

Catalog Addendum 2012-2013

Updated: September 14, 2012

NOTICES

Authorization

[Updated 2012]

DigiPen Institute of Technology is authorized by the Washington Student Achievement Council (formerly the Higher Education Coordinating Board) and meets the requirements and minimum educational standards established for degreegranting institutions under the Degree-Granting Institutions Act. This authorization is subject to periodic review and authorizes DigiPen Institute of Technology to offer specific degree programs. The Council may be contacted for a list of currently authorized programs. Authorization by the Council does not carry with it an endorsement by the Council of the institution or its programs. Any person desiring information about the requirements of the act or the applicability of those requirements to the institution may contact the Council at P.O. Box 43430, Olympia, WA 98504-3430.

Nonimmigrant Alien Students

This school is authorized under Federal law to enroll nonimmigrant alien students.

Accreditation

[Updated 2012]

DigiPen Institute of Technology is accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC), a recognized accrediting agency by the U.S. Department of Education.

Copyright Notice

[Updated 2012]

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Important Notices

All items including, but not limited to, application forms, transcripts, reference letters, resumes, software, and any accompanying documentation or works of art (collectively "the Items"), forwarded to DigiPen by any person (the "Sender") whether at the request of DigiPen or otherwise, become the exclusive property of DigiPen unless otherwise agreed to in writing by DigiPen, and the Institute* shall be under no obligation whatsoever to return the Items to the Sender. At DigiPen's discretion, the Items may be destroyed after being reviewed.

DigiPen Institute of Technology reserves the right to make changes to the curricula and calendar without any prior notice.

The course offerings and requirements of DigiPen Institute of Technology are under continual examination and revision. This catalog is not a contract; it merely presents the offerings and requirements in effect at the time of publication and in no way guarantees that the offerings and requirements will not change. The Institute specifically reserves the right to change requirements for any major during any particular year. The individual student assumes full responsibility for compliance with all current academic requirements. Current course offerings may be obtained from the Office of the Registrar. Current major and degree requirements may also be obtained from the Office of the Registrar. For the most current information, visit DigiPen's official course catalog online at *www.digipen.edu/academics/course-catalog*.

*Please note that when "Institute" is used in this book it means "DigiPen Institute of Technology."

GENERAL INFORMATION

Name of the School

DigiPen Institute of Technology

Contact Information

DigiPen Institute of Technology 9931 Willows Road NE Redmond, WA 98052 USA

Telephone: (866) 478-5236 or (425) 558-0299 Facsimile: (425) 558-0378 Email: info@digipen.edu Web: www.digipen.edu

Degree Authorization

[Updated 2012]

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History of DigiPen Institute of Technology

[Updated 2012]

DigiPen was founded in 1988 by Mr. Claude Comair as a computer simulation and animation company based in Vancouver, British Columbia, Canada. As the demand for production work increased, DigiPen faced difficulty finding qualified personnel, and in 1990, it began offering a dedicated training program in 3D computer animation to meet this growing need.

That same year, DigiPen approached Nintendo of America to jointly establish a post-secondary program in video game programming. The result of this collaborative effort was the DigiPen Applied Computer Graphics School, which in 1994, officially accepted its first class of video game programming students to its Vancouver campus for the two-year Diploma in the Art and Science of 2D and 3D Video Game Programming. In 1995, DigiPen implemented a revised two-year 3D computer animation program and graduated student cohorts over each of the following four years.

Around this time, the video game industry underwent a paradigm shift from dealing primarily with 2D graphics and gameplay to fully 3D worlds that players could freely explore. As these worlds became more sophisticated, so did the task of programming, designing, and animating them. In anticipation of this change, DigiPen developed a four-year bachelor's degree in video game programming (the Bachelor of Science in Computer Science in Real-Time Interactive Simulation) that would prepare students for the challenges of creating complex 3D game and simulation software.

In 1996, the Washington State Higher Education Coordinating Board (HECB) granted DigiPen the authorization to award both Associate and Bachelor of Science degrees in Real-Time Interactive Simulation. Two years later, in 1998, DigiPen Institute of Technology opened its campus in Redmond, Washington, USA. In 1999, DigiPen began offering the Associate of Applied Arts in 3D Computer Animation. At this time, DigiPen phased out its educational activities in Canada, moving all operations to its Redmond campus. On July 22, 2000, DigiPen held its first commencement ceremony, where it awarded Associate of Science and Bachelor of Science degrees.

In 2002, DigiPen received accreditation from the Accrediting Commission of Career Schools and Colleges (ACCSC). In 2004, DigiPen began offering three new degrees: the Bachelor of Science in Computer Engineering, the Master of Science in Computer Science*, and the Bachelor of Fine Arts in Digital Art and Animation. In 2008, DigiPen added two more degree programs: the Bachelor of Science in Game Design and the Bachelor of Arts in Game Design.

Also in 2008, DigiPen partnered with Singapore's Economic Development Board to open its first international branch campus, offering the following degrees: the Bachelor of Science in Computer Science in Real-Time Interactive Simulation, the Bachelor of Science in Game Design, the Bachelor of Fine Arts in Digital Art and Animation, and the Bachelor of Arts in Game Design. In 2010, DigiPen announced plans to open its first European campus in Bilbao, Spain.**

That same year, DigiPen relocated its US campus to its current location at 9931 Willows Road Northeast in Redmond, Washington. In addition to uniting DigiPen's BFA and BS programs under one roof, the larger campus provides more spaces for students to learn, meet, and collaborate on group projects.

On September 26, 2011, DigiPen launched DigiPen Institute of Technology Europe – Bilbao offering two bachelor's degree programs: Bachelor of Science in Computer Science in Real-Time Interactive Simulation and Bachelor of Fine Arts degree in Digital Art and Animation, to forty students.

On October 11, 2011, DigiPen Singapore was granted accreditation by ACCSC as a branch campus of the main school located in Redmond, Washington, USA.

In 2012, DigiPen added three new degree programs: the Bachelor of Arts in Music and Sound Design, the Bachelor of Science in Engineering and Sound Design, and the Master of Fine Arts in Digital Arts.

*ACCSC granted approval for this degree in 2006. ** DigiPen's international branch campus (DigiPen Europe-Bilbao) does not fall within the scope of ACCSC accreditation.

Awards

[Updated 2012]

DigiPen students have consistently excelled in both national and international game development competitions. At the annual Independent Games Festival (IGF) in San Francisco, California, DigiPen games have been nominated to the Student Showcase every year for the last 12 consecutive years. Since 2001, the IGF has granted 41 awards to 31 DigiPen student games. In 2007, 2008, and 2009, DigiPen projects also won the coveted Best Student Game award (for Toblo, Synaesthete, and Tag: The Power of Paint, respectively). In the IGF Main Competition, five DigiPen student games have been nominated for awards in various professional categories, and in 2004 Bontago won the "Innovation in Game Design" award while competing against professional developers. In 2011, the Independent Games Festival China, part of the annual Game Developers Conference China, selected three DigiPen games for its Student Competition which honors six of the top regional student games. DigiPen Singapore student game Pixi won the "Excellent Student Winner" award, while DigiPen Singapore student game Void won the "Best Student Game" award, as well as the "Excellence in Technology" award in IGF China's Main Competition.

Other competition highlights for DigiPen students include five finalist positions at the Slamdance Guerrilla Gamemaker Competition with two of those games winning their award categories, wins at the Northwest Games Festival, the Intel Games Demo, the IndieCade International Festival of Independent Games, and the PAX 10, as well as wins at the Indie Game Challenge, which in 2010 awarded the \$100,000 nonprofessional Grand Prize to the DigiPen student game GEAR and in 2012 gave the Gamer's Choice Award to the DigiPen game Nitronic Rush. In 2011 at the Tokyo Game Show, only two of the 10 games showcased at the annual Sense of Wonder Night were from North America, with one of those, Solstice, being a DigiPen student project. Additionally, DigiPen students have won numerous awards at the Austin Game Developers Conference in Game Narrative Reviews and Poster Competitions.

Student Right to Know Act and Campus Crime Act Disclosure Notice

[Updated 2012]

In compliance with the Higher Education Act of 1965, as amended, and the Student Right to Know Act, DigiPen is pleased to provide copies of the retention, graduation, and employment rates as well as campus crime reports to prospective and current students upon request. Please send a request to the Admissions Office (*admissions@digipen.edu*) or Registrar's Office (*registrar@digipen.edu*) to have copies of either report sent to you.

About DigiPen's Facilities

[Updated 2012]

DigiPen's campus (9931 Willows Road NE, Redmond, WA 98052) encompasses 105,000 square feet including a library, an academic support center, meeting rooms for student and faculty use, a professional kitchen and cafeteria, auditoriums, computer labs, art studios, as well as additional classrooms for lectures, instruction, and production work. Weekly student access to the DigiPen campuses is from 8:00 A.M. to midnight, Monday through Friday, and from noon to 8 P.M. on Saturday and Sunday with noon to 8 P.M. lab access hours on certain holidays. Core office hours for the Administration staff run from 9:00 A.M. to 5:00 P.M., Monday through Friday.

Major equipment items include microphones and LCD highdefinition projection systems in many of the classrooms. Various presentation formats are also available, including HD-DVD players, VCRs, document cameras, and CD players. The majority of the student computers currently range from Intel I7 quad-core, hyper-threaded systems with 8GB RAM to Intel I3 PCs with 4GB RAM to Core2 Duo - 3GHz systems with 2GB RAM. All computers are on an internal network and have access to printers, servers, and archival media. DigiPen upgrades the computer equipment on a periodic basis.

DigiPen classrooms vary in size from lecture halls accommodating up to 145 students to small classrooms of 16 students. DigiPen labs range in size from those accommodating 30 students to smaller ones seating 16 and 12. DigiPen also has a large, open production area that seats approximately 182 students and facilitates the interdisciplinary work that goes into joint productions involving videogame programmers and 3D artists.

Description of the Library Facilities and Internet Access

[Updated 2012]

Library Services

DigiPen's library aims to support the Institute's curriculum, students, and faculty. Students have access to a variety of resources like sound effects and reference books relevant to their program of study. The library also subscribes to a selection of major journals and magazines related to the fields of gaming, simulation, computer engineering, and animation. Furthermore, the DigiPen library allocates an annual budget for updating the contents of the library. The 1,100 squarefoot library currently holds over 5,000 books and videos, subscriptions to 30 different magazines (print and electronic), with access to many more available in our online databases. The library also checks out video games, consoles, and other equipment. In addition to these curriculum-related resources, the library has a collection of career-oriented materials, including books on resumes, cover letters, and interviews.

The library facilities provide a quiet place to study and areas for small groups to meet and work collaboratively. Library hours change from semester to semester. For current hours, please refer to the library's webpage or contact the library staff by email at *library@digipen.edu* or by phone at (425) 895-4420.

Internet Access

Internet access is a regulated service and is provided for students free of charge. Students may lose this privilege if they do not abide by the Student Network and Internet Usage Policy (see the following section).

Military Active Duty Policies for Students and Military Dependents

Withdrawal and Readmission Procedures for Students Called to Military Active Duty

Withdrawal

Students who are called to active duty should bring a copy of their activation orders to the Department of Student Affairs or the Registrar's Office and complete an Institutional Withdrawal form.

- If students are called to active military duty before the end of the second week of instruction, no course entries will appear on their transcripts for that semester, and they will be eligible for a full tuition refund.
- If students are called to active military duty after the end of the second week of instruction and before the end of the eighth week of instruction, they will receive a "W" for each course enrolled, and they will be eligible for a full tuition refund.
- If students are called to active military duty after the end of the eighth week of instruction, they will receive a "W" for each course enrolled, and they will be eligible for a full tuition refund. Students who have completed a substantial amount of their course work may request an "I" grade. An "I" will revert to a "W" if the student's active duty period is extended beyond the agreed upon length of the original agreement. Students who do not otherwise successfully complete their coursework in the agreed upon time shall receive an "F". Students who are assigned an "I" shall not receive a refund.

Financial Aid [Updated 201]

If students are receiving financial aid during the semester in which they are called to active duty, financial aid must be repaid according to federal and state guidelines before a refund will be issued by DigiPen. The rules on these are not necessarily within the control of this institution. Students should consult with the Financial Aid Department concerning the impact of military call-up on financial aid conditions and eligibility. The U.S. Department of Education has directed the Direct Loan Program and colleges to provide relief from student loan obligations by postponing student loan payments for borrowers during the period of the borrower's active duty service.

If a veteran receiving Post 9/11 benefits withdraws before the semester is completed, all funding received from the US Department of Veteran Affairs would be returned to the student, and it is the student's responsibility to return any funds to the US Department of Veteran Affairs and pay any balance owed to DigiPen.

Readmission

In compliance with the Higher Education Authorization Act, matriculated students who are called to active duty shall be entitled to readmission provided that the student followed the appropriate steps as outlined in the Withdrawal and Readmission Procedures for Students called to Military Active Duty (see above). This is provided that the cumulative length of the absence and of all previous absences from the Institute, by reason of service in the uniformed services, does not exceed five years, and, except as otherwise provided in this section, the student submits a notification of intent to re-enroll in the Institute.

The re-application fee is waived for students returning to DigiPen from active duty.

Withdrawal Procedures for Students Who are Military Dependents Whose Families Must Move Due to Redeployment/Relocation

Withdrawal

Students who are military dependents and whose families must move due to redeployment or relocation, must provide a copy of their family members' deployment/relocation orders to the Department of Student Affairs or the Registrar's Office and complete an Institutional Withdrawal form.

- Students who must move before the end of the second week of instruction shall receive no course entry on their transcript and will receive a 100% refund.
- Students who must move after the end of the second week of instruction and before the end of the eighth week of instruction shall receive a "W" for each course enrolled and receive a 100% refund.
- Students who must move after the end of the eighth week of instruction will receive a "W" for each course enrolled and receive a 100% refund.

Financial Aid

[Updated 2012]

Military redeployment/relocation may also affect a student's financial aid. Military dependents receiving Financial Aid during the semester in which they are required to move, must repay their financial aid according to federal and state guidelines before a refund will be issued by DigiPen. The rules regarding financial aid may not necessarily be within the control of this institution. Students should consult with the Financial Aid Department concerning the impact of military redeployment/ relocation on financial aid conditions and eligibility.

