrices, and determinants. Analytic geometry including conic sections. Trigonometric functions, identities, equations, inverse functions, trigonometric applications including vector definition, operations, and dot product. Students are introduced to the basic concepts for computer graphics. | | | |
| MATH116 | Pre-Calculus | 4 | Placement Exam or MATH114 |
| Topics include principles and applications of factoring, rational expression, radicals, solutions and graphs of linear, quadratic equations and inequalities; polynomials, rational, exponential, trigonometric, and logarithmic functions; matrices, determinants, complex numbers. | | | |
| MATH143 | Calculus 1 | 4 | Placement Exam or MATH114 or higher |
| A first course in differential and integral calculus of a single variable. Topics include functions, limits, derivatives, Mean Value Theorem, trigonometric functions, related rates, maximum-minimum problems, inverse functions, definite and indefinite integrals; logarithmic, exponential, and hyperbolic functions. Students learn basic applications of integration and simple differential equations. | | | |
| MATH145 | Calculus 2 | 4 | MATH143 |
| A second course in differential and integral calculus of a single variable: integration; techniques of integration; infinite sequences and series; polar and parametric equations; applications of integration. Primarily for Science, Technology, Engineering & Math Majors. | | | |
| MATH215 | Mathematics for Computer Graphics | 3 | CS100, DAA244 and MATH114 or Higher |
| This course focuses on math concepts and algorithms used in the Computer Graphics field. It addresses mathematical topics and application of these topics in modeling, rigging, animation, texturing, shading, lighting, and compositing. It also introduces techniques used in particle and fluid simulation for visual effects. This course will establish solid mathematical foundation and ability to apply basic principles of computer graphics. | | | |
| MATH240 | Applied Probability and Random Processes | 3 | MATH145 |
| Fundamental concepts of probability, discrete and continuous random variables, probability distributions, sampling, estimation, elementary hypothesis testing, basic random processes, correlation functions, and power-spectral-density functions. Applications include music, speech and image and processing or computer programming. | | | |
| MATH245 | Calculus 3 | 3 | MATH145 |
| A third course in differential and integral calculus of a single variable. Students are introduced to calculus concepts for science and engineering, including vectors, lines, planes, quadratic surfaces, cylindrical and spherical coordinates, partial derivatives, directional derivatives, gradient, divergence, curl, chain rule, and multiple integrals. | | | |
| MATH285 | Abstract Algebra | 3 | MATH145 |
| Detailed study of abstract algebra: Set Theory (Operations on sets, Set Properties, Functions and Relations), Group Theory (Cyclic Groups, Permutation Groups, Normal Groups, Homomorphism, Isomorphism, Finite Abelian Groups), Ring Theory (Integral Domains, Prime and Maximal Ideals, Quotients, PID's and UFD's), Introduction to Matrix Theory and Vectors. | | | |
| MATH290 | Linear Algebra and Transformations | 3 | MATH145 |
| Graphical representation of vectors and vector projection. Eigenvalues and Eigenvectors. Linear Transformations. Matrix theory and its association with linear transformations. Complex Plane and Rotations, Reflections and Projections therein. Unit Circle and its Applications in Rotations. Quaternion Algebra. Bezier Curves and its applications. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| MATH295 | Discrete Mathematics | 3 | MATH114 or higher |
| Logic. Set theory. Functions. Relations. Proofs by mathematical induction. Recursion and program correctness. Fundamentals of counting, and discrete probability. Elementary graph theory. Introduction to analysis of algorithms. | | | |
| MATH299 | Special Topic | TBD | None |
| Course on a special topic in Mathematics. May be used as an elective and repeated as topic changes. | | | |
| MATH315 | Mathematics for Computing | 4 | MATH295 |
| In this course student learn fundamental and applications of mathematical tools needed for graduate study in computer science ( and game design). Key concepts from calculus, probability, statistics, and graph theory are reviewed with an emphasis on application to real world problems. Topics include limits, infinite sequences and series, derivatives and its applications, definite and indefinite integrals, Applications of integration and simple differential equations, graphs and trees, Introduction to discrete random variables and probability distributions, analysis of algorithms. | | | |
| MATH320 | Geometry and Transformation | 3 | MATH145 |
| Descriptive geometry: points, lines, planes, intersections, spatial relationships. Transformations. Projective Geometry: plane transformations, homogeneous coordinates, space transformations, perspective projection. Differential Geometry: Theory of curves and surfaces. Quaternions and rotation sequences. | | | |
| MATH346 | Applied Differential Equations | 3 | MATH145 |
| Mathematical solutions to ordinary linear differential equations through various techniques. Emphasis on scientific and engineering applications: mechanical, electrical, chemical, structural, thermal, and other systems. Damping and resonance, general and particular solutions, solutions of simultaneous equations, solutions by Laplace transforms and the use of series. | | | |
| MATH499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Mathematics. May be used as an elective and repeated as topic changes. | | | |
| RWPS480 | Capstone Project 1 | 3 | Senior Status or Faculty Approval |
| RWPS480 is Part 1 of the final, 2 semester (6 credit) capstone project in which student groups develop a project idea, create, and document an effective project plan, and begin pre-production activities appropriate to the project. This course proceeds with faculty facilitation and supervision, with students providing direction. Groups will typically develop their own project brief to be approved by a faculty panel and update their faculty facilitator throughout the semester. Each student will be reviewed as individuals and groups throughout the semester according to professional standards established by students and faculty. Students are expected to deploy a full range of creative, technical, and collaborative skills as developed throughout their studies at Cogswell. The project will be concluded during RWPS485 Capstone Studio 2, and so should be scoped effectively to cover two semesters. | | | |
| RWPS485 | Capstone Project 2 | 3 | RWPS480 |
| RWPS485 is Part 2 of the final, 2 semester (6 credit) capstone project in which student groups resume development of the project planned in RWPS480. This course proceeds with faculty facilitation and supervision, with students providing creative direction. Groups will proceed with the production of their project, executing the development according to the previously devised plan. Each student will be reviewed as individuals as well as in groups, according to professional standards established in the previous course. Students are expected to deploy a full range of creative, technical, and collaborative skills as developed throughout their studies at Cogswell. To conclude the semester, groups will present their work to a panel of faculty and guests for feedback. | | | |
| SCI100 | Basic Concepts of Physics | 3 | MATH115 or MATH116 or MATH143 |
| Basic principles: motion, gravitation, electricity and magnetism, light, relativity, and atomic physics. Students are introduced to the fundamentals of physics. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| SCI101 | Basic Physics 1 | 3 | MATH112 or higher |
| Students are introduced to the fundamentals of physics. Topics include basic principles of motion, gravitation, fluids, thermodynamics, kinetic theory, and entropy. Course is intended for students not majoring in engineering. | | | |
| SCI102 | Basic Physics 2 | 3 | SCI101 |
| This course provides a grounding in the fundamentals of classical and modern physics. Topics include basic principles of electricity, magnetism, waves and motion, sound, light, and an introduction to modern physics. | | | |
| SCI110 | The Science of Motion: Humans, Animals, Objects | 3 | MATH112 or higher |
| Analysis of movement of biological systems and objects based on the mechanical principles of motion. Topics covered in lectures and labs: linear kinematics including walking, running, jumping, and climbing; kinematics of joints (elbows, knees, hips, etc.), angular kinematics, forces acting on a body and objects, work and energy, positive and negative work of muscles and total body, conservation of energy during body and object movement, center of mass and its calculation, torque, mechanical and anatomical levers, joint torque calculation and joint reaction force, rotational motion and angular momentum, buoyancy, lift and drag forces acting on wings, swimming propulsion. Fulfills the requirement for a basic lab science. | | | |
| SCI120 | Basic Biology | 3 | None |
| This course presents a systematic approach to the study of living organisms, their relationship to each other and the broader environment with emphasis on the basic principles of biology The topics covered will include basic biology concepts like cell theory, macromolecules, energy metabolism and homeostasis, photosynthesis, nutrition, genetics, reproduction, inheritance, mutations and cancer, evolution, and ecology. Laboratory work will parallel and reinforce concepts introduced in the lectures, using practical models and other visual aids along with discussion and cooperative learning exercises. | | | |
| SCI125 | Introduction to Astronomy | 3 | None |
| This course provides an introduction to astronomy and an overview of our understanding of the universe. Students will learn the history of astronomy, and study the moon, the sun, and the planets. The course will also explore astrobiology, the search for new planetary bodies and extraterrestrial life. Additional topics will include the nature of other natural phenomenon in the universe, and the future of cosmology. | | | |
| SCI130 | Basic Concepts of Anatomy and Physiology | 3 | MATH112 or higher |
| This course presents a systematic approach to the study of the human body beginning with an introduction to anatomical terminology. Topics covered include the gross and microscopic anatomy of the following system: skeletal; muscular, nervous, circulatory, respiratory, digestive, urinary and reproductive. Laboratory work will parallel and reinforce concepts introduced in the lectures, using practical models and other visual aids. | | | |
| SCI145 | College Physics 1 | 4 | MATH143 |
| Fundamentals of mechanics, fluids, and heat, including vectors, translation and equilibrium, acceleration, projectile motion, Newton's Laws, work, energy, power, impulse, momentum, uniform circular notion, rotation of rigid bodies, simple changes, elasticity, simple harmonic motion, fluid statics and dynamics, temperature, thermal expansion, heat units, heat transfer, thermal properties of matter, the thermodynamics and wave motion. Illustrative laboratory work to complement theory. Students are introduced to physics concepts for science and engineering. | | | |
| SCI199 | Special Topic | TBD | As Appropriate |
| Course on a special topic in science. May be used as an elective and repeated as topic changes. | | | |
| SCI200 | General Physics | 3 | SCI100 or SCI110 or SCI130 or SCI145 |
| This course provides a grounding in the fundamentals of classical and modern physics. Topics include basic principles of mechanics, fluids and thermodynamics, waves and motion, sound, light, electricity and magnetism, and an introduction to modern physics. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| SCI220 | Foundations of Musical Acoustics | 3 | SCI100 or SCI145 |
| Waves and wave propagation, sound pressure level and measurement, reflection, absorption, and diffusion. Acoustic characteristics of building materials, room acoustics. Bass traps, diffusers, and other acoustic interventions. Acoustic aspects of studio design. | | | |
| SCI245 | College Physics 2 | 4 | SCI145 |
| Fundamentals of sound, light electricity and magnetism, and modern physics, including illumination, reflection, refraction, interference, diffraction, polarization, DC and AC circuits, magnetism, electrochemistry, and electronics. Illustrative work to compliment theory. Students are introduced to physics concepts for science and engineering. | | | |
| SCI299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in science. May be used as an elective and repeated as topic changes. | | | |
| SCI345 | College Physics 3 | 3 | SCI245 |
| Fundamentals of theory of relativity, quantum mechanics, solid state physics and subatomic particles. | | | |
| SCI399 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in science. May be used as an elective and repeated as topic changes. | | | |
| SCI499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in science. May be used as an elective and repeated as topic changes. | | | |
| SL101 | Cogswell 101 | 0 | None |
| This course is designed to assist incoming students with adapting to college life at Cogswell Polytechnical College. All incoming students will participate in discussions about college academic expectations, time management, organizational skills, communication skills, college social life, registration, portfolio development, and professionalism. | | | |