IMPORTANT DATES

Institutional Calendar [Updated 2012]

August 27-31, 2012	Orientation - First Year Students	
September 3, 2012	Labor Day	No Classes – Labs Closed
September 4, 2012	Classes Begin - Fall Semester	
November 12, 2012	Veterans' Day	No Classes – Labs Open
November 25-27, 2012	Thanksgiving	No Classes – Labs Open
December 10-14, 2012	Fall Semester Final Exams	
December 14, 2012	Fall Semester Ends	
December 15, 2012-January 6, 2013	Winter Break	No Classes – Labs Closed
January 2-6, 2013	Intersession	No Classes – Labs Closed
January 7, 2013	Classes Begin - Spring Semester	
January 21, 2013	M.L. King Jr. Day	No Classes – Labs Closed
February 3, 2013	Founder's Day	No Classes – Labs Open
February 18, 2013	Presidents' Day	No Classes – Labs Open
March 25-29, 2013	Spring Break	No Classes – Labs Open
April 22-26, 2013	Spring Semester Final Exams	
April 26, 2013	Spring Semester Ends	
April 29-May 5, 2013	Intersession	No Classes – Labs Closed
April 30, 2013	Commencement	
May 6, 2013	Classes Begin - Summer Session	
May 27, 2013	Memorial Day	No Classes – Labs Closed
July 4, 2013	Independence Day	No Classes – Labs Closed
July 22-26, 2013	Summer Session Final Exams	
July 26, 2013	Summer Session Ends	
August 27-30, 2013	Orientation – First year Students	
September 2, 2013	Labor Day	No Classes – Labs Closed
September 3, 2013	Classes Begin – Fall Semester	

The Institute is closed on all statutory holidays. Exam periods and breaks may be subject to change. The laboratory facilities may be closed for a period of two consecutive days per month for maintenance. It is usually the last two working days of the month unless otherwise posted. Enrollment occurs once a year, in September.

Deadlines [Updated 2012]

July 1, 2012	Tuition deposit due for Fall 2012 semester
July 9, 2012	Last day to submit Request for Change of Major for Fall 2012 Semester Last day to submit Application for Readmission for Fall 2012 Semester
August 1, 2012	Tuition balance due for Fall 2012 Semester
September 10, 2012	Last day to drop Fall 2012 Semester courses for 100% refund Last day to add classes for Fall 2012 Semester
September 14, 2012	Final day to drop classes without academic penalty
October 3, 2012	Withdrawal deadline for 50% refund
October 25, 2012	Final day to receive a "W" on transcript for Fall 2012 Semester withdrawals. Withdrawals from the Institute after this date will receive "F" grades on transcript Final day to drop a class
November 1, 2012	Tuition deposit due for Spring 2013 Semester
November 26, 2012	Last day to submit Request for Change of Major for Spring 2013 Semester Last day to submit Application for Readmission for Spring 2013 Semester
December 1, 2012	Tuition balance due for Spring 2013
January 13, 2013	Last day to drop Spring 2013 Semester courses for 100% refund Last day to add classes for Spring 2013 Semester
January 18, 2013	Final day to drop classes without academic penalty
February 5, 2013	Withdrawal deadline for 50% refund
February 27, 2013	Final day to receive a "W" on transcript for Spring 2013 Semester withdrawals. Withdrawals from the institute after this date will receive "F" grades on transcript Final day to drop a class
April 1, 2013	Tuition Balance due for Summer 2013 session
April 8, 2013	Last date to submit Request for Change of Major for Summer 2013 session Last day to submit Application for Readmission for Summer 2013 session
May 12, 2013	Last day to drop Summer 2013 Session courses for 100% refund Last day to add classes for Summer 2013 Session Automatic Withdrawal date from classes missing pre-requisites
May 17, 2013	Final day to drop classes without academic penalty
June 4, 2013	Last day to receive 50% Summer 2013 tuition refund
June 26, 2013	Final day to receive a "W" on transcript for Summer 2013 Session withdrawals. Withdrawals from the Institute after this date will receive "F" grades on transcript Final day to drop a class
July 1, 2013	Tuition deposit due for Fall 2013 semester
July 8, 2013	Last day to submit Request for Change of Major for Fall 2013 Semester Last day to submit Application for Readmission for Fall 2013 Semester
August 1, 2013	Tuition balance due for Fall 2013 Semester
September 9, 2013	Last day to drop Fall 2013 Semester courses for 100% refund
July 1, 2013	Tuition deposit due for Fall 2013 Semester
July 8, 2013	Last day to submit Request for Change of Major for Fall 2013 Semester Last day to submit Application for Readmission for Fall 2013 Semester
-	Last day to submit Application for Readmission for 1 all 2013 Semester
August 1, 2013	Tuition balance due for Fall 2013 Semester

TUITION AND FEES

All tuition and fees are in U.S. dollars.

Application Fee

[Updated 2012]

A \$35.00 application fee must accompany the application form. The application fee is refundable if the applicant is not accepted to the Institute or if the applicant requests a refund within three days after submitting the application fee and cancels his or her application. This fee can be waived for students who demonstrate financial need through an SAT feewaiver program or for participation in a similar need-based program.

Enrollment Fee

[Updated 2012]

Upon acceptance into a degree program, a \$150.00 enrollment fee must be paid to confirm enrollment. If a student cancels his or her enrollment, he or she may request a refund of the enrollment fee within three days after signing the enrollment agreement and making an initial payment.

CANCELLATION AND REFUND POLICIES 2012-2013

Cancellation Policies

[Updated 2012]

- Applicants who have not visited the school prior to enrollment will have the opportunity to withdraw without penalty within three business days following either the regularly scheduled orientation procedures or following a tour of the school facilities and inspection of equipment where training and services are provided.
- All monies paid by an applicant who withdraws will be refunded if requested within three days after signing an enrollment agreement and making an initial payment.
- An applicant requesting cancellation more than three days after signing an enrollment agreement and making an initial payment, but prior to entering the school, is entitled to a refund of all monies paid minus an enrollment fee of 15% of the contract price of the program. However, in no event will the school retain more than \$150.00.

Tuition Refund Schedule

[Updated 2012]

A student who drops a course, who submits an official withdrawal in writing, or who is determined by the Administration to have withdrawn from the institute shall be refunded as follows:

- Before the close of the seventh calendar day from the beginning of the semester: Students receive a 100% tuition refund.
- Before the close of the eighth calendar day through the thirtieth calendar day from the beginning of the semester: Students receive a 50% tuition refund.
- After the thirtieth calendar day from the beginning of the semester: Students are required to pay 100% of the tuition and no refund is available.

Except for the enrollment fee, all other assessed fees are refunded on the same schedule as tuition payments.

FINANCIAL ASSISTANCE

The Role of the Financial Aid Office

[Updated 2012]

The Financial Aid Office assists students and their parents in meeting basic educational costs. Its goal is to deliver student assistance in a timely manner and to seek financial aid availability for those who qualify.

The primary objective of the Financial Aid Office is to provide financial assistance to the maximum number of eligible students through coordination with and full utilization of all government, community, and on-campus resources. DigiPen administers all financial aid programs in accordance with established state, federal, and institutional regulations and policies. Please contact the Financial Aid Office or visit *www. digipen.edu* for the most up-to-date eligibility criteria and award amounts for the aid programs outlined in this catalog.

The Financial Aid Office endeavors to fully fund students to the maximums provided under the law and strives to eliminate unnecessary steps by simplifying the aid process. The Financial Aid Office provides individualized services to students. Additionally, DigiPen takes a proactive approach towards default management and prevention by performing an active role in student loan counseling and delinquency notification procedures.

The U.S. Department of Education has designated DigiPen Institute of Technology as an eligible institution for participation in the following programs:

Washington State Funding

[Updated 2012]

Students who are residents of Washington State may qualify for the following two grants based on their financial need. Grants are free money given to students to help pay for their education and do not need to be repaid. DigiPen students who are not residents of Washington State should inquire with their state's Office of Higher Education to determine if they are eligible for any of its financial aid programs.

Direct Loans

[Updated 2012]

Direct Loans are fixed-interest loans offered to students and parents by the U.S. Department of Education rather than a bank or other financial institution. Unlike grants, you must pay back Direct Loans after you graduate. Each loan has an origination fee that must be paid and varies depending on the type of loan. If you or your parents need to borrow money to help finance your education, Direct loans are an option. With Direct loans, you:

- Have one contact the Direct Loan Servicing Center – for everything related to the repayment of your loans, even if you receive Direct loans at different schools;
- Have online access to your Direct loan account information 24 hours a day, seven days a week at www.studentloans.gov;
- Can choose from several repayment plans that are designed to meet the needs of almost any borrower, and you can switch repayment plans as needed.

The following Direct loans are available to qualifying DigiPen students. Note that you may be eligible for more than one type of Direct loan at a time.

Direct Subsidized Stafford Loans

Direct Stafford Subsidized loans are awarded to undergraduate and graduate students based on financial need. To be eligible for this loan, you must be enrolled as at least a half-time student. With Direct Stafford Subsidized loans, the federal government pays for the interest accrued while you are in school. Interest accrues once you graduate, leave school, or enroll as less than a half-time student.

Direct Unsubsidized Stafford Loans

Direct Stafford Unsubsidized loans are awarded to undergraduate and graduate students regardless of their financial need. To be eligible for this loan, you must be enrolled as at least a half-time student. With Direct Stafford Unsubsidized loans, interest accrues while you are in school and during the six-month grace period after you graduate, leave school, or enroll as less than a half-time student.

Direct Parent Loan for Undergraduate Students (Direct PLUS Loans)

Direct Parent PLUS loans are unsubsidized, non-needbased loans awarded to parents of dependent undergraduate students. This loan can cover a large amount of your educational costs and has a fixed interest rate. Those who qualify must not have adverse credit history. They must also submit a "Consent to Obtain Credit Report" form to apply for this loan, which is available at *www.digipen.edu/financial-aid*.

Direct Graduate PLUS Loans

Direct Graduate PLUS loans are unsubsidized, non-needbased loans awarded to graduate students. This loan can cover a large amount of your educational costs and has a fixed-interest rate. To receive a Direct Graduate PLUS loan, you must submit a "Consent to Obtain Credit Report" form, and not have an adverse credit history. The form is available at *www.digipen.edu/financial-aid*.

Private Loans

[Updated 2012]

Private Education Loans, also known as Alternative Education Loans, are student loans offered by private banks or other financial institutions. These loans are credit based and may have variable interest rates that are less favorable than those of Direct loans. Therefore, they should be used as a last resort when seeking funding for your education. DigiPen does not participate in any preferred lender arrangements, nor does it endorse any lenders.

Enrollment Requirements

[Updated 2012]

Full-time enrollment for traditional undergraduate students consists of 12 or more credits per semester; for graduate students, it is nine or more credits per semester or as required for the program. An undergraduate student must be enrolled at least half-time (6-11 credits) in order to be eligible for federal financial aid; half-time graduate student enrollment is 6-8 credits. Changes in a student's enrollment may require an adjustment and/or repayment of financial aid funds that have been awarded.

Financial Aid Eligibility

[Updated 2012]

To be eligible to apply for financial aid at DigiPen, you must meet the following requirements:

- Be a citizen of the United States or an eligible noncitizen;
- Have a valid Social Security number;
- Be enrolled in a degree program with six or more credits per semester;
- Not owe a repayment on a grant or be in default on a student loan;
- Be registered with Selective Service, if required and if male;
- Be making Satisfactory Academic Progress (if you are a returning DigiPen student). For more information about Satisfactory Academic Progress, see the Course Catalog.

Deadlines

In order to apply for federal financial aid, the Financial Aid Office must have confirmation that you have completed and finalized your Free Application for Federal Student Aid (FAFSA) and that your FAFSA has been approved by the last day of enrollment. You will not be able to receive any disbursement of federal funding until the Financial Aid Office has determined that your application information is complete and correct. If you do not meet the above deadlines, you will lose your eligibility to receive federal funding for the current award period.

Satisfactory Academic Progress for Financial Aid

[Updated 2012]

Warning

The history of the student's academics from all periods of enrollment, regardless of enrollment status, will be reviewed at the end of each semester to determine if the student is maintaining the standards established in the SAP policy. This includes all courses attempted whether Financial Aid was received or not. Students who fail to meet the SAP standards will be placed on Financial Aid warning for the next semester. Students placed on Financial Aid warning are eligible for Financial Aid during the warning term. If the student does not meet the SAP standards by the end of the warning term, future financial aid will be terminated effective with the next term of enrollment. Students whose Financial Aid is terminated may appeal to the Financial Aid Appeals Committee for reinstatement of Financial Aid.

Appeals for Undergraduate and Graduate Students

A student who loses eligibility for financial aid may have opportunity to appeal to the Financial Aid Appeals Committee, aside from the loss of eligibility due to "the maximum time frame". Appeals must be submitted in writing to the Director of Financial Aid outlining any extenuating circumstance(s) that influenced the student's academic performance. Extenuating circumstances are those events that might include, among other things, serious injury, illness or mental health condition, death of an immediate family member. The appeal should include a description of the extenuating circumstance, documentation of circumstance, and the manner by which the deficiency will be resolved. Each appeal will be considered on a case-by-case basis. Individual cases will not be considered as precedent. Financial aid cannot be reinstated for a prior semester. Your appeal should be submitted within 21 days of the beginning of the semester you want aid reinstated.

The Financial Aid Appeals Committee will review the appeal within two weeks of its receipt to determine whether the financial aid disqualification or suspension is justified. Students filing an appeal will be advised in writing of the decision at the student's home address and/or campus e-mail account. The committee's decision is final, and it cannot be appealed to a higher level. If your appeal is approved, reinstatement of aid is dependent on availability of funds. In addition, a student whose appeal is approved will receive financial aid on probationary status for the next term of enrollment. The student is encouraged to take advantage of counseling, tutoring, and the academic support center.

Return of Title IV Funds Policy

[Updated 2012]

DigiPen's Institutional Refund Policy operates independently from the Return of Title IV Funds Policy requirements for all financial aid recipients.

I. Treatment of Title IV Funds

When a recipient of a Title IV grant and/or loan withdraws from

the Institute during any payment period in which the recipient began attendance, the Institute must determine the amount of Title IV grant and/or loan that the recipient earned as of the student's withdrawal date. Unearned funds must be returned to the Title IV programs.

II. The Return of Title IV Funds

This policy applies to all Financial Aid recipients who withdraw, drop out, leave without notice, or otherwise fail to complete 60% of the payment period for which they received Title IV funds (grants and/or loans).

- The term "Title IV Funds" refers to the Federal Financial Aid programs authorized under the Higher Education Act of 1965 (as amended) and includes the following programs administered by the Institution: FDLP Unsubsidized Ioans, FDLP Subsidized Ioans, FDLP PLUS Ioans, FDLP Grad PLUS Ioans, Pell Grants and. IASG Iraq and Afghanistan Service Grant.
- 2. A student's withdrawal date is the last date of attendance as determined by the Institute's attendance records or the date of determination in accordance with the Institute's withdrawal policy.
- 3. The calculation required determines a student's earned and unearned Title IV aid based on the percentage of the payment period completed by the student. The Institution calculates the amount of Title IV assistance earned by the student by dividing the number of days the student attended in the payment period by the number of days in the payment period. Calendar days (including weekends) are used, but breaks of at least 5 days are excluded from both the numerator and denominator.
- 4. Until a student has passed the 60% point of a payment period, only a portion of the student's aid has been earned. A student who remains enrolled beyond the 60% point is considered to have earned all awarded aid for the payment period.
- 5. In accordance with Federal Regulations refunds are allocated in the following order:
 - FDLP Unsubsidized Federal Stafford loans
 - FDLP Subsidized Federal Stafford loans
 - FDLP PLUS loans
 - FDLP Grad PLUS loans
 - Federal Pell Grant
 - IASG Iraq and Afghanistan Service Grant
- 6. Institutional and Student responsibility in regard to the Return of Title IV Funds:

The responsibility to repay unearned Title IV aid is shared by the Institution and the student. For example, the calculation may require the Institution to return a portion of the federal funds to the Title IV programs.

Once the Institution has calculated the amount to return, the Institution will return the funds within 45 calendar days. The Institution will return the loan funds and make adjustments to as required by Federal Regulations. The Bursar will refund the funds to the Direct Loan Program or a subsequent holder, if the loan has been transferred and the school knows the new holder's identity.

In addition, the student may also be obligated to return funds based on the calculation. A student returns funds to the FDLP Stafford loan programs based on the terms and conditions of the promissory note of the loan. A student who receives a Federal Grant may be required to repay 50% of the funds received.

Institution's Responsibility

- The Institution makes this policy readily available by request to any enrolled and/ or prospective students by request to the Financial Aid Department. In addition, the Financial Aid Department makes readily available the written refund requirements.
- Identifying students who are affected by this policy and completing the Return of Title IV funds calculation for those students
- Returning any Title IV funds that are due to the Title IV programs.

Student's Responsibility:

The student's responsibilities in regard to the Return of Title IV Funds include:

- Returning to the Title IV programs any funds that were disbursed directly to the student and which the student was determined to be ineligible for via the Return of Title IV Funds calculation.
- Students who owe funds to a grant program are required to make payment of those funds within 45 days of being notified that they owe this overpayment. During the 45-day period students will stay eligible for Title IV funds. If the student does not take any action within the 45 days of being notified, the Institution will notify the U.S. Department of Education of the student's overpayment situation. The student will no longer be eligible for Title IV funds until they enter into a satisfactory repayment agreement with the U.S. Department of Education.
- 7. Post-Withdrawal Disbursement: If a student receives less federal student aid than the amount earned the

Institution must offer a post-withdrawal disbursement. The institution is required to make a post-withdrawal disbursement within 180 days of the date the institution determines the student withdrew. Upon completion of the Return of Title IV Funds calculation, if it is determined a post withdrawal is due to the student and/or parent the Institution will notify the student and/or parent in writing.

8. The Institute will make readily available a summary of the Return of Title IV Funds requirements to any enrolled and/or prospective student by request to the Financial Aid Department.

III. To Officially Withdraw from DigiPen Institute of Technology

Please refer to the course catalog regarding the withdrawal policy.

IV. Cancellation and Refund Policies

Please refer to the section regarding Cancellation and Refund Policies.

If you have any questions or concerns regarding the Return of Title IV Funds, Refund Policy, Overpayment, or would like examples of the Return of Title IV Funds calculations, please contact the Financial Aid Department.

Terms and Conditions under the Direct Stafford Loan Program

[Updated 2012]

DigiPen participates in the William D. Ford Direct Loan Program. Students who wish to receive their Federal Stafford Subsidized and/or Unsubsidized Stafford loans must complete a Master Promissory Note (MPN).

There are two types: Direct Subsidized Loans, for which the government pays the interest while you are in college; and Direct Unsubsidized Loans, for which you are responsible for paying all the interest on the loans, during college and after. The student is not required but can make payments on the interest portion of the Unsubsidized Ioan. You may receive both types of loans at the same time. To receive loan funds, you must be enrolled at least as a half-time student.

For more information please visit www.studentloans.gov.

Federal Direct Master Promissory Note (MPN)

[Updated 2012]

If you decide to accept the Federal Direct Subsidized and/or Unsubsidized Stafford Ioan in your financial aid award offer letter, you must complete the steps below. All Undergraduate and Graduate students MUST complete the MPN in order to receive Federal Direct Ioans.

Please be prepared to have your required U.S. Department of Education issued PIN number to complete the electronic MPN.

This is the same PIN number that was used to complete the signature on the FAFSA. If you misplaced your PIN number or have questions regarding this process please visit *www.pin.ed.gov/PINWebApp/pinindex.jsp*

Step 1: Login to the student portal at *www.studentloans.gov* and complete your federal government requirement: Entrance Counseling.

Step 2: After completing Entrance Counseling, you must complete the Federal Direct Loan Master Promissory Note (MPN) also available at *www.studentloans.gov.*

APPLYING TO DIGIPEN

Visiting DigiPen

[Updated 2012]

DigiPen offers regular information sessions both on campus and online for the general public. Anyone interested in finding out more about DigiPen Institute of Technology and its programs is welcome to attend. For information on dates and times for these information sessions, please visit our website at *www.digipen.edu* or email *admissions@digipen.edu*.

Visitors interested in learning about DigiPen's admission requirements, application process, and degree programs are encouraged to schedule a meeting and school tour with an admissions representative. To schedule an appointment, please contact the Office of Admissions at *admissions*@ *digipen.edu* at least one week before your intended visit.

One of the best ways to find out what DigiPen is like as a student is to spend a day on campus, attending classes and meeting students, faculty, and staff. During the fall, spring, and summer semesters, the admissions department can help prospective students arrange to shadow a current student. Most visitors will combine a student shadow with a one-on-one admissions or financial aid meeting. Student shadow requests should be made at least two weeks in advance. To learn more about this program and to schedule a time for your visit, please contact the Office of Admissions.

Undergraduate Application Process

[Updated 2012]

DigiPen Institute of Technology works on a rolling admissions basis and enrolls new students in the fall semester that begins each September. DigiPen begins accepting applications for the following fall as early as late September, and the Institute will evaluate applications as they are completed and submitted.

DigiPen encourages new applicants to apply by February 1 of each year, but the Institute will continue to accept qualified applicants after that date until all programs have reached maximum enrollment. Applicants should submit all application materials within four weeks of their initial application submission. Applicants who need additional time should request an extension, after submitting their initial application, by contacting the Office of Admissions at *admissions@digipen. edu.* Applicants normally receive a decision within two to four weeks after their application has been completed. Applicants may choose their preferred major at the time of application, however during the review process, DigiPen may determine that an applicant fits more appropriately into another degree program and may admit an applicant into another program. Additionally, DigiPen may sometimes determine that an applicant qualifies for admission to several programs and notes this on the acceptance letter.

Except where noted, all undergraduate applicants must submit the following for consideration:

- 1. DigiPen Institute of Technology's Online Application for Admission. This application form is available at: https://management.digipen.edu/srs-app/ applicationmenu.aspx.
- 2. \$35.00 application fee: If an applicant is denied admission to the program, DigiPen will refund the application fee.
- 3. Official high school transcripts or official GED test scores, if applicable: International students should submit attested copies or certified-true copies of all academic records. See more about this requirement in the "International (Non-U.S. Resident) Applicants" section if an applicant has transcripts and other official documentation in languages other than English.
- 4. DigiPen requires all applicants to have completed grade 12 or the equivalent with a recommended minimum 2.5 cumulative GPA; for international students, DigiPen will determine the minimum academic performance standards based on the educational system of the individual applicant.
 - Applicants who have earned their GED should submit sealed transcripts for the time that they attended high school, in addition to their GED test scores.
 - For home-schooled applicants, please see the "Home-Schooled Applicant Admission Requirements" section below.
 - Applicants who have completed a bachelor's degree at an accredited institution are not required to submit high school transcripts, but final transcripts from their college or university will be required along with official transcripts from ALL post-secondary institutes attended.
- Official transcripts from ALL post-secondary institutes 5. attended, if applicable: International students should submit attested copies or certified-true copies of all academic records. Again, see more about this requirement in the "International (Non-U.S. Resident) Applicants" section if an applicant has transcripts and other official documentation in languages other than English. This includes transcripts for high school concurrent enrollment programs. Transcripts must be sent by the issuing school directly to DigiPen Institute of Technology. Alternatively, they may be sent by the applicant if they are SEALED in an envelope prepared by the issuing school and stamped over the seal by the Registrar, showing that they have not been opened.

- Official SAT or ACT exam scores: DigiPen requires 6. completion of the SAT or ACT test and submission of these scores from all undergraduate applicants who have attended high school in the U.S. International applicants are strongly encouraged to submit SAT scores, but they are not mandatory. The writing portion is not required but may be taken into consideration if sent. Applicants to DigiPen's undergraduate degree programs do not need to submit these if they have already graduated from high school and have at least one full-time year (or 24 semester credits, 45 quarter credits) of college experience or if they graduated from high school more than ten years ago. However, any applicant coming directly from high school will need to submit SAT/ACT scores regardless of whether or not he or she has taken some college courses. There is no minimum score requirement for either test. SAT or ACT test scores must be sent directly to DigiPen by the issuing organization. DigiPen also accepts them on official high school transcripts. SAT code: 4138; ACT code: 6659.
- 7. Application essays: Please see the Application Essays section below for the requirements and recommendations about completing this important component of the application.
- Letters of recommendation (optional): Two letters 8. of recommendation from individuals familiar with your academic background and/or work ethic, i.e. an instructor, guidance counselor, or employer. Recommendation letters from family members will not be considered. Applicants may choose to enter the contact information for their reference in the online application. The form will email the reference a link to an electronic recommendation form. Applicants should notify the authors of their recommendation letters prior to entering names. For hard copy submissions, each letter MUST be signed, and dated by the author, and each must contain a contact phone number. Recommendation letter templates are available for download online at https://management.digipen.edu/ srs-app/. Alternatively, references may write their own letters of recommendation without using the templates. Please note that these letters are NOT REQUIRED for applicants to DigiPen's undergraduate degree programs.
- 9. Other official documentation, if applicable: This includes, but is not limited to, TOEFL scores, copy of Permanent Resident card, and a financial responsibility form for international students.
- Art portfolio: This is only required of applicants to the Bachelor of Fine Arts in Digital Art and Animation (BFA) degree program. Please see the Portfolio section below for complete details about this important component of the application.
- 11. Performance Portfolio: This is only required of applicants to the Bachelor of Arts in Music and Sound Design degree program. Please see the Performance Portfolio section below for complete details about this important component of the application.

12. Optional application components for Game Design applicants: copies of drawings and paintings, photographs of landscapes or urban environments, printed versions of digital art, sketches of level designs, and copies of maps. These optional components must be original creations solely of the applicant.

Applicants should not submit electronic games or modifications as the Office of Admissions will not install any of these.

Application Essays

[Updated 2012]

The application essays are an important part of the application for admission to DigiPen Institute of Technology. What you write will help us find out information about you that is not apparent from your application or transcripts.

Topics

Please address the following:

- 1. **Reasons for Applying:** This section is required for ALL undergraduate applicants, regardless of the program to which they are applying.
 - Discuss your reasons for applying to DigiPen and explain how these reasons relate to your future goals (personal, education, and professional). Make sure you explain why you are applying to the specific program you are interested in, not just DigiPen in general (although you can certainly explain that as well). Explaining why you are applying to one particular program instead of another is also good, as is writing about what other programs you would be interested in (some uncertainty about which program you are most interested in will not hurt your chances of admission). Spelling, grammar, and sentence structure, along with the correct use of punctuation, capitalization, quotation marks, etc. are all considered, so proofread your essay carefully.
- 2. **Character Analysis:** Applicants specifically interested in the BS in Game Design or BA in Game Design programs must submit this essay, but for all other undergraduate applicants, this is optional.
 - Choose one of the character images at the link provided to analyze. Once you have made your choice, write an essay in which you describe a basic personality and history of the character you have chosen, plus a bit about the world he or she came from. Do not go overboard on this first part--just a third of the essay at most. Then describe the character's abilities, equipment, and weaknesses. Finally, describe what type of game the character is for (this does not have to be a video game) and what purpose the character would have in that game, both in terms of the story and game mechanics (not

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just one or the other). The character cannot be the primary hero or villain of the game--he or she must be a secondary, non-player character. The essay must be at least 800 words long (and no more than 1200 words), with good structure, excellent grammar, and perfect spelling. *Characters: https://www. digipen.edu/admissions/undergraduateadmissions/requirements-for-fall-2012/ character-analysis/.*

- 3. **Card or Dice Game:** Applicants specifically interested in the BS in Game Design or BA in Game Design programs must submit rules for an original card or dice game, but for all other undergraduate applicants, this is optional.
 - The rules for this game must use only normal six-sided dice and/or a normal deck of traditional playing cards--no other physical components are allowed (other than scratch paper for keeping score, if needed). Do not send dice or cards with your application, we will use our own when evaluating your game. After creating these rules, you must test your game with other players (more than once) and describe the results in detail (including whether the results were good, bad, or mixed). The rules themselves should be at least one-third and at most two-thirds of this submission, with the rest being the playtesting description (which must come after the rules). The rules should, of course, be updated based on the results of your playtesting. The total length must be between 800 and 1200 words. The rules and playtesting description must be clear and well-organized, use excellent grammar, and have perfect spelling.
- Personal Game History: Applicants specifically interested in the BS in Game Design or BA in Game Design programs must submit this history, but for all other undergraduate applicants, this is optional.
 - The Personal Game History is a list all the games you have ever played. Start with video games and list all the ones you can remember. Follow that with a list of all the non-video games you have ever played. List everything you can think of, whether you liked those games or not (it is okay if the list is very long). Finally, list the names of any original games you have created yourself (of any kind). In parenthesis after each game listed, write a short description of what you have done with that game (played it a little, played it a lot, played it professionally, made modifications to it, made levels for it. etc.). For any games you created, describe the type of game and the most interesting thing about it. Below is a sample of the required format, with some sample games and comments listed. Follow this format exactly (including the headers, capitalization, parenthesis, etc.):

VIDEO GAMES Halo (Played it a lot.) Doom (Played it a lot, made levels for it.) Farmville (Played it a little.) NON-VIDEO GAMES Dungeons and Dragons (Played it a lot, created new classes, ran several campaigns.) Spades (Played it a lot.) Chess (Played it a lot.) Chess (Played it a little.) ORIGINAL GAMES Rhino Wars (A simple animal-based trading card game I made for my friends.)

 Optional Essay: Applicants should use this optional essay to explain any unusual circumstances or situations that they think may have an impact on their application.

Submission

Applicants may choose to type the answers to the application essays directly into the online application (in which case, there is an electronic signature and date stamp), to mail a hardcopy to DigiPen's Office of Admissions, or email a copy to *admissions@digipen.edu* where it will be added to the applicant's file. Those who opt for online submission of the application essays should be sure to have their answers drafted and prepared before beginning the online application.

Formatting for Paper Submission

Please adhere to the following requirements if submitting the application essays in hardcopy format:

- Applicant's name and program to which he/she is applying should be printed at the top of each page.
- Each page should be typed and double-spaced.
- The completed application essay(s) should be signed and dated on the last page.

Math and Science Requirements and Recommendations for Bachelor of Science and Bachelor of Arts in Game Design Applicants

[Updated 2012]

In addition to the requirements listed for all undergraduate applicants, those applying to any of the Bachelor of Science programs must have completed grade 12 or more recent coursework with a recommended "B" average (3.0 GPA) in mathematics.