| SL102 | Strategies for Student Success | 0 | None |
| This course gives students skills and guidance needed to successfully navigate academic environments. Students will establish their own values and identity and discover their own strengths and challenges. The course covers learning to manage time effectively, communicating with instructors, and developing a range of skills that will make them successful within their learning community. Students will define good learning environments and role-play assertive communication scenarios. They will also review and implement effective test-taking strategies, note-taking, and learning techniques. At the conclusion of the course, students will present a final project that utilizes skills learned throughout the course. | | | |
| SSC180 | Introduction to Psychology | 3 | None |
| Introduces students to the scientific study of human behavior. Topics may include natural foundations of behavior, motivation and emotion, critical thinking processes, personality traits, developmental, cognitive, and social behaviors. | | | |
| SSC199 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Social Sciences. May be used as an elective and repeated as topic changes. | | | |
| SSC200 | U.S. Government | 3 | ENG100 |
| Introduces students to the American constitutional system, parties, elections, media, interest groups, branches of government, and public policy issues. Comparison with California constitution and institutions. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| SSC210 | Introduction to Consciousness | 3 | ENG100 |
| Conceptual and experiential investigation of theories of consciousness. Consideration of theories drawn from psychology, neuroscience, and philosophical traditions. Topics include defining “consciousness”, theories of the self, the evolution of consciousness, the neural correlates of consciousness, altered states of consciousness, paranormal experiences and consciousness contemplating itself. Exercises and experiments to accompany reading and discussion. | | | |
| SSC225 | Fashion and Culture | 3 | ENG100 |
| This course provides an introduction to the critical study of culture’s intersections with a wide range of visually impactful fashions and clothing in countries around the world. Students examine the myriad ways in which clothing and style development –from haute couture to street fashion – inform, and are informed by, historic understandings of gender, race, class, sexuality, space, and the body. This exploration pinpoints key developments in each period from ancient times to the present day and covers fashion-related art including costumes designed for animated and video-game-based characters. Course themes include clothing and identity construction, consumerism, power, subversion, and agency. | | | |
| SSC227 | Architecture and World Societies | 3 | ENG100 |
| This course surveys visually impactful architecture, examining how structures reflect geophysical differences, cultural mores and sociopolitical climates within a given period. Students explore buildings and monuments within their societal contexts across Classical, Neolithic, ancient, medieval, Renaissance, and modern times as well as Asian, African, and Pre-Columbian American cultures. Students assess games. Topics include the work and philosophies of major architects including Kahn and Venturi. Course themes include architectural design’s relation to technology. | | | |
| SSC230 | Human Behavior and Entrepreneurship | 3 | ENG100 |
| This course addresses the psychology of entrepreneurism: conceiving, creating, bootstrapping, managing, leading, and potentially selling an innovative business idea. Our goal is to offer mission- critical concepts and best practices of entrepreneurism with a focus on psychology of business, social networking, influence, and leadership. Basic literacy in key areas of marketing, management, and finance combine with psychological profiling of entrepreneurs: creative, innovative, passionate; self- confident; obsessive; oppositional-defiant. The course features discussions, peer engagement, and social networking, case analysis, behavior journaling, and building a business plan for your own creative entrepreneurial idea. | | | |
| SSC235 | Race, Gender and Technology in the Music Industry | 3 | ENG100 |
| The class will explore and discuss the aspects of technology, culture, and business, as well as the many colorful personalities that have shaped this industry. We will also consider how diversity, or lack thereof, has impacted popular culture, as well as specific careers of musicians and music managers throughout the last century. Students will research, write, and present a thesis paper on a topic of their own choice. | | | |
| SSC240 | Microeconomics | 3 | ENG100 |
| Course focuses primarily on microeconomics, such as how people choose, the nature of markets and market failures, and alternative government policies to deal with failure. Topics include opportunity cost, supply, demand, markets, price controls, and market failures. In this course, the economic way of thinking will be applied in order to better understand a market economy. | | | |
| SSC299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Social Sciences. May be used as an elective and repeated as topic changes. | | | |
| SSC332 | Global Political Economics | 3 | ENG100 |
| Based on political, economic, and geopolitical study of contemporary processes of globalization. Comparative analysis of various economic and political systems. New realities of the transitional economic systems. Current economic and social development of West Europe, Russia and Eurasia, China, the Middle East, Latin America, and Africa in context of global economic, cultural, military, and political relations with the United States. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| SSC380 | The Silicon Valley Ecosystem | 3 | ENG100 and HUM100 |
| Silicon Valley is known to be the hub of innovation. This course is designed for students to understand the role of Silicon Valley in wealth creation by taking them through the exciting and rich history of Silicon Valley, its early beginnings and how its culture helps shape the dynamic ecosystem of innovation. Students will learn about pivotal people, inventions, companies, as well as their successes and failures that made an impact on society and the world. | | | |
| SSC399 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Social Sciences. May be used as an elective and repeated as topic changes. | | | |
| SSC499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Social Sciences. May be used as an elective and repeated as topic changes. | | | |
| SWE299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Software Engineering. May be used as an elective and repeated as topic changes. | | | |
| SWE361 | Software QA, Testing and Validation | 3 | CS295 |
| This course introduces students to methods and practice of software testing, verification, and validation. The course also introduces students to different testing frameworks like Junit. | | | |
| SWE442 | Software Engineering Methods and Projects 2 | 3 | SWE340 |
| Case Studies of Object-Oriented Analysis and Design. Design Patterns. Component architecture. Component frameworks. Students apply object-oriented principles in a large project. | | | |
| SWE449 | Tools Programming | 3 | CS106, CS106, and DAA240 |
| This course is an advanced scripting course that will teach students how to use Maya Python command engine and Maya Python API to write and deploy production tools in Maya (workflow optimization tools. Modeling, and rigging, animation tools). It will introduce students to Maya architecture and data flow. Students will learn how to write a simple command plugin and dependency node plugin. Other types of plugins will be analyzed and demonstrated. | | | |
| SWE499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Software Engineering. May be used as an elective and repeated as topic changes. | | | |
| VIRT299 | Special Topic | TBD | As Appropriate |
| Course on a special topic in Virtual Reality and/or Augmented Reality. May be used as an elective and repeated as topic changes. | | | |
| VIRT499 | Special Topic | TBD | As Appropriate |
| Advanced course on a special topic in Virtual Reality and/or Augmented Reality. May be used as an elective and repeated as topic changes. | | | |
| VRAR400 | PERCEPTION, COGNITION AND PRESENCE IN VR | TBD | None |
| The experience of virtual worlds depends upon the mediation of perceptual faculties that can be cognized as 'being in' a virtual space. This course will first present the perceptual and cognitive fundamentals of sight, sound and touch and then present ways in which these faculties are mediated by technology to create a sense of 'presence,' i.e., of being in that world. The course will include theories of presence as well consider health-related impacts of sensory mediation in VR. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| VRAR410 | Introduction to Unity and C# for VR/AR | TBD | No prior Unity, C or VR/AR implementation skills required. |
| For students with no prior skills in the tools of VR and AR, VAR410 introduces C and Unity elements needed to implement cross-platform VR/AR projects. Topics include project setup, editor customization and editor views, basic animation, and audio and asset management. The course also includes rudiments of C programming for the purpose of developing Unity scripts. | | | |
| VRAR420 | Project Implementation for VR/AR | TBD | VRAR410 or previous Unity production experience, including scripting. |
| Building on the foundation set in VRAR410, VRAR420 focuses on Unity elements required to set up and implement simple games and VR/AR projects. This includes an introduction to object-oriented programming in C and more advanced Unity elements such as materials and effects, lighting, physics, and interactivity. The course concludes with the completion of simple app that can be submitted to the Google Play store. | | | |
| VRAR440 | Basic VR App Development | TBD | VRAR420 or previous Unity VR production experience, including scripting. |
| Basic VR App Development begins a more serious introduction to the theory behind virtual reality projects, the dos and don'ts for UI, text, walking and turning speed. It includes multiple ways of narrating a story in VR as opposed to working in non-VR environments. Projects include a first Google Cardboard project and a first HTC Vive project. | | | |
| VRAR450 | HUMAN COMPUTER INTERFACE AND INTERACTION DESIGN | TBD | None |
| Human Computer Interface design addresses problems of usability in VR and AR systems. This course will begin with fundamental techniques of interaction and address progressively more challenging problems. The course will engage both theory and practice of HCI with hands-on projects. It will include an introduction to spatial audio relevant to VR and AR for non-audio specialists. | | | |
| VRAR460 | Basic AR App Development | TBD | VRAR420 or previous Unity AR production experience, including scripting. |
| Basic AR App Development parallels VRAR440 but with a focus on the theory behind augmented reality projects, the dos and don'ts for UI, and how production practices differ from non-AR applications. Practical skills include building AR applications that understand hand gestures and voice commands. The course culminates in a Microsoft HoloLens project that uses all the above features. | | | |
| VRAR499 | Project Practices | TBD | As Appropriate |
| Course on a special topic in virtual reality and/or augmented reality. May be repeated as topic changes. | | | |
| VRAR500 | VR/AR DESIGN PRINCIPLES 1 | TBD | None |
| Moving beyond design principles for 2D and 3D art, VR/AR Design Principles 1 addresses fundamental issues of designing virtual and augmented experiences. Topics may include factors such as semantic vs. responsive gestures, the reactivity of objects in virtual space, interactive element targeting, ergonomics, economy of gestures, sound, or other factors specific to VR and AR. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| VRAR525 | VR/AR DESIGN PRINCIPLES 2 | TBD | VRAR500 |
| Following on the foundations established in VR/AR Design Principles 1, VR/AR Design Principles 2 develops more fully the techniques of creating experiences through interactive virtual and augmented media. Specific topics may include locomotion, optimization for VR tracking, hand and body design, space, and perspective, as well as elements of sound in virtual/augmented spaces. | | | |
| VRAR550 | VR/AR STUDIO PROJECT 1 | TBD | VRAR525 |
| The capstone of the VR/AR certificate program is the VR/AR studio project, a multidisciplinary collaborative project that will engage the efforts of engineers, VR/AR content designers and audio specialists. All of the theory and practice of previous courses will come together in the implementation of projects inspired by 'real world' applications and in some cases commissioned by actual clients. Industry professionals will be brought in at intervals to provide expert feedback and to inspire best practices. | | | |
| VRAR555 | VR/AR STUDIO PROJECT 2 | TBD | VRAR550 |
| Part Two of VR/AR Studio Project extends the timeframe for completion of a multidisciplinary collaborative project to accommodate more complexity and/or depth. Students will give a formal presentation completed work at the end of the program. | | | |
| VRAR599 | Special Topic | TBD | As appropriate |
| Course on a special topic in virtual and/or augmented reality. May be repeated as topic changes. | | | |