At a minimum, applicants to any of DigiPen's Bachelor of Science programs and the Bachelor of Arts in Game Design programs should have completed coursework in Algebra and Geometry. Moreover, Bachelor of Science applicants need to have completed Precalculus – or be in the midst of completing it – before we can evaluate their application. Please note that if an applicant is currently enrolled in Precalculus, he or she must submit the first quarter/semester grade for this course. Although not required, DigiPen strongly encourages Bachelor of Art in Game Design applicants to complete through Precalculus.

Admissions will try to evaluate an applicant's application based on the current grade in Precalculus. Applicants who have not completed Precalculus or are not currently enrolled in a Precalculus course should contact *admissions@digipen.edu* for recommendations on fulfilling this requirement.

Additionally, applicants to the Bachelor of Science programs are encouraged to take Calculus, Physics, Computer Science, and related AP courses before coming to DigiPen.

BFA Art Portfolio

[Updated 2012]

DigiPen reviews applicants' portfolios to ensure that students have the appropriate foundational skills to succeed in the degree programs to which they are applying.

Applicants to the Digital Art and Animation (BFA) degree are required to submit an art portfolio. This portfolio must contain between 15 to 20 samples of original artwork created by the applicant. At least 10 pieces must be drawings from direct observation, rather than from photos, other 2D references, or the student's imagination. The remaining pieces should demonstrate the applicant's artistic range and skill. Animations, figure/animal studies, character designs, architectural renderings, landscape studies, sculptures, and paintings are preferred for this part of the portfolio. If necessary, DigiPen may request more samples for review.

Applicants to the Bachelor of Arts in Game Design program are not required to submit an art portfolio. Those who elect to do so may include sketches of level designs for games in addition to other types of work.

The Portfolio Should Demonstrate The Following:

- The applicant has sufficient foundational drawing skills to meet the challenges of DigiPen's rigorous curriculum. The portfolio should include at least 10 drawings directly from live observations, preferably of people and animals (not from the applicant's imagination or from 2D references such as a photograph or another artist's work). These drawings should clearly communicate the structure and 3D form of the subject. The applicant should focus on representational accuracy rather than on cartooning or heavy stylization.
- The applicant is a serious amateur artist. The portfolio should include five to ten samples of the applicant's best work, regardless of the subject matter or medium. Sustained drawings (i.e. those that took two to three hours to complete) are encouraged to demonstrate the applicant's skill and concentration. These works should be selected with an eye toward quality, design, composition, and a dedication to craft.

Guidelines for All Art Portfolio Submissions:

- Submit the portfolio via Slideroom (*https://digipen. slideroom.com*). Slideroom requires a \$10 fee to upload portfolios; however, this fee may be waived for students who demonstrate financial need through an SAT fee-waiver program or participation in a similar need-based program.
- All artwork should be submitted as .jpg, .jpeg, .png, .gif, .tif, .tiff, or .bmp, files (each image must be under 5MB).
- Label all artwork with the date of completion and the medium used. Please note: DigiPen prefers that the artwork submitted be less than one year old.
- Avoid samples that rely heavily on exaggerated physical features such as large eyes, big hair, and elongated limbs, or samples copied directly from Manga, Animé, Disney, etc. Instead, focus on creating works that demonstrate your ability to draw from observation and your own imagination.

Performance Portfolio

[Updated 2012]

DigiPen's intent in reviewing applicants' performance portfolios is to ensure that students have appropriate foundational skills relative to the degree program to which they are applying. Applicants should have some background studies in music and some aptitude for music.

Performance Portfolio Requirements for BA in Music and Sound Design Applicants

Applicants to the Music and Sound Design degree program must submit a performance portfolio. This portfolio should contain two live, unedited performances in contrasting styles on the applicant's instrument of choice, as well as one (1) to five (5) examples of musical involvement.

The performance portfolio must adhere to the following requirements:

- For the two (2) live, unedited performance pieces in contrasting styles:
 - o Edited recordings will not be accepted
 - o Audio quality must be clear and free of noise
 - For all instruments except voice, at least one of the performances must be unaccompanied.
 - Both performances must be with the applicant's primary instrument.
 - Each performance should be between two and five minutes in duration.
 - The recorded performances should demonstrate the applicant's musicianship and performance ability, and should showcase the applicant's expertise on the instrument.

- All styles of music are welcome, as long as the two pieces are in sufficiently contrasting styles, such as Baroque and Romantic, or Classical and Jazz.
- The rest of the applicant's portfolio should include evidence of musical involvement. This should be a combination of the following types of items:
 - Scores and/or recordings of compositions, arrangements and/or performances
 - Concert programs
 - o Reviews
 - Awards for musical competitions
 - Video or audio recordings of musical performances
 - Documentation of participation in performances ensembles, such as orchestras, bands, or other musical performance groups
 - Video soundtracks (include video)

Guidelines for All Performance Portfolio Submissions

- Submit the performance portfolio via Slideroom (https://digipen.slideroom.com). Slideroom requires a \$10 fee to upload portfolios; however, this fee may be waived for students who demonstrate financial need through an SAT fee-waiver program or participation in a similar need-based program. Slideroom accepts the following file types/sizes:
 - o Images (5 MB) .jpg, .jpeg, .png, .gif, .tif, .tiff, .bmp, .tga
 - Videos (60 MB) .m4v, .mov, .mp4, .wmv, .flv, .asf, .mpeg, .mpg, .mkv
 - Audio (30 MB) .mp3, .wma, .ogg, .flac
 - o Documents (10 MB) .pdf
- Label items with the date, title and composer of a performance. Please note: DigiPen prefers that the performance submissions be less than three years old.

Graduate Application Process

[Updated 2012]

Admissions Requirements for Master of Science in Computer Science:

All Master of Science in Computer Science applicants should complete their application by July 1 to guarantee timely evaluation of their application. Any applications completed after July 1 may not be evaluated for the current application year. All graduate applicants must submit the following:

- 1. DigiPen Institute of Technology's Online Application for Admission. This application form is available at: https://management.digipen.edu/srs-app/ applicationmenu.aspx.
- 2. \$35.00 application fee: If an applicant is denied admission to the program, DigiPen will refund the application fee.
- Official Graduate Record Examination (GRE) scores for the General Test*: All graduate applicants must complete the GRE General Test and arrange for the testing agency to send those scores directly to DigiPen Institute of Technology. GRE code: 4193.

Students applying to the Master's Program in Computer Science should note that the preferred combined GRE verbal and math scores should be in the 60th percentile or better. Applicants to the Master's Program in Computer Science with an undergraduate degree in any major other than Computer Science or Computer Engineering are required to take an additional test: the Computer Science GRE Subject Test or the DigiPen Computer Science Exam. An acceptable score for the Computer Science GRE Subject Test is 700 or higher. A score of 75% is the minimum acceptable score for the DigiPen Computer Science Exam. Please note that achieving an acceptable score on the Computer Science GRE Subject Test or the DigiPen Computer Science Exam does not guarantee admission. For more information on the DigiPen Computer Science Exam. please email admissions@digipen.edu to be directed to the testing services coordinator. Official transcripts from ALL colleges and universities attended must be submitted. International students should submit attested copies or certified true copies of all academic records. See more about this requirement in the "International (Non-U.S. Resident) Applicants" section if an applicant has transcripts and other official documentation in languages other than English

- Applicants must provide evidence of their completion of a bachelor's degree with a recommended minimum 2.5 cumulative GPA; For international students, DigiPen will determine the minimum academic performance standards based on the educational system of the individual applicant.
- Official transcripts from all colleges and universities attended must be sent directly by the issuing institutions. Alternatively, applicants may send their transcripts if they are SEALED in envelopes and STAMPED across the seal by the Registrar.
- 4. Two letters of recommendation: These MUST be from individuals familiar with your academic background and/or work ethic, i.e. an instructor, guidance counselor, or employer. Recommendation letters from family members will not be considered. Applicants may choose to enter the contact information for their recommenders in the online application. The form

will email the recommender a link to an electronic recommendation form. Applicants should notify the authors of their recommendation letters prior to entering names. For hard copy submissions, each letter MUST be sealed, signed, and dated by the author, and each must contain a contact phone number. Please download the recommendation letter templates online at *https://management.digipen.edu/srs-app/applicationmenu.aspx* alternatively, references may write their own letters without using the templates.

- Statement of Purpose: Guidelines for the Statement of Purpose will be included on the Application for Admission.
- 6. Other official documentation, if applicable: This includes, but is not limited to, TOEFL scores, copy of Permanent Resident card, etc.

*Effective December 2010, graduates of DigiPen's Bachelor of Science in Computer Science in Real-Time Interactive Simulation program are no longer required to complete the GRE to apply to the Master of Science in Computer Science program.

Admissions Requirements for MFA in Digital Arts:

All Master of Fine Arts in Digital Arts applicants should complete their application by July 1 to guarantee timely evaluation of their application. Any applications completed after July 1 may not be evaluated for the current application year. All graduate applicants must submit the following:

- 1. DigiPen Institute of Technology online Application for Admission: This application form is available at: https://management.digipen.edu/srs-app/ applicationmenu.aspx.
- 2. \$35.00 application fee: If an applicant is denied admission to the program, DigiPen will refund the application fee.
- 3. Official transcripts from ALL colleges and universities attended: International students must provide attested copies or certified true copies of all academic records. See more about this requirement in the "International (Non-U.S. Resident) Applicants" section if an applicant has transcripts and other official documentation in languages other than English
 - Applicants must provide evidence of their completion of a bachelor's degree with a recommended minimum of 3.0 cumulative GPA; For international students, DigiPen will determine the minimum academic performance standards based on the educational system of the individual applicant.

- Official transcripts from all colleges and universities attended must be sent directly by the issuing institutions. Alternatively, applicants may send their transcripts if they are SEALED in envelopes and STAMPED across the seal by the Registrar.
- 4. Other official documentation, if applicable: This includes, but is not limited to, TOEFL scores, copy of the Permanent Resident card, etc.
- 5. Two letters of recommendation: These MUST be from individuals familiar with your academic background and/or work ethic, i.e. an instructor, guidance counselor, or employer. Applicants may choose to enter the contact information for their recommenders in the online application. The form will email the recommender a link to an electronic recommendation form. Applicants should notify the authors of their recommendation letters prior to entering names. For hard copy submissions, each letter MUST note how the author knows the applicant and for how long, be sealed, signed, and dated by the author, and each must contain a phone number. Please download the recommendation letter templates online at https:// management.digipen.edu/srs-app/applicationmenu. aspx. Alternatively, references may write their own letters without using the templates.
- 6. Statement of Purpose: Guidelines for the Statement of Purpose will be included on the Application for Admission.
- Portfolio: DigiPen's intent in reviewing applicants' portfolios is to ensure that students have appropriate foundational skills relative to the degree program to which they are applying.
- 8. Interviews: An interview may be required of selected students. This will be arranged on an as needed basis.

MFA Art Portfolio

Applicants to the Digital Arts (MFA) degree program must submit an art portfolio. This portfolio should contain between 15-20 samples of original artwork by the applicant for review. At least ten pieces of the portfolio must be drawings from direct observation; they may not be from photos or other 2D reference or from the student's imagination. The portfolio, as a whole, should demonstrate an applicant's artistic range and skill. Samples of painting, sculpture, animation, figure/animal studies, character designs, architectural renderings, and landscape studies are encouraged. If necessary, DigiPen may request more samples for review.

Samples of digital art are strongly encouraged.

For candidates with bachelor's degrees but a lack of experience in computer graphics or technology, DigiPen may require students to take prerequisite classes.

The portfolio should demonstrate the following:

- The applicant has the strong foundational art and observational skills necessary to handle the rigors of the curriculum. The portfolio should include at least ten drawings directly from live observations, preferably of people and animals (not from an applicant's imagination or from two-dimensional references such as a photograph). The drawings should clearly communicate the structure and threedimensional form of the subject. The emphasis should be on representational accuracy rather than on cartooning or heavy stylization.
- The applicant is a serious artist. The portfolio should include five to ten samples of the applicant's best work regardless of the subject matter or medium. Sustained drawings (at least 2-3 hours each) are highly encouraged to demonstrate the applicant's skill and concentration. This work should be selected with an eye toward quality, design, composition, and a dedication to craft.

Guidelines for Art Portfolio Submissions: See the section "Art Portfolio" in Undergraduate Admissions for submission guidelines

International (Non-U.S. Resident) Applicants

[Updated 2012]

DigiPen Institute of Technology welcomes students from all countries and cultures. Because of language and educational differences, DigiPen does require some additional information from international applicants in order to ensure a successful experience for students. International applicants are also asked to complete the application process early, preferably well before July 1, to guarantee timely evaluation of their application and to allow time to process required documents for the U.S. Immigration and Customs Enforcement (ICE). DigiPen will continue to accept International applications after July 1; however applications completed after July 1 may not allow enough lead-time for documentation processing.

In addition to attested copies or certified-true copies of all academic records and any other degree-specific requirements found under the undergraduate or graduate admission requirements, all international applicants must meet the following minimum requirements:

- 1. Proficiency in the English Language (see the section *Proof of Proficiency in the English Language*)
- Financial Responsibility: Evidence indicating that sufficient funds are available for the eight-month period of study and living expenses must be submitted to DigiPen and made available to the U.S. ICE upon entry into the United States. The Financial Responsibility Form and supporting documentation must be submitted, regardless of whether or not a student is living in the U.S.

International students intending to study at DigiPen must obtain an F-1 visa from the U.S. ICE. An F-1 student is a non-immigrant who is pursuing a full course of study towards a specific educational or professional objective at a school in the United States. Once that objective has been attained, the F-1 student is expected to return to his or her residence abroad. International students should note their citizenship on the application form for admission. If accepted, DigiPen will send you a Form I-20 (Certificate of Eligibility for Nonimmigrant [F-1] Student Status). Applicants who are accepted but do not receive a Form I-20 in their acceptance packets should contact the Office of Admissions.

Once applicants receive their I-20 form they can take it to their nearest U.S. consulate to obtain a student visa. The visa process may take several months to complete, so DigiPen recommends that applicants complete the admissions process before July 1. Applicants must also take copies of the Financial Responsibility Form and support documents to prove they have sufficient financial resources for their education and stay in the United States. For more information on visas, please consult the U.S. Immigration and Customs Enforcement web page at www.ice.gov. International students transferring to DigiPen from another institution within the U.S. must provide DigiPen with a completed Transfer-In Form to ensure that their I-20s are updated accordingly. Transfer-In Forms can be obtained on DigiPen's website or by contacting admissions@ digipen.edu. International students who will be bringing a dependent with them to the U.S., such as a child or spouse, will need to complete the appropriate sections of the Financial Responsibility Form to ensure that an I-20 can be issued to their dependent.