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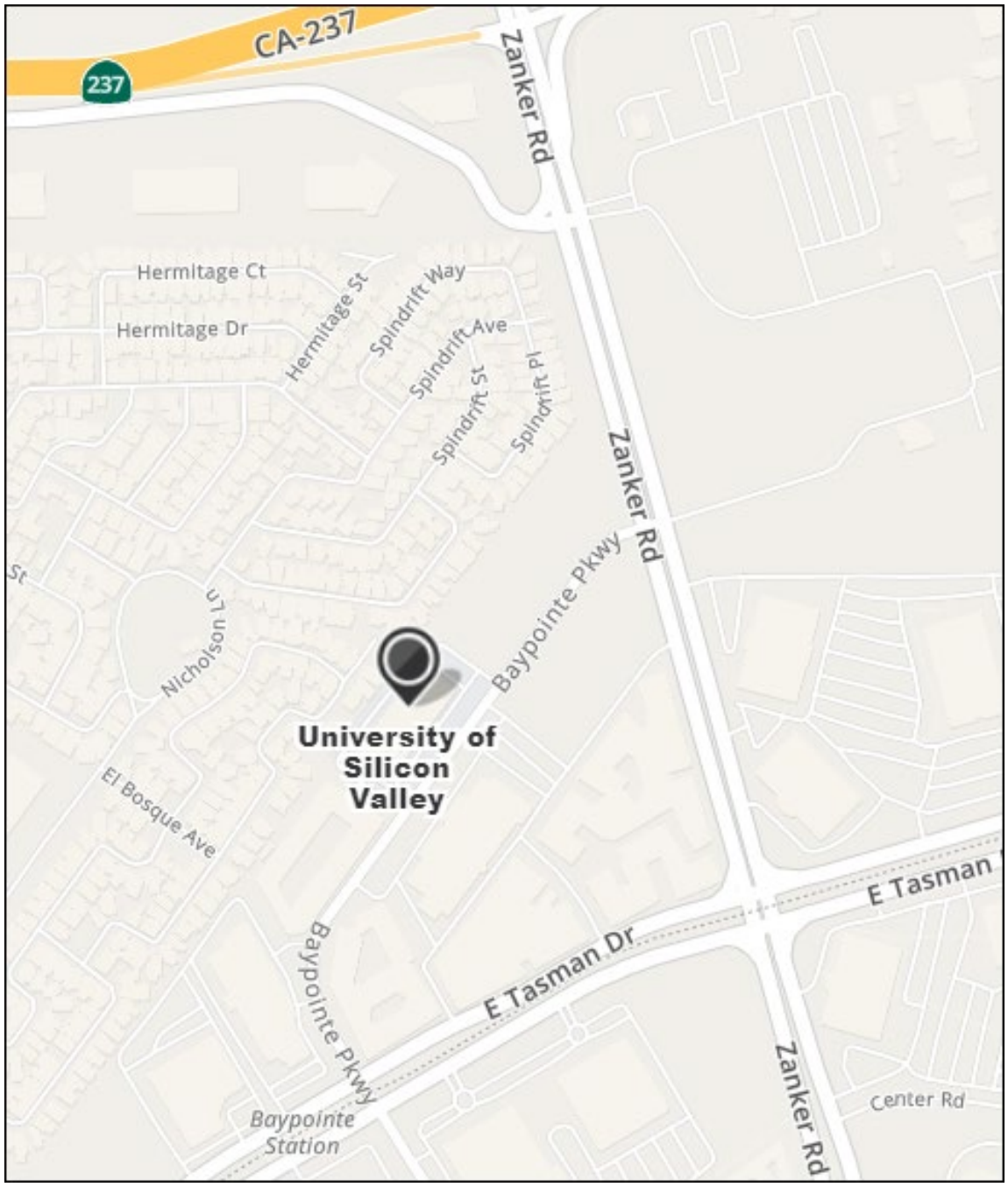