Applicants who are Permanent Residents of the United States do not need a student visa; however, they must prove their immigration status by submitting a copy of their permanent residency card and marking the appropriate citizenship status on the application for admission. The copy of the permanent residency card confirms that a student is a legal resident and that he or she may pursue studies at DigiPen. Permanent residents are subject to the same rights, services, and rates as U.S. citizens.

Proof of Proficiency in the English Language

[Updated 2012]

Non-native English speakers must provide proof of English proficiency in one of the following ways:

- A minimum Test of English as a Foreign Language (TOEFL) score of 550 (paper exam), 213 (computer exam), or 80 (IBT - Internet-Based Test). TOEFL code: 4138.
- A minimum International English Language Testing System (IELTS) score of 6.5 or higher.
- A minimum Cambridge English: Advanced (also known as a Certificate in Advanced English or CAE) score of C1 or higher.
- Completion of four years of high school in the United States at an English-speaking school, or an International School where the primary language of

instruction is English.

- Completion of a post-secondary degree in the United States at an English-speaking school, or an International School where the primary language of instruction is English.
- DigiPen may accept other proof of English proficiency, such as through the submission of internationally recognized standardized English test scores, the completion of English preparatory coursework, or internal English assessments on a case-by-case basis.
- DigiPen may use its discretion and own internal assessments in determining sufficient English proficiency for students transferring from one DigiPen campus or program to another.

Readmission Information

[Updated 2012]

Any student who wishes to return to DigiPen after an absence may apply to do so by completing a Readmission Application and submitting a non-refundable application fee \$25, official transcripts from all institutions attended since last attending DigiPen, and other official documentation for specific circumstances as requested below:

Medical Withdrawals

A physician's statement must be included, and it must indicate that the applicant is ready to resume his or her studies. Additionally, it should describe any special needs the student may require upon returning to the Institute.

Readmission after Academic Dismissal

A statement explaining how time away from the institute was spent, why the student wishes to return, and how the student plans to be successful by returning should be submitted as part of the application for readmission. Students dismissed for academic reasons are not eligible to apply for readmission until at least one year has passed since the formal dismissal from the Institute. It is highly recommended that students take the time away to raise their GPA through college-level coursework in order to boost the likelihood of being readmitted.

Readmission after Disciplinary Action

Applicants should include a formal appeal for the Disciplinary Committee to review along with their application for readmission. Applicants previously withdrawn for disciplinary reasons must receive clearance from the Disciplinary Committee to return.

Readmission for Personal Reasons

There are usually no impediments to returning to the Institute if there is space available; however, an academic plan may need to be developed with the student's advisor upon re-enrollment, and students requesting readmission after an extended period of time must meet with an academic advisor to determine the viability of completing their degree program.

Readmission after Non-Payment of Account

Outstanding accounts must first be settled before applying for readmission. Once settled, the policy for readmission follows the same guidelines listed under Readmission for Personal Reasons.

Readmission after Military Service

In compliance with the Higher Education Authorization Act, any student whose absence from the Institute is required by reason of service in the uniformed services shall be entitled to readmission to the Institute if the student (or an appropriate officer of the Armed Forces or official of the Department of Defense) gives advance written or verbal notice of such service to the Registrar's Office. This is provided that the cumulative length of the absence and of all previous absences from the Institute, by reason of service in the uniformed services, does not exceed five years, and, except as otherwise provided in this section, the student submits a notification of intent to reenroll in the Institute.

Readmission into a New Degree Program

Readmission applicants who would like to return to DigiPen as a student but enter into a new degree program must submit any additional materials required for entrance into the degree program (i.e. art portfolio, game modification, character/ world analysis, etc.). To review the exact requirements for each degree program, please view the "Change of Major" information online or in the course catalog or contact the Office of Admissions at *admissions@digipen.edu*.

Deadline for Readmission Applications: Students interested in applying for readmission must submit their completed applications by the deadlines listed in the academic calendar and on DigiPen's website, according to the semester they are applying to attend.

Exceptions to these requirements will only be made on a caseby-case basis at the discretion of the DigiPen Administration.

Submission of Official Transcripts

All readmission applicants to DigiPen must request an official transcript from DigiPen's Registrar's Office to be sent to the Office of Admissions as part of their application. Additionally, if you have taken courses from another college since leaving DigiPen, you must also have any and ALL official transcripts forwarded to the Office of Admissions from the registrar of each institution attended. The transcripts should show all academic work until the last semester or quarter you completed. If you are approved for readmission with coursework in progress, your admission status will be provisional, pending receipt of your final transcript(s).

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WAIVER CREDIT, AP EXAMINATIONS, CLEP, AND OTHER CREDIT

[Updated 2012]

Students may apply for course waivers if they can demonstrate that their knowledge and skills - whether they were gained by formal education, exam, work experience, or life experience are equivalent to those gained by courses offered at DigiPen Institute of Technology. Credit may be granted through other means: Advanced Placement (AP) Exam scores, International Baccalaureate (IB) courses, College-Level Examination Program (CLEP) subject exam scores, or transfer credits from other post-secondary institutions. A maximum of nine credits per semester may be earned by these means. For undergraduate programs, a student must take a minimum of 75% of the entire program at DigiPen. Graduate programs allow a maximum of 15 transfer credits from other colleges and other DigiPen programs. Course transfers and waivers are processed at \$25.00 per credit.

STANDARDS OF PROGRESS

Semester Credit Hour

The semester credit hour is the basic unit of credit awarded at the Institute. The academic value of each course is stated in semester credits. DigiPen defines a semester credit hour as follows:

Over any semester, one semester credit hour of academic credit equals:

- at least 15 hours of classroom contact, or
- at least 20 hours of supervised laboratory time, or
- at least 30 hours of documented independent study activities, or
- at least 45 hours of internship or externship experience.

In addition, each semester credit also assumes:

• a minimum of 30 hours over the semester for external preparation, project work, or homework by the student, except for independent studies or internship or externship experience.

A classroom contact hour is 53 minutes in length.

Whenever "semester hour" is used in this Catalog, it is synonymous with "semester credit hour" (SCH) and does not always represent "hours per week in class." Students taking courses over the summer should be aware that the total number of hours for a course is compressed into the 11 weeks, but is not reduced. The number of courses that a student is recommended to take during the shorter Summer semester is therefore fewer than the Fall or Spring semesters.

Grading System

[Updated 2012]

The following system applies to undergraduate students; for information on the grading system for graduate programs, please refer to the Master of Science in Computer Science and the Master of Fine Arts in Digital Arts program section.

The following grading system is in use and, except where otherwise specified, applies to both examinations and homework assignments. The weight of a final examination grade is a matter individually determined by each instructor. See the following Grade Point Average section for additional information.

Grade	Description	Quality Points	Explanation of Minimum Grade Requirement
A	Excellent	4.0	
A-	Excellent	3.7	
B+	Good	3.3	
В	Good	3.0	
В-	Good	2.7	
C+	Fair	2.3	
С	Fair	2.0	minimum grade required to earn credit for graduate students
C-	Fair	1.7	minimum grade required to earn credit for undergraduate students to earn credit
D	Poor	1.0	minimum grade required for undergraduate students to earn credit in non-core courses for their majors
F	Failure	0	

The following grades do not affect the GPA:

AU - Audit

Indicates that the student attended the course without expectation of receiving credit or a grade.

IP - In Progress

Indicates that the grade was not available from the instructor at the time the transcript was printed.

I - Incomplete

This grade is used when circumstances beyond a student's control prohibit the student from taking the final exam or completing course work. It is not a grade given to students who need to retake a course because the student has fallen substantially behind. Students will not be given an "I" grade for unacceptable reasons, including, but not limited to, the need to rewrite a paper, the demands of a time-consuming job, the desire to leave town for a vacation or family gathering, the desire to do well on tests in other courses, etc. Students who want to repeat a course can drop it prior to the end of the eighth week of classes, and they will receive a "W" (see "Withdrawal" below). Otherwise, the instructor will assign the appropriate final grade ("D" or "F," for example).

Arrangements for the "I" grade and its completion must be initiated by the student and agreed to by the instructor. An Assignment of Final Grade for Completion of an Incomplete (I) Form must be completed each time a grade of "I" is assigned. On the form, the instructor will specify to both the student and the department the work remaining to be done, the procedures for its completion, the grade in the course to date, and the weight to be assigned to work remaining to be done when the final grade is computed.

If make-up work requires classroom or laboratory attendance in a subsequent semester, the students should not register for the course again; instead, the student must audit the course and pay audit fees. If the make-up work does not require classroom or laboratory attendance, the instructor and student should decide on an appropriate plan and a deadline for completing the course. When the student completes the course, the instructor will submit a change of grade to the Registrar's Office. Should the work not be completed within the agreed upon time frame, the Institute will assign a grade of "F."

These procedures cannot be used to repeat a course for a different grade. An "I" grade will not be assigned to a student who never attended class; instead, instructors may assign a failing grade.

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W - Withdrawal

Indicates withdrawal from the course before the end of the eighth week of classes or withdrawal from the Institute. The grade of "W" will not be assigned to any student who has taken the final examination in the course. An instructor may not withdraw a student from a course.

P - Pass

Given for internship, seminar, and thesis courses.

Assessment Process

[Updated 2012]

DigiPen has an assessment process to evaluate the defined student learning outcomes of the education and training and established competencies. This process includes a combination of methods such as grading, portfolio assessment, projects, externships, and criterion referenced testing based on developed and appropriate rubrics.

Each course syllabus contain clearly defined course objectives and learning outcomes, course requirements, grading policy and allotment, and grading distribution. Students are made aware of the grading policy, performance standards, and grading distribution at the beginning of each course. The faculty measures the student's achievement of the stated course objectives and learning outcomes based on the grading policy published in the course syllabus.

Satisfactory Progress

[Updated 2012]

Federal Regulations mandate that Institutions of Higher Education create a Satisfactory Academic Progress (SAP) standard for students receiving financial assistance under the Title IV programs. The point of SAP standards are to measure a student's progress toward the completion of their education program. The Financial Aid Office is responsible for ensuring that all students receiving federal Financial Aid are meeting these standards by conducting an evaluation at the end of each term.

The SAP standards established in this policy apply to all Title IV Financial Aid programs administered by the Institution. This includes Unsubsidized Ioans, Subsidized Ioans, PLUS Ioans, Grad PLUS Ioans, and Federal Pell Grant.

The Institute's SAP policy is the same for all students, regardless of whether they are receiving federal financial aid or not. To be eligible for any of the types of Financial Aid listed above, a student must be:

- 1. Matriculated
- 2. Meeting the terms of the SAP policy

A SAP policy is comprised of two standards: qualitative and quantitative. The qualitative standard measures academic performance by the cumulative grade point average. The quantitative standard measures the total number of academic credits earned within the specified time periods and satisfactory pace towards completion. Financial Aid recipients must meet all of these standards to qualify for aid. A program of study must be completed within a reasonable period of time for a student to be eligible for graduation; that is, the credit hours attempted cannot exceed 1.5 times the credit hours or more than 1.5 times the recommended time required to complete the program. For example, the BFA program normally takes 145 credits to complete. Students in this program have up to 217.5 credits to complete their program. The Registrar will withdraw from the Institute full-time students who do not complete their studies during this time frame.

In addition, frequent withdrawals from courses or from the Institution, failed or repeated courses, changes of major, or taking courses that are not related to the student's degree program could put the student's financial aid eligibility at risk. All attempted hours at the Institution and accepted transfer credits will count toward the maximum time frame for SAP. Students who have completed sufficient hours to finish their degree program are no longer eligible for financial aid. For financial aid recipients, if it is determined that a student will not be able to complete their degree within the maximum allowable time frame, eligibility for student financial aid may be revoked.

Changing Majors and Satisfactory Academic Progress (SAP)

All courses that are deemed transferable to a student's new degree program are considered when calculating a student's satisfactory progress (SAP). Courses that are not part of the new major are not used.

Students should refer to the section Change of Major and Graduation for information about how to change majors.

Undergraduate Students

A student must be in "good academic standing" based on the cumulative grade point average of all courses taken at DigiPen Institute of Technology to meet the qualitative standard. Good academic standing is as follows:

Students Who Began in the 2011 Cohort or Earlier [Updated 2012]

Milestone – Undergraduate	Minimum GPA Requirement
Up to 50% of program 77 attempted credits* for BSCS in RTIS, BSCE, or BSGD 73 attempted credits for BAGD 72 attempted credits for BFA 70 attempted credits for BSESD 67 attempted credits for BAMSD	1.8 or better cumulative GPA
Over 50% of program 78-153 attempted credits for BSCS in RTIS, BSCE, or BSGD 74-146 attempted credits for BAGD 73-143 attempted credits for BFA 70-139 attempted credits for BSESD 67-133 attempted credits for BAMSD	2.0 or better cumulative GPA
 100% of program 154 earned credits or greater for BSCS in RTIS, BSCE, or BSGD 147 earned credits or greater for BAGD 144 earned credits or greater for BFA 140 earned credits or greater for BSESD 134 earned credits or greater for BAMSD 	2.0 or better cumulative GPA

Students in Cohorts that Began in 2011 or Later

[NEW]

Milestone – Undergraduate	Minimum GPA Requirement
Up to 50% of program 77 attempted credits* for BSCS in RTIS, BSCE, or BSGD 73 attempted credits for BAGD 73 attempted credits for BFA 71 attempted credits for BSESD 68 attempted credits for BAMSD	1.8 or better cumulative GPA
Over 50% of program 78-153 attempted credits for BSCS in RTIS, BSCE, or BSGD 74-146 attempted credits for BAGD 74-144 attempted credits for BFA 72-140 attempted credits for BSESD 69-134 attempted credits for BAMSD	2.0 or better cumulative GPA
 100% of program 154 earned credits or greater for BSCS in RTIS, BSCE, or BSGD 147 earned credits or greater for BAGD 145 earned credits or greater for BFA 141 earned credits or greater for BSESD 135 earned credits or greater for BAMSD 	2.0 or better cumulative GPA

* An attempted credit is defined as any credit that is awarded a final letter grade ("A" to "F"). Credits earning a "W" or "I" are not considered attempted credits for the purpose of calculating GPA. Credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose of calculating generative credits earning a "W" or "I" are considered attempted credits for the purpose

Graduate Students

[Updated 2012]

Graduate students who take the undergraduate-level classes to fulfill the contingency for acceptance into the graduate programs must earn a "B" (or better) for such a class to meet the minimum requirement. During the course of graduate study at DigiPen, students are required to maintain a cumulative GPA of 3.0 at the graduate level. If the cumulative GPA falls below the required standard, the student will be placed on academic warning. Students on warning must earn 3.0 GPA or better in their graduate-level classes in subsequent semesters until the cumulative GPA reaches 3.0 or above. Students who fail to attain a 3.0 in graduate-level classes during their academic warning will be academically terminated. Terminated students may apply for readmission after a 12-month suspension.

Graduate students who fail to complete their program within 1.5 times the attempted credits will be placed on academic warning. Students on warning shall work with their graduate advisors to develop a completion plan that outlines the quickest path to completion. Failure to meet the terms of this plan will result in academic termination.

CHANGE OF MAJOR AND GRADUATION

Requesting a Change of Major

[Updated 2012]

Students wishing to change their major are encouraged to speak with their academic advisor before submitting an application. To apply for a change of major, the following steps must be completed:

- Submit a Request for Change of Major Form to the Office of Admissions; forms are available in front office or through the Student Record System. Admissions will print an unofficial grade report to include with the change of major application.
- 2. Submit a Change of Major Statement addressing the following topics:
 - Discuss your reasons for requesting a change of major, and explain how these reasons relate to your future goals (personal, educational, and professional).
 - Describe how a change of major will affect your academic plan from this point forward, and include any steps you will take to ensure a smooth transition.
- 3. Submit any additional materials required for the degree program to which you would like to change. This information is available here: https://www. digipen.edu/current-students/academics/change-of-major/.

Art portfolios should be submitted in hard copy or electronic format, as originals will not be returned. Detailed information about additional materials and the change of major process can be accessed online at *https://www.digipen.edu/current-students/academics/change-of-major/.*

Once all relevant materials have been received and the application has been evaluated, a decision regarding the change of major will be sent to the student via mail or email. Students approved for a change of major will be emailed an Enrollment Agreement corresponding to the new program. They must sign this agreement either electronically through DocuSign or print, sign and return it to the Office of Admissions before the change can take effect.

Important Information Regarding Change of Major Requests

- Change of Majors will only take effect on the first day of a new semester. To be considered, requests must be submitted at least fifteen working days before the start of a new semester; otherwise, the request will be considered for the next available semester. Specific deadlines for submitting a request for change of major can be seen on the academic calendar.
- Students requesting a change of major should remember to consider add/drop deadlines. Requesting a change of major does not exempt students from the add/drop policies at DigiPen.
- Students may register for classes in any major prior to the deadline for adding a class, but it is recommended that they speak with their academic advisor if they have not yet had their request for change of major approved.
- Students who change their majors are encouraged to meet with their academic advisor or with the head of the program to which they are transferring to determine what changes need to be made to their schedules or to recommended course sequences.
- Students considering a change of major should speak to the degree program faculty if they have specific questions about the differences between programs. Any questions about the status of a request for change of major or about this process should be directed to the Office of Admissions or to the Registrar's Office.

Important Financial Aid Information

[Updated 2012]

Applicants who are a recipient of federal financial aid, could potentially lose some or all of their financial aid eligibility by changing majors. Accepted change of major applicants must notify the Financial Aid office in person, as their financial aid will need to be revised.

Graduation Requirements

[Updated 2012]

Degrees will be granted at the end of the semester in which students complete the final requirements. For example, if a student receives an "I" grade in a course required for graduation in his or her final semester, he or she will not graduate until the semester in which the "I" is replaced by a letter grade. During that semester, the student must reapply for graduation. A program of study must be completed within a reasonable period of time for a student to be eligible for graduation. The Institute defines "reasonable time" as the credit hours attempted cannot exceed 1.5 times the credit hours required to complete the program. Students who do not complete their studies during this maximum time frame will be placed on academic warning and will have to complete their program requirements under the conditions of their academic warning. For more information, please see the Academic Warning section.

Graduation Application Process

[Updated 2012]

Graduation Date	Graduation Application Due Date
April	December 1
July	April 1
December	April 1

- 1. The student completes the Graduation Application and submits the \$100.00 graduation fee by the deadlines stated in the table above.
- The academic advisor or administrator will review the most recent transcript or degree plan to verify progress and will notify the student whether or not he or she has completed all courses satisfactorily to date, and, if upon satisfactory completion of courses for which the student is currently registered, he or she will be eligible for graduation.
- 3. Final approval will not be made until after final grades are submitted and posted to the student's record. Degrees will be mailed as soon as possible after that process, which should be from four to six weeks after completion. The student needs to keep the Office of the Registrar informed of address changes so that degrees are mailed to the correct address.

STUDENT AFFAIRS

Academic Support Center

[NEW]

Peer tutoring is available for 100 and 200 level courses in the Academic Support Center. For further information please contact *tutors@digipen.edu*.

Placement Assistance

[Updated 2012]

Advice on career options is available to enrolled degree seeking students. With the assistance of Student Affairs and faculty members, the Career Services team works to establish relationships with prospective employers on an on-going basis. It offers resume and job-hunting workshops to supplement career education found in the curriculum.

The Institute has a career bulletin board, including an electronic bulletin board, and uses an email mailing list to post

current job openings in the industry. The Institute also provides placement services in the form of internships that may be available during the summer. The placement program bases its recommendations of students on their academic performance. Additionally, DigiPen hosts an annual career fair that attracts employers from around the country to the campus to review student portfolios and conduct interviews. DigiPen also attends industry events, such as the Game Developers Conference, to promote the Institute's programs and its students. Placement assistance continues beyond graduation as these services are extended to alumni. For further information, please email the Career Services department at *careerservices@digipen. edu.* Please note that employment upon graduation is not guaranteed, nor is DigiPen obligated to secure employment on behalf of students.

REGULATION OF CONDUCT AND DISCIPLINARY PROCEDURES

[Updated 2012]

DigiPen Institute of Technology is an academic institution that strives to ensure all students have a safe and effective workplace free of harassment, which supports collaborative and cooperative education. To this end, students will comport themselves in a professional manner when dealing with instructors, faculty, administrators, and/or other students. They are expected to dress and manage personal hygiene in a way that does not cause undue offense to other students, faculty, or staff of the Institute, and to refrain from verbal or physical intimidation of others. The Institute has the right to take appropriate disciplinary action warranted by a student's misconduct. The specific provisions as to offenses, penalties, and disciplinary procedures set out below should not be construed as limiting the general authority of the Institute.

Rules and Regulations

1. It is strictly forbidden to bring in or out of the premises any digital storage and any form of memory sticks or optical media, diskettes, video recorders, etc. other than for academic and approved usages which directly apply to courses being taken by the student during his/her enrollment of this agreement, or for the required purpose of maintaining back-up copies of student-created projects and assignments. Any use of DigiPen's computer resources (including all video or audio recording) that violates the Network and Internet Usage Agreement is strictly forbidden and may be punished according to the fullest extent of the law. Students are responsible for guaranteeing that any files transferred to and from DigiPen's equipment are free of malicious viruses or Trojan horses. In respect to the above, students are only allowed to carry in and out of the DigiPen premises data files only and not executable files. This includes studentcreated executables. Following this policy will greatly reduce the risks of virus infections to the DigiPen network. In order for DigiPen faculty to review and grade projects and assignments, source code must be stored and executables must be generated at DigiPen from the corresponding source code.

- Students are forbidden from downloading any files from the Internet or installing any software, including but not limited to freeware and/or shareware, without the written approval from a DigiPen faculty member or from DigiPen's IT department. Furthermore, illegal use of the Internet may be prosecuted to the fullest extent of the law.
- In order to prevent damage to equipment and facilities, food and/or drink are not permitted anywhere within the training areas of the premises.
- 4. Smoking is not permitted anywhere within the premises, including but not limited to, the washrooms, elevators, or stairwells.
- 5. Student ID tags must be worn visibly when on the premises. Lost or stolen ID tags must be reported to Security as soon as possible.
- 6. All student projects must receive approval from DigiPen's instructors prior to commencement of any production. DigiPen reserves the right to reject ideas or to stop production of any student game, animation, or project for reasons deemed appropriate to DigiPen. The Institute will not allow the production of any student work that contains or makes a direct or indirect reference to any of the following material/ subjects:
 - Religious content
 - Religious symbols
 - Pornographic material
 - Excessive violence
 - Sexual and nude content
 - Promotion of illegal substances
 - Promotion of racism or hate
 - Content demeaning to any group of society
- 7. Plagiarism will not be tolerated. Any student who submits the work of another person as his or her own is considered to have committed plagiarism. Types of work that can be plagiarized include, but are not limited to, source code, artwork, concepts, designs, or other material. Anyone submitting someone else's work without the explicit written permission from the legal owner may have violated the owner's intellectual property rights or copyrights, in addition to committing plagiarism. If any student is unsure as to what constitutes a case of plagiarism, he or she should consult an instructor for clarification.
- 8. Students shall not submit any work to the Institute that infringes upon the intellectual property rights of a third party. If, during the program, a student submits such work to the Institute, he or she shall indemnify or hold harmless the Institute from and against all loss, damage, cost (including legal fees), and other liability, which the Institute may suffer as a result of the same.

- 9. Cheating on an examination will not be tolerated. Using any materials other than those authorized by the examiners during an exam is an example of cheating.
- Submitting false documents, transcripts, or any other academic credentials to gain admission to DigiPen or to obtain any academic benefit is grounds for expulsion without recourse.
- 11. Disrupting instructional activities, including making it difficult to proceed with scheduled lectures, seminars, examinations, tests, etc., shall be considered an offense.
- 12. In the interest of maintaining an environment that is safe and free of violence and/or threats of violence for its employees, students, and visitors, possession of a dangerous weapon is prohibited on property owned by or under the control of DigiPen. Weapons and ammunition are potential safety hazards. Possession, use, or display of weapons or ammunition is inappropriate in an academic community for any reason, except by law enforcement officials. No weapons or ammunition shall be worn, displayed, used, or possessed on campus. Any member of the DigiPen community who violates this policy shall be subject to appropriate disciplinary action up to and including dismissal from DigiPen and shall be subject to all appropriate procedures and penalties including, but not limited to, the application of the criminal trespass provisions of the law of the State of Washington. Any person who is not a member of the DigiPen community who violates this policy shall be subject to all appropriate procedures and penalties including, but not limited to, the application of the criminal trespass provisions of the law of the State of Washington. Members of the DigiPen community who are aware of any violations of this policy or who have other concerns about safety or weapons should report them to the Student Affairs Director, Dean of Faculty, Senior Vice President of Administration, or the Chief Operating Officer.
- 13. Evidencing symptoms of alcohol or drug use while on Institute property, or the procurement or possession of alcohol or illegal substances on Institute property, is considered an offense.
- 14. It is forbidden to damage, remove, or make unauthorized use of the Institute's property or the personal property of faculty, staff, students, or others at the Institute. Without restricting the generality of "property," this includes information, however it may be recorded or stored.
- 15. It is strictly forbidden to use any equipment in the premises to produce any commercial work. The equipment is only to be used for homework and training purposes. Any attempt to produce commercial work will result in legal action against the offenders.
- 16. Public areas and equipment of the building must be kept clean. No tampering, moving, defacing, or otherwise altering the premises, equipment, or the building property is allowed.

- 17. Graffiti, other forms of mural art, or the posting of signs anywhere in the premises and the building without permission of the Administration is not permitted.
- 18. Office equipment (photocopier, fax, office phone, etc.) is not available for student use.
- 19. The assault of individuals, whether verbal, nonverbal, written, or physical, including conduct, or any other kind of assault which leads to the physical or emotional injury of faculty, staff, students, or others at the Institute, or which threatens the physical or emotional well-being of faculty, staff, students, or others at the Institute, is considered an offense.
- 20. In accordance with applicable law, DigiPen prohibits sexual harassment and harassment between employees, between students, and between employees and students. Harassment due of race, sex, color, national origin, ancestry, religion, physical or mental disability, veteran status, age, or any other basis protected by federal, state, or local law. Any such harassment may violate the law and will not be tolerated. DigiPen's policy prohibits inappropriate conduct even though it may not reach the legal standard for harassment.
- 21. It is forbidden to attempt to engage in, aid and abet others to engage in, or attempt to engage in conduct which would be considered an offense.
- 22. Failing to comply with any penalty imposed for misconduct is considered an offense.

Degree Programs for the Academic Year 2012-2013

BACHELOR OF SCIENCE IN COMPUTER SCIENCE IN REAL-TIME INTERACTIVE SIMULATION

[Updated]

Program Overview

The electronic and digital entertainment industry is one of the fastest growing and most exciting career choices of the future. The video game, movie, and military industries are only a few of those that demand well-trained, enthusiastic programmers, designers, artists, and managers. DigiPen Institute of Technology is a key provider of these individuals, and the Bachelor of Science in Computer Science in Real-Time Interactive Simulation (BSCS in RTIS) prepares programmers for these industries. Designed and developed by industry experts and DigiPen faculty, the Institute's four-year BSCS in RTIS program is a computer science degree that is highly focused on the technical area of graphics and simulations. Participants in the BSCS in RTIS program specialize in the skills and tools necessary to create real-time simulations of real-life events and imaginary situations.

The BSCS in RTIS program offers extensive training in mathematics and physics as a foundation for the various topics presented in general computer science and computer graphics. Throughout the degree program, BSCS in RTIS students participate in several team-based projects. These substantial projects are designed to give students concrete experiences in which they apply the theoretical knowledge gained from their courses. Forming the cornerstone of the program, these projects exemplify many of the skills necessary in the video game industry today: teamwork, design, implementation, follow through, and business knowledge, among others. BSCS in RTIS students gain the experience of designing, programming, and testing a variety of simulations and games, including textbased, scrolling, simulation, and 2D and 3D games.

Students in this degree program work both individually and collaboratively to learn the fundamentals of game design, production, and programming. Additionally, they write game design documents and technical design documents, learn how to schedule tools and techniques, and participate in the full production of several games. These game-oriented productions are a perfect media to present complicated subjects in a format agreeable to students. These productions:

- Are graphics-oriented simulations, including 2D and 3D simulations.
- Can realistically reproduce or simulate natural phenomena and real-life events. Flight simulators are excellent examples of such simulations.
- Are highly interactive, requiring an elaborate and efficient graphical user interface (GUI). The development of a GUI requires the management of windows, menus, dialog boxes, and hardware resources including keyboards, mice, and display monitors.

- React in real time. The implementation of such simulations requires a thorough knowledge of computer hardware and computer languages.
- Are story-based simulations requiring a plot in which game objects must interact intelligently with each other. Therefore, in order to make games challenging and interesting, students must design and implement good artificial intelligence algorithms, which serve as the cognitive processes for the computer-controlled game objects.
- Could be designed for either a single-player or multi-player environment. The development of the latter requires the understanding of subjects such as computer networks, TCP/IP, and Internet programming.
- Are excellent examples of large and complex productions. Teamwork is essential to the successful completion of such productions. Therefore, students are divided into teams and are rigorously trained in object-oriented programming languages, paradigms, and software engineering techniques and practices.

Graduates of this program will gain the skills required to successfully pursue entry-level careers in the rapidly growing world of computer technologies in general, and computer graphics and simulations in particular. This degree prepares students to work in the computer and video game industry as intermediate-level programmers in graphics, artificial intelligence, networking, or general programming; beginning designers; or engineering tool staff members. Some of the job titles that graduates of this program may aspire to are Solutions Architect, Compatibility/Playability Tester, Game Analyst, Quality Assurance Engineer, Quality Assurance Supervisor, Computer or Software Programmer, Software Engineer, Game Programmer, Engine and Tools Programmer, Game Graphics Programmer, Artificial Intelligence Programmer, Audio Programmer, Web Programmer, or Software/Lead Tester.