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UNIVERSITY OF SILICON VALLEY®

# 2022 UNIVERSITY CATALOG

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UNIVERSITY OF SILICON VALLEY®

# 2022 CATALOG ADDENDUM

## BOARD OF TRUSTEES

Effective 04/21/2022, Dr. Fardad Fateri is no longer a member of the University Board of Trustees.
Effective 11/17/2022, Charles Restive is no longer an ex-officio member of the University Board of Trustees.

## DEPARTMENT DIRECTORS

Effective 5/1/2022, John Hayes is the Interim Director of the Business, Entrepreneurship, and Innovation Department.

## EXECUTIVE COMMITTEE

Effective 11/17/2022, Christopher Spohn is the President of USV.

## INSTITUTIONAL SCHOLARSHIPS AND GRANTS

The Institutional Scholarships and Grants on Page 25 apply primarily to students attending campus programs only. Students attending 100% online programs are ineligible to apply for most Institutional Scholarships or Grants.

## TUITION LOCK AT USV

A college education is the most important investment you will make. At USV we are committed to your success and providing the resources to help make it happen. Our Tuition Lock makes your financial plan more predictable and affordable. It applies to students attending campus-based programs* who meet and maintain the eligibility requirements. Tuition Lock guarantees the same tuition rate from start through graduation for students who enrolled full-time** per trimester and maintain continuous enrollment.