Students in the BSCS in RTIS program who are interested in pursuing a graduate degree at DigiPen or taking graduate level coursework during their undergraduate studies, may participate in the "Accelerated Schedule" option, which permits students who meet the minimum requirements to take selected graduate-level courses during the junior and senior years of their undergraduate study and apply up to 15 credits towards both BS and MS degree requirements. Students who pursue the accelerated schedule can successfully complete their BSCS in RTIS degree and Master of Science in Computer Science in five years sequentially. Please refer to the section about the "Accelerated Schedule" for more details.

Rather than attempt to provide a broad, general education, this degree program is an intensive educational experience in a specialized and highly technical area, and it prepares students for a career in several rapidly expanding industries. Staff and faculty are prepared to guide students desiring more general education course work about supplementary opportunities available through other institutions.

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Degree Requirements

Number of Credits and GPA

The BSCS in RTIS requires completion of at least 154 credits with a cumulative GPA of 2.0 or better. The program usually spans eight semesters of 15 weeks each, or a total of four academic years.

Humanities and Social Sciences Requirements

Required courses are COL 101, ENG 110 and COM 150. Five additional ENG credits are required from ENG 116 and above. Students must take an additional three credits in HIS, PSY, or SOS. (Total: 15 credits)

Art Requirements

Students are required to take ART 210, CG 130 and 2 additional credits from the following: ANI 125, ART 400, FLM 115, FLM 151, FLM 152, FLM 275, or ART 410. (Total: 7 credits)

Computer Science Requirements

The following courses are required: CS 100, CS 100L, CS 120, CS 120L, CS 170, CS 170L, CS 180, CS 200, CS 225, CS 230, CS 250, CS 260, CS 280, CS 300, CS 315, CS 330, CS 350, and CS 365. Students must select four more courses (12 credits) numbered higher than 200 or PHY 350. (Total: 60 credits)

Mathematics Requirements

The following courses are required: MAT 140, MAT 150 or MAT 180, MAT 200 or MAT 230, MAT 250, MAT 258, MAT 300, and one MAT elective numbered higher than 300, or MAT 256. (Total: 24 credits)

Physics Requirements

The following courses are required: PHY 200 and PHY 250. (Total: 6 credits)

Game Projects Requirements

The following courses are required: GAM 100, GAM 150, GAM 200, GAM 250, GAM 300, GAM 350, GAM 400, and GAM 450. (Total: 34 credits)

Grade Requirements and Core Courses

Students must receive a grade of "C-" or higher in all core courses for the BSCS in RTIS major. (In a non-core course, a grade of "D" or higher is considered passing.) The core courses are all those taken to fulfill the GAM, MAT, and CS requirements as described above. PHY 200 is also a core course.

Note on General Education Courses

The following courses satisfy the general education requirement for the Bachelor of Science in Computer Science in Real-Time Interactive Simulation: ART 210 (2), ART elective (2), COM 150 (3), ENG 110 (3), ENG electives numbered ENG 116 or higher (5), a social science elective in HIS, PSY, or SOS (3), MAT 150 or MAT 180 (4), MAT 250 (3), PHY 200 (3), and PHY 250 (3), for a total of 31 credits.

Recommended Course Sequence

Listed on the following page is the recommended course sequence for the Bachelor of Science in Computer Science in Real-Time Interactive Simulation. Please note the following:

• Students must achieve a grade of "C-" or higher in the core courses to earn credit toward this degree.

Recommended Course Sequence Chart (BSCS in RTIS)

[Updated 2012]

Semester	Course	Course Title	Core	Credits
	MAT 140	Linear Algebra and Geometry	Х	4
er 1	CS 100	Computer Environment	Х	3
	CS 100L	Computer Environment Lab	Х	1
	CS 120	High-Level Programming I – The C Programming Language	Х	3
Semester 1	CS 120L	High-Level Programming I Lab	Х	1
Serr	GAM 100	Project Introduction	Х	3
	ENG 110	Composition		3
	COL 101	College Life and Academic Skills		1
			Semester Total	19
	MAT 150 or MAT 180	Calculus and Analytic Geometry I or Vector Calculus I	х	4
N	CS 170	High-Level Programming II – The C++ Programming Language	х	3
Semester 2	CS 170L	High-Level Programming II Lab	Х	1
mes	CS 230	Game Implementation Techniques	Х	3
Se	GAM 150	Project I	Х	3
	COM 150	Interpersonal and Work Communication		3
			Semester Total	17
	MAT 200 or MAT 230	Calculus and Analytic Geometry II or Vector Calculus II	х	4
e	CS 180	Operating System I, Man-Machine Interface	Х	3
Semester 3	CS 200	Computer Graphics I	Х	3
mes	CS 225	Advanced C/C++	Х	3
Se	GAM 200	Project II	Х	4
	PHY 200	Motion Dynamics	Х	3
			Semester Total	20
	PHY 250	Waves, Optics, and Aerodynamics		3
ər 4	CS 250	Computer Graphics II	Х	3
	CS 260	Computer Networks I, Interprocess Communication	х	3
Semester 4	CS 280	Data Structures	х	3
Sen	GAM 250	Project II	х	4
	MAT 250	Linear Algebra	х	3
			Semester Total	19

Semester	Course	Course Title	Core	Credits
Semester 5	CS 300	Advanced Computer Graphics I	X	3
	CS 315	Low-Level Programming	X	3
	CS 330	Algorithm Analysis	X	3
	MAT 258	Discrete Mathematics	X	3
	CG 130	3D Computer Animation Production I		3
	GAM 300	Project III	X	5
			Semester Total	20
	MAT 300	Curves and Surfaces	X	3
	CS 350	Advanced Computer Graphics II	X	3
	CS 365	Software Engineering	X	3
Semester 6	Computer Science or Physics Elective	Any 200-level or higher CS course not required or PHY 350	X	3
	GAM 350	Project III	X	5
	Elective	An elective of the student's choice from any department at DigiPen		3
			Semester Total	20
	Art Elective	Select one: ANI 125, ART 400, FLM 115, FLM 151, FLM 152, FLM 275, or ART 410		2-3
	English Elective	One English elective chosen from any ENG course, ENG 116 and above		2-4
Semester 7	Computer Science or Physics Elective	Any 200-level or higher CS course not required or PHY 350	X	3
Sem	Math Elective	MAT 256 or any MAT course greater than 300	X	3
	GAM 400	Project IV	X	5
	Elective	An elective of the student's choice from any department at DigiPen		3
	ART 210	Art Appreciation		2
			Semester Total	20-23
Semester 8	English Elective	One English elective chosen from any ENG course, ENG 116 and above		2-4
	Computer Science or Physics Elective	Any 200-level or higher CS course not required or PHY 350	X	3
	Computer Science or Physics Elective	Any 200-level or higher CS course not required or PHY 350	X	3
	GAM 450	Project IV	X	5
	Elective	An elective of the student's choice from any department at DigiPen		3
	HSS Elective	One humanities & social science elective from any three-credit HIS, PSY or SOS courses		3
			Semester Total	19-21
			Degree Total	154 minimu

Note: Please see the previous page for an explanation of core courses.

The BS/MS in Computer Science Accelerated Schedule

[Updated]

DigiPen offers students in the Bachelor of Science in Computer Science in Real-Time Interactive Simulation (BSCS in RTIS) program the opportunity to complete both BSCS in RTIS and Master of Science in Computer Science (MSCS) programs through an accelerated schedule. The accelerated schedule permits students who meet the minimum requirements to take selected graduate-level courses during the junior and senior years of their undergraduate study and apply up to 15 credits towards both BS and MS degree requirements. Students who pursue the accelerated schedule will successfully complete their BSCS in RTIS degree while at the same time beginning to extend their knowledge into the graduate level curriculum and allow students to finish both degree programs in five years sequentially (i.e., BSCS in RTIS in 4 years, and then MSCS in 1 year).

Minimum Requirements

To be considered for the BS/MS accelerated schedule, students must meet the following minimum requirements:

- Major: Bachelor of Science in Computer Science (BSCS in RTIS) in Real-Time Interactive Simulation at DigiPen Institute of Technology
- *Junior standing*: students must have completed the 5th semester's study (the first semester of Junior year) or earned 93 or more credits of course work
- GPA: 3.00 or higher
- Petition to take graduate level CS electives
- Consent from the academic advisor in writing

The MSCS Admissions Committee will review the student's request of entering the accelerated schedule and inform the student within three weeks upon receiving the petition. Please note that the petition to be considered for the BS/ MS accelerated schedule does not indicate admission to the MSCS degree program. Students must still apply for the MSCS program following the standard admission procedures.

Accelerated Schedule Degree Requirements:

The recommended course sequence for the BSCS in RTIS degree program includes 6 electives (2 during each of the following semesters: 6, 7, 8). Students on the accelerated schedule may choose up to 5 graduate level CS courses for their CS electives. The following table contains the graduate level CS electives that are eligible for credit sharing (maximum 15 semester credits) between the BSCS in RTIS and MSCS degree programs. Students may only share credits of courses for which they earn a B- or higher.

Graduate-Level Computer Science Electives

Course Number	Course Name	Credits
CS 500	Ray Tracing	3
CS 530	Advanced Game Engine Design	3
CS 550	Physics Simulation	3
CS 560	Advanced Animation & Modeling (I)	3
CS 561	Advanced Animation & Modeling (II)	3
CS 562	Advanced Real-Time Rendering Techniques	3
CS 570	Computer Imaging	3
CS 571	Advanced Computer Imaging	3
CS 580	Artificial Intelligence in Games	3
CS 581	Introduction to Artificial Intelligence	3
CS 582	Reasoning Under Uncertainty	3
CS 590	Introduction to Computation Theory	3
CS 599	Special Topics	3

Recommended Course Sequence

The MSCS degree program requires a total of 37 credits; students who complete 15 credits during their undergraduate program will have 22 credits remaining. Those remaining credits may be completed in 2 semesters (i.e., 12 credits during the first semester and 10 during the second). Students taking the accelerated schedule must also satisfy the MSCS program graduation requirements by completing the following:

- One of the remaining courses must be a MAT course numbered 500 or higher
- GAM 550 and GAM 551 are required
- Students must take CS 598 (MSCS Colloquium)
- A sequence of 2 graduate level courses in an approved concentration area. Graduate-level courses taken during the undergraduate program may be used to fulfill this requirement.
- Either one of the following:
 - o Thesis or
 - Extra Coursework and Comprehensive Exam

Displayed below is the recommended MSCS schedule for students completing the accelerated schedule:

Semester	Options	Course Name	Credits
ster 1	MAT Elective	MAT 500 or above	3
	Concentration Elective	See MSCS "Computer Science degree requirements" section for details	3
Semester	GAM 550	Advanced Game Project	3
Se	Elective or CS 601	CS 500 or above Master's Thesis I	3
Semester 2	CS 598	CS Colloquium	1
	Concentration Elective	See MSCS "Computer Science degree requirements" section for details	3
	GAM 551	Advanced Game Project	3
	Elective or CS 602	CS 500 or above Master's Thesis II	3

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

Program Overview

The Computer Engineering (BSCE) degree program at DigiPen educates engineers to understand both sides of the hardwaresoftware interface, from designing circuits to creating operating systems. Multidisciplinary in scope, the BSCE curriculum integrates the fields of electrical engineering and computer science. This program will uniquely prepare BSCE graduates to design and develop embedded, digital, and computer systems. Graduates with a degree in Computer Engineering will be highly skilled and ideally suited for twenty-first-century industries, including the games industry.

Like students in DigiPen's other degree programs, BSCE students will apply their theoretical learning through a variety of semester-long and year-long projects with critical feedback and evaluation from expert instructors. As they develop through the program, students will have increasingly more creative control over their projects. The BSCE curriculum and the student projects will focus on embedded systems, a term that refers to any device that uses a microprocessor or microcontroller. Embedded systems appear in a wide array of household, industrial, and military applications, including portable and console game systems, robots, game peripherals, electronic toys, digital cameras, audio/video component systems, and aircraft flight systems.

Applications of the computer engineering knowledge and skills students will gain through this degree include:

Technology Areas

Game Systems Hardware/Electronic Toys Virtual Reality Hardware Human Interface Devices Robotics & Automation Artificial Intelligence Operating Systems Information Systems Telecommunications Signal Processing Control Systems & Instrumentation Multimedia

Application Domains

Aerospace & Avionics Automotive Consumer Electronics Medical Sciences Internet Entertainment Military

The field of computer engineering has a real potential for innovation, and there is a growing demand for skilled graduates. For example, hardware design limits game software development, however BSCE graduates possess the proficiency to design and implement new hardware interfaces that will expand the bounds of video games and other interactive media. Students who successfully complete the BSCE curriculum acquire the following:

- A broad foundation in mathematics, physics, and computer science, which allows students to remain up-to-date in the profession as tools and techniques evolve.
- A foundation in electrical engineering, which includes the principles of circuits with an emphasis on digital electronics, microprocessors, microcontrollers, and embedded systems.
- The ability to work in small teams to design, build, and test prototype systems typical of what are currently used in the industry.
- Strong foundational skills in system design, software engineering, coding, and system integration.
- Extensive skills in applied technology using industrystandard hardware and software.
- Professional attitude and work habits, including the ability to maintain a production schedule and to respond to professional criticism.
- Social perspective and civic accountability relative to the roles that technology plays in society.

Graduates of DigiPen's Computer Engineering program will have the necessary skills and preparation to work at entry-level positions in computer technologies in general, and embedded systems development in particular. Some of the positions to which graduates from this program may work in, include Software Engineer, Systems Engineer, Embedded Systems Engineer, Design Engineer, Development Engineer, Quality Control Engineer, Computer Architect, Systems Test Engineer, and Video Game Hardware Engineer.

Degree Requirements

Number of Credits & GPA

The Bachelor of Science in CE requires completion of at least 154 semester credits with a cumulative GPA of 2.0 or better. The program typically spans eight semesters of 15 weeks each, or four academic years.