Students must adhere to the following terms to have your current tuition rate locked-in, however special circumstances may be taken into consideration before disqualification:

- Maintain continuous** full-time enrollment throughout the calendar year;
- Keep all financial accounts current and up to date;
- Apply for financial aid and provide required documents in a timely manner (if applicable); and
- Remain in good academic standing.***

Like many colleges, tuition rates at USV have often increased each year, usually in the fall. This was necessary to adjust to rising costs for purchasing and replacing equipment and maintaining a faculty of outstanding industry professionals and educators. While future increases in tuition can be expected, students eligible for the Tuition Lock will not be affected.

* Tuition Lock does not apply to students attending 100% online programs.

** Students must be enrolled for 12 or more credits per trimester for undergraduate programs and 6 or more credits per trimester for graduate programs. .

*** Students must demonstrate Satisfactory Academic Progress (SAP) by having and maintaining a Cumulative Grade Point Average (CGPA) of 2.0 or higher for undergraduate programs and 3.0 for graduate programs.

## ADMISSIONS REQUIREMENTS FOR UNDERGRADUATE PROGRAMS

The acceptable scores for Placement Testing on Pages 6 and 9 are replaced with the below chart:

| Subject | Score | Placement |
|---|---|---|
| English | 0 – 49% | ENG050 |
| | 50 – 79% | ENG100 & ENG060 |
| | 80 – 100% | ENG100 |
| Mathematics | 39% or less (12 / 30) | MATH050 |
| | 40% - 65% (13 -19 / 30) | MATH112 & MATH060 |
| | 66% or greater (20 -30 / 30) | MATH112 |
| Music Theory | 0 – 59% | DAT050 |
| | 60% or greater | DAT103 |

Placement tests in English and/or Mathematics are not required for Undergraduate Non-Degree Programs that do not contain English and/or Math courses in the curriculum.

## RESIDENCY REQUIREMENTS

The residency requirements on Page 14 have been amended to include that students enrolled in an undergraduate non-degree or a graduate program must complete at least 75% of the program of study in residence with the University of Silicon Valley.

## TUITION AND FEES

| Effective: 07/01/2022 | | |
|---|---|---|
| **Undergraduate Tuition** (per credit hour): *for On Campus Programs* | $895 | Refundable According to the Institutional Refund Policy |
| **Undergraduate Tuition** (per credit hour): *for 100% Online Programs* | $648 | Refundable According to the Institutional Refund Policy |
| **Graduate Tuition** (per credit hour): | $499 | Refundable According to the Institutional Refund Policy |
| **Fees** (per term): | | |
| Campus/Technology Fee (Undergraduate Students): | $500 | Non-refundable |
| Technology Fee (Graduate Students): | $50 | Non-refundable |
| Student Tuition Recovery Fee/STRF (*per $1,000*): | $2.50 | Non-refundable |
| Books and Supplies: | $200 | Estimated Costs |
| Housing Fee: | $6,695 | Refundable According to the Institutional Refund Policy |
| **Other:** | | |
| Enrollment Fee: | $100 | Non-refundable |

| **Other Fees** | **Amount** |
|---|---|
| Late Payment Fee | $25 per Payment Due Date (non-refundable) |
| Official Transcript | $10 per transcript (non-refundable) |
| Graduation Fee | $100 (non-refundable) |
| Credit by Examination Fee | $75 per examination (non-refundable) |
| Audit Fee (waived for USV graduates) | $500 per course (refundable per refund policy) |
| Diploma Reprint Fee | $25 (non-refundable) |
| Student ID Card Replacement Fee | $10 (non-refundable) |
| Student Housing Application Fee | $300 (non-refundable) |
| Replacement VTA Pass Fee | $25 (non-refundable) |
| International Students Enrollment Fee | $500 (non-refundable) |
| Non-sufficient Funds (NSF) Fee | $20 (non-refundable) |
| Late Equipment Return Fee | $5 per day (non-refundable) |

Charges (for the first term)

| **Tuition and Fees** | **On Campus Undergraduate Degree Programs** | | **100% Online Undergraduate Degree Programs** | | **Graduate Degree Programs** | |
|---|---|---|---|---|---|---|
| | w/o Housing | With Housing | w/o Housing | With Housing | w/o Housing | With Housing |
| Undergraduate Tuition (based on 15 credits): | $13,425 | $13,425 | $9,720 | $9,720 | | |
| Graduate Tuition (based on 9 credits): | | | | | $4,491 | $4,491 |
| Enrollment Fee: | $100 | $100 | $100 | $100 | $100 | $100 |
| Campus / Technology Fee: | $500 | $500 | $500 | $500 | $50 | $50 |
| Student Tuition Recovery Fee (STRF): | $280 | $280 | $205 | $205 | $45 | $45 |
| Books and Supplies (Estimated): | $200 | $200 | $200 | $200 | $200 | $200 |
| Housing Fee: | $0 | $6,695 | $0 | $6,695 | $0 | $6,695 |
| Student Housing Application Fee: | $0 | $300 | $0 | $300 | $0 | $300 |
| **Total Charges for the First Term:** | **$14,505** | **$21,500** | **$10,725** | **$11,025** | **$4,886** | **$11,881** |

| Total Program Costs | | |
|---|---|---|
| **Program** | **Current Period** | **Total Costs** |
| BA Digital Art and Animation (On Campus) | $28,630.00 | $113,380.00 |
| BA Digital Art and Animation (100% Online) | $21,145.00 | $83,665.00 |
| BA in Game Art (On Campus) | $28,630.00 | $113,380.00 |
| BA in Game Art (100% Online) | $21,145.00 | $83,665.00 |
| BA in Game Design (On Campus) | $28,630.00 | $113,380.00 |
| BA in Game Design (100% Online) | $21,145.00 | $83,665.00 |
| Bachelor of Business Administration (On Campus) | $28,630.00 | $113,380.00 |
| Bachelor of Business Administration (100% Online) | $21,145.00 | $83,665.00 |
| BS in Computer Science (On Campus) | $28,630.00 | $113,380.00 |
| BS in Computer Science (100% Online) | $21,145.00 | $83,665.00 |
| BS in Digital Audio Technology (On Campus) | $28,630.00 | $113,380.00 |
| BS in Digital Audio Technology (100% Online) | $21,145.00 | $83,665.00 |
| BS in Game Engineering (On Campus) | $28,630.00 | $113,380.00 |
| BS in Game Engineering (100% Online) | $21,145.00 | $83,665.00 |
| BS in Software Development (On Campus) | $28,630.00 | $113,380.00 |
| BS in Software Development (100% Online) | $21,145.00 | $83,665.00 |
| Certificate in Audio Recording (On Campus) | $15,858.00 | $15,858.00 |
| Certificate in Audio Recording (100% Online) | $11,896.00 | $11,896.00 |
| Certificate in Cloud Computing (On Campus) | $15,858.00 | $15,858.00 |
| Certificate in Cloud Computing (100% Online) | $11,896.00 | $11,896.00 |
| Certificate in Electronic Music Production (On Campus) | $15,858.00 | $15,858.00 |
| Certificate in Electronic Music Production (100% Online) | $11,896.00 | $11,896.00 |
| Diploma in Audio and Music Production (On Campus) | $23,038.00 | $23,038.00 |
| Diploma in Audio and Music Production (100% Online) | $17,095.00 | $17,095.00 |
| Graduate Certificate in Project Management (100% Online) | $6,603.00 | $6,603.00 |
| Master of Business Innovation (On Campus/Hybrid) | $11,117.00 | $15,858.00 |
| Master of Business Innovation (100% Online) | $11,117.00 | $15,858.00 |
| MS in Management and Leadership in Creative Technologies (100% Online) | $12,621.00 | $18,360.00 |

*Tuition and Fees are subject to change.*

## EDUCATIONAL PROGRAMS AND INFORMATION

The Institutional Learning Outcomes (ILO's) on Page 47 has been amended as outlined below:

Undergraduate Programs Institutional Learning Outcomes:

| ILO | Core Competency | Institutional Learning Outcome |
|---|---|---|
| ILO1 | Written and Oral Communication | USV graduates will be able to communicate professionally, accurately, and persuasively through both written and oral modalities. |
| ILO2 | Critical Thinking | USV graduates will be able to critically analyze ideas, issues, content, and events to formulate conclusions and make decisions individually or collaboratively. |
| ILO3 | Information Literacy | USV graduates will be able to identify, locate, evaluate, and responsibly use information from a range of sources. |
| ILO4 | Quantitative Reasoning | USV graduates will be able to apply quantitative analysis and methods to address a variety of issues. |
| ILO5 | Creative Thinking | USV graduates will be able to create, synthesize and combine ideas, content, and expertise in original and innovative ways. |
| ILO6 | Teamwork and Diversity | USV graduates will be able to work effectively and ethically in a diverse community. |
| ILO7 | Career Readiness | USV graduates will be able to demonstrate career readiness through field-appropriate professional presentations of their knowledge and skills. |

Graduate Programs Institutional Learning Outcomes:

| ILO | Core Competency | Institutional Learning Outcome |
|---|---|---|
| ILO1 | Broad and Integrative Knowledge | Graduates of USV master's programs design and execute applied, investigative, or creative work that draws on the perspectives and methods of their major, as well as other fields of study. |
| ILO2 | Specialized Knowledge | Graduates of USV master's programs demonstrate a depth of knowledge in their areas of study by solving problems using field-appropriate methodologies. |
| ILO3 | Intellectual Skills | Graduates of USV master's programs demonstrate proficiency in high-level academic, technical, and intellectual skills. |
| ILO4 | Applied and Collaborative Learning | Graduates of USV master's programs plan, design, and implement complex projects in collaborative, real-world scenarios that require application of advanced knowledge gained in their field. |
| ILO5 | Civic and Global Learning | Graduates of USV master's programs demonstrate the knowledge required for responsible citizenship by engaging with and proposing ethical paths of resolutions to problems complicated by competing civic, social, environmental, and economic interests at the local, national, and global levels |

## MASTER OF BUSINESS INNOVATION (MBI)

The MA in Entrepreneurship and Innovation (MA ENT) program on Page 51 – Program name has changed to Master of Business Innovation (MBI).

## ACADEMIC DEPARTMENTS AND EDUCATIONAL PROGRAMS

The BA in Digital Art and Animation (DAA) programs on Pages 59-62 are replaced with the below curriculum:

| BA in Digital Art and Animation (DAA) Curriculum | | |
|---|---|---|
| **Core Courses - 57 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART102 | Principles of Drawing & Rendering | 4 |
| ART103 | Elements of Visual Design | 4 |
| ART115 | Figure Drawing 1 | 3 |
| CS106 | Introduction to Scripting | 4 |
| DAA101 | Foundations of Digital Art for Production | 4 |
| DAA106 | Digital Imaging Concepts | 3 |
| DAA135 | Animation Studio Project 1 | 3 |
| DAA235 | Animation Studio Project 2 | 3 |
| DAA240 | Introduction to 3D Modeling | 3 |
| DAA244 | Introduction to 3D Animation Principles | 3 |
| DAA246 | Texturing | 4 |
| DAA335 | Animation Studio Project 3 | 3 |
| DAA341 | Modeling 1 | 4 |
| DAA360 | 3D Animation 1 | 3 |
| DAA480 | Portfolio 1 | 3 |
| RWPS480 | Senior Capstone Project 1 | 3 |
| RWPS485 | Senior Capstone Project 2 | 3 |
| **General Education Courses - 30 credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Communication | 3 |
| HUM100 | Disruptive Imagination | 3 |
| MATH112 | College Algebra | 3 |
| MATH114 | Trigonometry | 3 |
| | Arts / Humanities Choice | 3 |
| | Physical & Biological Sciences | 3 |
| | Social Sciences Choice | 3 |
| | Arts and Sciences 300+ Choice | 3 |
| | Arts and Sciences Capstone (400) | 3 |
| **Electives - 33 credits** | | |
| **Total 120 Credits** | | |

***Students are strongly advised to plan a cohesive elective path by clustering courses into one of four categories: 3D Animation, 3D Modeling, Entertainment Design, or Technical Art. Students must take at least 15 DAA300+ credits and 9 DAA400+ credits.***

| 3D Animation Suggested Electives | | |
|---|---|---|
| **Course Number** | **Course Name** | **Credits** |
| DAA200 | Acting | 3 |
| DAA221 | Editing and Motion Graphics | 3 |
| DAA264 | Drawing Animation 1 | 3 |
| DAA265 | 2D Animation 1 | 3 |
| DAA267 | Character Rigging | 3 |
| DAA310 | Storyboarding | 3 |
| DAA312 | Animal Drawing and Motion | 3 |
| DAA321 | Quadruped Animation | 3 |
| DAA365 | 3D Animation 2 | 3 |
| DAA425 | Advanced Motion Graphics | 3 |
| DAA465 | 3D Animation 3 | 3 |
| GAM360 | Game Animation | 3 |
| **3D Modeling Suggested Electives** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART230 | Introduction to Sculpture | 3 |
| DAA248 | Lighting and Layout 1 | 3 |
| DAA250 | Digital Sculpture | 3 |
| DAA267 | Character Rigging | 3 |
| DAA326 | Advanced Texturing | 3 |
| DAA345 | Modeling 2 | 3 |
| DAA370 | Concept Design | 3 |
| DAA440 | Modeling 3 | 3 |
| DAA442 | Advanced Lighting and Layout | 3 |
| GAM300 | Game 3D Asset Creation | 4 |
| GAM365 | Environment Art | 4 |
| **Entertainment Design Suggested Electives** | | |
| **Course Number** | **Course Name** | **Credits** |
| ART210 | Figure Drawing 2 | 3 |
| DAA221 | Editing and Motion Graphics | 3 |
| DAA250 | Digital Sculpture | 3 |
| DAA264 | Drawing Animation 1 | 3 |
| DAA270 | Illustration 1 | 3 |
| DAA310 | Storyboarding | 3 |
| DAA320 | Digital Painting | 3 |
| DAA370 | Concept Design | 3 |
| DAA425 | Advanced Motion Graphics | 3 |
| DAA435 | Matte Painting | 3 |

| Technical Art Suggested Electives | | |
|---|---|---|
| **Course Number** | **Course Name** | **Credits** |
| CS206 | Object-Oriented Programming with Python | 3 |
| CS449 | Tools Programming | 3 |
| DAA248 | Lighting and Layout 1 | 3 |
| DAA267 | Character Rigging | 3 |
| DAA325 | Advanced Character Rigging | 3 |
| DAA326 | Advanced Texturing | 3 |
| DAA358 | Dynamics | 3 |
| DAA400 | Compositing and Special Effects | 3 |
| DAA442 | Advanced Lighting and Layout | 3 |
| GAM430 | Real-Time Visual Effects | 3 |
| MATH215 | Mathematics for Computer Graphics | 3 |

The Audio and Music Technology (AMT) Department on Page 63 now includes the following programs:

## CERTIFICATE IN AUDIO RECORDING (AR)

The Certificate in Audio Recording program will introduce students to the fundamental technology, technique, and practice of recording audio in a studio environment. Students will learn the basics of editing, mixing and apply the knowledge to create pro-quality audio project.

### PROGRAM LEARNING OUTCOMES

Graduates in the Certificate in Audio Recording program will:

- **AR PLO1**: Understand historical and technological development of audio.
- **AR PLO2:** Demonstrate basic understanding of digital audio workstations and their application in audio production.
- **AR PLO3:** Demonstrate technical and artistical skills in audio recording and mixing at entry level.

| Certificate in Audio Recording (AR) Curriculum | | |
|---|---|---|
| **Core Courses** | | |
| **Course Number** | **Course Name** | **Credits** |
| DAT104 | Audio, Technology, and Innovation | 4 |
| DAT111 | Desktop Production Fundamentals | 4 |
| DAT221 | Studio Production 1 | 4 |
| DAT239 | Principles of Room Acoustics | 4 |
| **Total 16 Credits** | | |

## CERTIFICATE IN ELECTRONIC MUSIC PRODUCTION (EMP)

The Certificate in Electronic Music Production program introduces students to the process of making modern music in an electronic production environment. Students will learn the fundamentals of music and will gain the skills and knowledge needed for creative music production.

### PROGRAM LEARNING OUTCOMES

Graduates in the Certificate in Electronic Music Production program will:

- **EMP PLO1**: Apply basic music theory to music production or recording.
- **EMP PLO2:** Understand historical and technological development of audio techniques and technologies.
- **EMP PLO3:** Demonstrate basic understanding of digital audio workstations and their application in audio production.

| Certificate in Electronic Music Production (EMP) Curriculum | | |
|---|---|---|
| **Core Courses** | | |
| **Course Number** | **Course Name** | **Credits** |
| DAT103 | Music Theory | 4 |
| DAT104 | Audio, Technology, and Innovation | 4 |
| DAT111 | Desktop Production Fundamentals | 4 |
| DAT116 | Desktop Audio Production | 4 |
| **Total 16 Credits** | | |

## DIPLOMA IN AUDIO AND MUSIC PRODUCTION (AMP)

The Diploma in Audio and Music Production program prepares students for entry-level employment in digital audio production and recording. Through courses in music technology and audio production using industry-standard tools, students will develop aesthetic and technical skills vital to the current audio production workplace..

### PROGRAM LEARNING OUTCOMES

Graduates in the Diploma in Audio and Music Production program will:

- **AMP PLO1**: Apply foundational knowledge from music theory and audio technology to audio and music production.
- **AMP PLO2:** Demonstrate proficiency with various aspects of digital audio production.
- **AMP PLO3:** Demonstrate technical and artistic skills in audio recording and mixing at entry level using digital audio workstations.

| Diploma in Audio and Music Production Curriculum | | |
|---|---|---|
| **Core Courses** | | |
| **Course Number** | **Course Name** | **Credits** |
| DAT103 | Music Theory | 4 |
| DAT104 | Audio, Technology, and Innovation | 4 |
| DAT111 | Desktop Production Fundamentals | 4 |
| DAT116 | Desktop Audio Production | 4 |
| DAT221 | Studio Production 1 | 4 |
| DAT239 | Principles of Room Acoustics | 4 |
| **Total 24 Credits** | | |

The Game Design and Development (GDD) Department on Page 65 now includes the following program:

## BACHELOR OF ARTS IN GAME DESIGN (GD)

The Bachelor of Arts in Game Design program establishes principles of game design and development throughout a hands-on, practical, collaborative program. Students are introduced to both theoretical design concepts and technical skills including logic, balance, storytelling, programming, level design and quality assurance. Students will game skills in various game design techniques and technologies, including game engines and project management through many practical project courses, which culminate in a two-semester capstone project comprised of interdisciplinary student teams. The program offers a robust education in game design, collaboration, and project skills, with a range of elective options to further develop skills in programming, game writing, marketing, user experience, art, or audio.

### PROGRAM LEARNING OUTCOMES

Graduates in the Bachelor of Business Administration (BBA) program will:

- **GD PLO1**: Articulate and demonstrate game design principles and best practices through the development of engaging, interactive media.
- **GD PLO2:** Employ game storytelling principles that demonstrate proven game narrative principles, tools, techniques, and practices.
- **GD PLO3:** Implement, test, and critique user-centered design experiences and interfaces within interactive media.
- **GD PLO4:** Collaborate effectively and ethically as part of multidisciplinary projects and demonstrate professionalism in diverse team environments.
- **GD PLO5**: Demonstrate a career-ready understanding of game design and production through a published portfolio and professional identity.

| BA in Game Design (GD) Curriculum | | |
|---|---|---|
| **Core Courses - 66 Credits** | | |
| **Course Number** | **Course Name** | **Credits** |
| BUS110 | Principles of Management and Entrepreneurship | 3 |
| BUS270 | Project Management | 3 |
| CS101 | Fundamentals of Computing | 4 |
| DAA101 | Foundations of Digital Art for Production | 4 |
| GAM101 | Foundations of Interactive Design | 4 |
| GAM135 | Game Studio 1: Production Pipeline | 3 |
| GAM200 | Foundations of Interactive Sound Design | 4 |
| GAM220 | Introduction to Game Storytelling | 3 |
| GAM231 | Introduction to Game Engines | 4 |
| GAM233 | Level Design for Single Player Games | 3 |
| GAM236 | Game Studio 2: Interactive Design | 3 |
| GAM320 | Level Design for Multiplayer Games | 4 |
| GAM351 | Game Systems Design | 4 |
| GAM380 | Game Usability & UX | 4 |
| GAM390 | Serious Games Development | 4 |
| GAM400 | Game Studio 3: Portfolio | 3 |
| RWPS480 | Capstone Project 1 | 3 |
| RWPS485 | Capstone Project 2 | 3 |
| SSC180 | Introduction to Psychology | 3 |

| General Education Courses - 30 credits | | |
|---|---|---|
| **Course Number** | **Course Name** | **Credits** |
| ENG100 | English Composition | 3 |
| ENG250 | Speech and Oral Communication | 3 |
| HUM100 | Disruptive Imagination | 3 |
| MATH112 | College Algebra | 3 |
| MATH114 | Trigonometry | 3 |
| | Humanities / Arts Choice | 3 |
| | Physical Science Choice | 3 |
| | Social Sciences Choice | 3 |
| | 300 Level Arts & Sciences Choice | 3 |
| | 400 Level Arts & Sciences Capstone | 3 |
| **Program Approved Courses (PAC) - 24 Credits** | | |
| **Total 120 Credits** | | |

***Students may choose a Game Writing elective path.***
***Students must take at least 12 300+ level credits within the 24 elective credits.***

| Game Writing Focus Courses – 24 credits | | |
|---|---|---|
| **Course Number** | **Course Name** | **Credits** |
| ENG227 | Scriptwriting | 3 |
| ENG228 | Creative Writing | 3 |
| GAM260 | Game Writing 1 | 3 |
| GAM340 | Game Writing 2 | 3 |
| GAM420 | Narrative Design and Leadership | 3 |
| PAC | Program Elective | 3 |
| PAC | Program Elective | 3 |
| PAC | Program Elective | 3 |

## COURSE DESCRIPTIONS

The following Course Descriptions listed on Pages 73-126 have been revised:

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| ART115 | Figure Drawing 1 | 3 | ART102 or ART110 |
| Students will study life-drawing from unclothed models. The course addresses the structure and anatomy of the human form, proportion, volumes, light and shade. Students will develop a basic understanding of the figure in motion. Drawing skills developed in previous courses are further refined by using a variety of drawing media. | | | |
| CS206 | Object-Oriented Programming with Python | 3 | CS100 or CS106 |
| This class provides an overview of OOP (Object-Oriented Programming) techniques using Python. The Concepts of classes, objects, object managers, encapsulation, polymorphism, and inheritance are explored in depth. Students are introduced to these OOP concepts in a highly visual environment, using the pygame extension along with a library of pre-built user interface widgets. Students will work on a project making use of OOP techniques to build their software solutions. | | | |
| CS347 | User Experience: Application Interface Design and Implementation | 3 | CS211 |
| Students learn the critical fundamental concepts and theory behind good user interface design. These interface design principles are taken into code where students learn a user interface framework, toolset, and language to implement interfaces. Students program and develop user interfaces that work on multiple platforms (web, pc, and/or mobile) using standard industry techniques and tools. The course may deploy frameworks such as Qt, JavaScript, React, Java, and other middleware or backend tools. | | | |
| CS449 | Tools Programming | 3 | CS189 or CS206 and DAA240 |
| This course is an advanced scripting course that will teach students how to use Maya Python command engine and Maya Python API to write and deploy production tools in Maya (workflow optimization tools. Modeling, and rigging, animation tools). It will introduce students to Maya architecture and data flow. Students will learn how to write a simple command plugin and dependency node plugin. Other types of plugins will be analyzed and demonstrated. | | | |
| DAA135 | Animation Studio Project 1 | 3 | None |
| Introduction to film effects development and various project production models and team structures through lectures, discussions, and simple commercial projects. Lessons learned from studying project post-mortems, case studies, and employing various tools, techniques, and strategies will develop skills in ideation, iteration, troubleshooting, risk assessment, adaptation, communication, team management, organization, and leadership. | | | |
| DAA235 | Animation Studio Project 2 | 3 | DAA135 |
| Students will create film/commercial prototypes. Topics include design concepts, theory and methodologies, storytelling, story analysis, viewer engagement and techniques for simplifying the development process. | | | |
| DAA246 | Texturing | 4 | DAA240 |
| This course involves the use of layering color maps on digital surfaces to create specific material shaders. Texture map painting in 2 D is covered extensively. Analysis through physical observation on the light gathering of surfaces teaches students how to digitally reproduce any material. Students learn UV texture layout and projection techniques for shader creation. Procedural versus painted shader maps are explored along with complex layering. Emphasis is spent on specular, diffuse, color, bump, displacement and normal mapping to achieve the desired result. | | | |
| DAA335 | Animation Studio Project 3 | 3 | DAA235 |
| In this course, students will build a portfolio that demonstrates their abilities with the relevant work they've done for their desired job role. Students will prepare their marketing materials such as a resume, cover letters, and an online presence. | | | |
| DAA341 | Modeling 1 | 4 | DAA240 |
| Introduces hard and organic surface modeling pertaining to control and refinement of form. Reproduction of machine-made forms and detailed organic shapes. Advanced texturing for enhancement of models. Students apply these techniques to develop 3D models. | | | |

| Course Number | Course Name | Credits | Prerequisites |
|---|---|---|---|
| GAM320 | Level Design for Single Player Games | 4 | GAM233 |
| Focus on the design and implementation of immersive multiplayer player experiences using commercial game engines and level editors. Advanced level design topics are covered including scripting interactive level sequences, level lighting, material editing, particle systems, development and use of custom assets, animation, user interface, in-game cinematics and choreography. | | | |
| GAM351 | Game Systems Design | 4 | GAM220, GAM331, and SSC180 |
| In this course students will gain an understanding of various game systems and how they interact to create an immersive game experience, balance, and cohesive design. Systems such as combat, game economics, reward, quest, and narrative are explored. | | | |
| GAM376 | Game Design 2 | 3 | GAM295 |
| Students will create playable video game prototypes. Topics include game design concepts, theory and methodologies, storytelling, game analysis, player engagement, player immersion, gamification, and techniques for monetization. | | | |
| GAM380 | Game Usability & UX | 4 | GAM135 and GAM231 |
| This course introduces assessment and analysis of game usability throughout game production. Students will assess player behaviors and thinking processes to improve the interaction between players and the game. Topics include focus testing, UI/UX design, roles and processes in quality assurance, bug reporting and regression, player psychology and observation, and measuring and quantifying subjective experiences. | | | |
| GAM390 | Serious Games Development | 4 | GAM236 and GAM351 |
| Games can be incredibly effective when used outside of an entertainment context. This is where the term 'serious games' comes in. In this course students combine learning strategies, knowledge and structures, and game elements to teach specific skills, knowledge, and attitudes. | | | |
| SWE449 | Tools Programming | 3 | CS106 and DAA240 |
| This course is an advanced scripting course that will teach students how to use Maya Python command engine and Maya Python API to write and deploy production tools in Maya (workflow optimization tools. Modeling, and rigging, animation tools). It will introduce students to Maya architecture and data flow. Students will learn how to write a simple command plugin and dependency node plugin. Other types of plugins will be analyzed and demonstrated. | | | |