Humanities and Social Science Requirements

[Updated 2012]

The following courses are required: COL 101, ENG 110, ART 210, and ECN 350. Students must also take an additional six semester credits of ENG classes numbered 116 or higher, or COM 150. Additionally, students must take three semester credits of SOS courses and an additional three semester credits of art electives taken from any ART course, ANI 125, FLM 115, FLM 151, FLM 152, FLM 275, or ART 410. (Total: 21 credits)

Computer Science Requirements

The following computer science courses are required: CS 100, CS 100L, CS 120, CS 120L, CS 170, CS 170L, CS 180, CS 225, CS 260, CS 280, CS 315, CS 365, CS 370, and either CS 380 or CS 381. (Total: 36 credits)

Electrical and Computer Engineering Requirements

The following courses are required: ECE 101L, ECE 200, ECE 210, ECE 220L, ECE 260, ECE 270, ECE 300, ECE 310L, ECE 350, ECE 360L, ECE 400 or ECE 420, ECE 410L, and ECE 460L. (Total: 47 credits)

Mathematics Requirements

The following mathematics courses are required: MAT 140, MAT 150 or MAT 180, MAT 200 or MAT 230, MAT 225, MAT 256, MAT 258, and MAT 340. (Total: 24 credits)

Physics Requirements

PHY 200 and PHY 270 are required. (Total: 6 credits)

Projects Requirements

GAM 100 and GAM 150 are required. (Total: 6 credits)

Electives

11 semester credits of electives of any non-ECE or CS courses and three semester credits from any CS, MAT, or PHY course are required. (Total: 14 credits)

Grade Requirements and Core Courses

Students must receive a grade of "C-" or higher in all core courses (or "Pass" for ECE 101L). All required CS, ECE, MAT, and PHY courses are considered core courses. (In a non-core course, a grade of "D" or higher is considered passing.)

A Note on General Education Courses

The following courses satisfy the general education requirement for the BS in Computer Engineering: ENG 110 (3), ENG electives (6), SOS elective (3), ART 210 (2), Art elective (3), MAT 150 or MAT 180 (4), PHY 200 (3), ECN 350 (3), and a Humanities and Social Sciences elective (3), for a total of 30 credits.

Recommended Course Sequence

Listed on the following page is the recommended course sequence for the Bachelor of Science in Computer Engineering. Please note the following:

• Students must achieve a grade of "C-" or higher in the core courses to earn credit toward this degree.

Recommended Course Sequence Chart (BSCE)

[Updated 2012]

Semester	Course	Course Title	Core	Credits
	MAT 150 or MAT 180	Calculus and Analytic Geometry I or Vector Calculus I	X	4
Semester 1	CS 100	Computer Environment I	Х	3
	CS 100L	Computer Environment I Lab	X	1
	CS 120	High-Level Programming I - The C Programming Language	X	3
	CS 120L	High-Level Programming I Lab	X	1
	GAM 100	Project Introduction		3
	ENG 110	Composition		3
	COL 101	College Life and Academic Skills		1
			Semester Total	19
	MAT 200 or MAT 230	Calculus and Analytic Geometry II or Vector Calculus II	X	4
0	ECE 101L	Introduction to Engineering Projects	X	1
Semester 2	CS 170	High-Level Programming II - The C++ Programming Language	X	3
mes	CS 170L	High-Level Programming II Lab	X	1
Sei	CS 180	Operating System I, Man-Machine Interface	Х	3
	GAM 150	Project I		3
	PHY 200	Motion Dynamics	Х	3
			Semester Total	18
	MAT 140	Linear Algebra and Geometry	X	4
	CS 225	Advanced C/C++	X	3
er 3	CS 315	Low-Level Programming	X	3
Semester 3	ECE 210	Digital Electronics I	X	4
Sen	ECE 220L	Introduction to Robotics	Х	3
	PHY 270	Electricity and Magnetism	Х	3
			Semester Total	20
	MAT 256	Introduction to Differential Equations	X	3
	CS 280	Data Structures	X	3
Semester 4	ECE 200	Electric Circuits	X	3
nest	ECE 260	Digital Electronics II	X	4
Sen	ECE 300	Embedded Microcontroller Systems	X	3
	MAT 258	Discrete Mathematics	X	3
			Semester Total	19

Semester	Course	Course Title	Core	Credits
	CS 260	Computer Networks I, Interprocess Communication	Х	3
Semester 5	CS 380	Artificial Intelligence for Games	Х	3
	ECE 270	Real-Time Operating Systems	X	3
	ECE 310L	CE Project III: Gaming System	Х	5
	MAT 225	Calculus and Analytic Geometry III	Х	3
	Elective	Any course from the Department of Humanities and Social Sciences		3
			Semester Total	20
	MAT 340	Probability and Statistics	Х	3
	CS 365	Software Engineering	Х	3
g	CS 370	Computer Imaging	Х	3
ster	ECE 350	Control Systems	Х	3
Semester 6	ECN 350	Engineering Economics		3
Š	ECE 360L	CE Project IV: Gaming System	Х	5
	ART 210	Art Appreciation		2
			Semester Total	20
	ECE 400 or ECE 420	Motors and Sensors or Digital Signal Processing	X	3
ır 7	ART Elective	Any ART course or: ANI 125, FLM 115, FLM 151, FLM 152, FLM 275, or ART 410		3
Semester 7	ENG/ COM Elective	One ENG elective chosen from ENG 116 or higher, or COM 150		3-4
	ECE 410L	CE Senior Project I	Х	5
	Elective	Any elective (excluding ECE and CS courses)		3
			Semester Total	19-20
	ENG/ COM Elective	One ENG elective chosen from ENG 116 or higher, or COM 150		3-4
œ	ECE 460L	CE Senior Project II	Х	5
Semester 8	Social Science Elective	Any SOS course		3
	Electives	Any two electives (excluding ECE and CS courses)		6
	Elective	An elective in CS, MAT, or PHY	Х	3
			Semester Total	20-21
	1		egree Program Total	154 Minimun

Note: Please see the previous section for an explanation of core courses.

GAME DESIGN DEGREE PROGRAMS

[Update 2012]

Overview

The designers of digital entertainment fill a unique role that combines art, technology, innovation, storytelling, history, psychology, and many other disciplines. This multidisciplinary program leads to one of two degrees: the Bachelor of Science in Game Design (BSGD) and the Bachelor of Arts in Game Design (BAGD). At DigiPen, both of these degree programs are designed to educate students to become game developers with the skills necessary to design levels, games, systems, and characters. In addition, the BSGD prepares students to become technical designers with the skills necessary to program games, behaviors, and user interfaces. On the other hand, the BAGD prepares students to become artistic designers with the skills necessary to create interesting stories, worlds, environments, and visuals. Students graduating with either degree will be prepared to begin working in the computer software and video games industries.

Students in the Game Design degree programs learn how to apply the software, tools, and processes used in this industry to challenging problems that practitioners in the field regularly encounter. They learn communication skills, both written and verbal, and practice those skills through presentations, proposals, and design documents. Like other DigiPen degree programs, students in the Game Design degree programs participate in several team-based projects. These projects are designed to give students concrete experiences in which they apply the theoretical knowledge gained from their other courses and emphasize teamwork, accountability, commitment, and testing. Game Design students gain the experience of designing, building, testing, and polishing a variety of games, including dice games, card games, board games, role-playing games, digital and non-digital simulations, 2D digital games, and 3D digital games.

BACHELOR OF SCIENCE IN GAME DESIGN

[Update 2012]

Program Overview

This degree program prepares graduates to design and build interactive digital entertainment. Graduates will be well versed in game design theory for digital and non-digital games, level design, system design, and behavior design. Graduates will have extensive experience testing, iterating, and polishing both digital and non-digital designs. Graduates will also be familiar with the tools commonly used in the industry by designers, artists, producers, and programmers, including level editors, drawing software, modeling software, scheduling tools, compilers, and databases. This interdisciplinary degree also provides a foundation in mathematics and the humanities.

The game industry requires designers to be versatile and skilled in more than just design. Technical designers must be able to implement designs, so the BSGD program stresses the importance of being able to write computer programs in core languages such as C and C++, as well as the scripting languages commonly used by technical designers. Graduates will be well versed in programming game logic, user interfaces, artificial intelligence, databases, and design tools.

Graduates of this degree program will be prepared to work in the video game industry as entry-level programmers, artificial intelligence programmers, user interface programmers, tools programmers, scripters, level designers, system designers, and game designers. Some of the job titles that graduates of this program may aspire to are Computer or Software Programmer, Software Engineer, Gameplay Programmer, Artificial Intelligence Programmer, User Interface Programmer, Tools Programmer, Game Scripter, Level Designer, System Designer, Content Designer, Technical Designer, Game Designer, Design Director, and Creative Director.

Degree Requirements

Number of Credits and GPA

The Bachelor of Science in Game Design (BSGD) requires completion of at least 154 semester credits with a cumulative GPA of 2.0 or better. The program usually spans eight semesters of 15 weeks each, or four academic years.

Grade Requirements and Core Coursess

Students must receive a grade of "C-" or higher in all core courses for the Bachelor of Science in Game Design. (In a non-core course, a grade of "D" is considered passing.) The core courses are defined as follows: all courses taken to fulfill the Projects, Mathematics, Computer Science, and Physics requirements, PSY 101, ENG 110, ENG 120.

Humanities and Social Science Requirements

The following courses are required: COL 101, COM 150, ENG 110, ENG 120, and PSY 101. Three additional credits must be selected from other courses with the designation COM, ENG, ECN, HIS, LAW, PHL, PSY, or SOS. (Total: 16 credits)

Art Requirements

The following courses are required: ART 101 or ART 102, ART 125 or ART 126, ART 260, ART 310, CG 102 or CG 201, and CG 125 or CG 225. (Total: 18 credits)

Projects Requirements

The following courses are required: GAM 100, GAM 150, GAM 200, GAM 250, GAM 302, GAM 352, GAT 110, GAT 210, GAT 211, GAT 212, GAT 240, GAT 250, GAT 251, GAT 315, and GAT 316. Two courses from the following list are also required: GAM 375, GAM 390, GAM 400, GAM 450, and GAM 490. (Total: 61 credits)

Computer Science Requirements

The following courses are required: CS 100 or CS 101, CS 120, CS 120L, CS 170, CS 170L, CS 180, CS 225, CS230, CS 251, CS 280, CS 311, CS 330, and CS 380. (Total: 33 credits)

Mathematics Requirements

The following courses are required: MAT 140, MAT 150 or MAT 180, MAT 200 or MAT 230, MAT 258, and MAT 364. (Total: 18 credits)

Physics Requirements

One course is required: PHY 200. (Total: 3 credits)

Electives

At least five credits from any courses in any departments at DigiPen. (Total: 5 credits)

Note on General Education Courses

The following courses satisfy the general education requirement for the Bachelor of Science in Game Design: COM 150 (3), ENG 110 (3), ENG 120 (3), MAT 140 (4), MAT 150 or MAT 180 (4), MAT 200 or MAT 230 (4), MAT 258 (3), PHY 200 (3), PSY 101 (3), and one Humanities and Social Sciences elective (3), for a total of 33 credits.

Recommended Course Sequence

Listed on the following page is the recommended course sequence for the Bachelor of Science in Game Design. Please note the following:

• Students must receive a "C-" or higher in the core courses to earn credit toward this degree.

Recommended Course Sequence Chart (BSGD)

[Updated 2012]

Semester	Course	Course Title	Core	Credits
	CS 101	Introduction to Computer Environment	Х	1
	CS 120	High-Level Programming I - The C Programming Language	Х	3
Semester 1	CS 120L	High-Level Programming I Lab	Х	1
	ENG 110	Composition	X	3
	GAM 100	Project Introduction	Х	3
Sen	GAT 110	Game History	X	3
	MAT 140	Linear Algebra and Geometry	X	4
	PSY 101	Introduction to Psychology	X	3
			Semester Total	21
	COL 101	College Life and Academic Skills		1
	CS 170	High-Level Programming II - The C ++ Language	Х	3
	CS 170L	High-Level Programming II Lab	X	1
N	CS 230	Game Implementation Techniques	Х	3
Semester 2	ENG 120	Research, Reasoning, and Writing	Х	3
mes	GAM 150	Project I	X	3
Se	GAT 210	Game Mechanics I	Х	3
	MAT 150	Calculus and Analytic Geometry I or Vector Calculus I	X	4
	or MAT 180			
			Semester Total	21
	CS 225	Advanced C/C++	X	3
	CS 180	Operating System I, Man-Machine Interface	Х	3
	MAT 200	Calculus and Analytic Geometry II or Vector Calculus II	Х	4
Semester 3	or			
nest	MAT 230			
Sen	PHY 200	Motion Dynamics	X	3
	GAT 211	Game Mechanics II	X	3
	GAM 200	Project II	X	4
			Semester Total	20
	CS 280	Data Structures	X	3
4	COM 150	Interpersonal and Work Communication		3
Semester 4	ART 102	Fundamentals of Visual Expression		3
	GAT 212	Advanced Game Mechanics	X	3
	GAT 240	Technology for Designers	X	3
	GAM 250	Project II	X	4
			Semester Total	19

Semester	Course	Course Title	Core	Credits
	CS 380	Artificial Intelligence for Games	X	3
Semester 5	CS 251	Introduction to Computer Graphics	X	3
	ART 126	Principles of Composition and Design		3
	ART 260	Graphic Design, User Experience, and Input		3
	GAT 250	2D Game Design I	X	3
	GAM 302	Project for Game Designers	X	5
			Semester Total	20
	ART 310	Architectural Spaces, Design, and Lighting I		3
	CG 125	Introduction to 3D Production for Designers		3
Semester 6	CG 102	2D Raster and Vector Graphics for Designers		3
lest	GAT 251	2D Game Design II	X	3
Sen	GAM 352	Project for Game Designers	X	5
	MAT 258	Discrete Mathematics	X	3
			Semester Total	20
	CS 330	Algorithm Analysis	X	3
	GAT 315	3D Game Design I	X	3
er 7	Elective	An elective of the student's choice from any department at DigiPen		3
Semester 7	CS 311	Introduction to Databases	X	3
Sen	MAT 364	Combinatorial Game Theory	X	3
	GAM 400	Project IV	X	5
			Semester Total	20
	GAT 316	3D Game Design II	X	3
8	Elective	An elective of the student's choice from any department at DigiPen		2-3
Semester 8	HSS Elective	Any three-credit COM, ENG, ECN, HIS, LAW, PHL, PSY, or SOS course.		3
Se	GAM 450	Project IV	X	5
			Semester Total	13-14
			Degree Total	154 minimur

Note: Please see the previous page for an explanation of core courses.

BACHELOR OF ARTS IN GAME DESIGN

[Updated 2012]

Program Overview

This degree program prepares graduates to design and build interactive digital entertainment. Graduates will be well versed in game design theory for digital and non-digital games, level design, system design, and general art skills. Graduates will have extensive experience testing, iterating, and polishing both digital and non-digital designs. Graduates will also be familiar with the tools commonly used in the industry by designers, artists, and producers, including level editors, drawing software, modeling software, and scheduling tools. This interdisciplinary degree also provides a foundation in computer programming and the humanities.

The game industry requires designers to be versatile and skilled in more than just design. Artistic designers must be able to create written or visual content, so the BAGD program allows students to select either an emphasis in visual design or an emphasis in writing and storytelling. Graduates with a visual design emphasis will build on their general art skills and be able to create art assets for games, such as vector art, textures, and models. Graduates with a writing and storytelling emphasis will build on their general writing skills and be able to create characters, history, dialogue, and interactive stories for games.

Graduates of this degree program will be prepared to work in the video game industry as entry-level writers, scripters, level designers, system designers, and game designers. Some of the job titles that graduates of this program may aspire to are Writer, Artist, Game Scripter, Level Designer, System Designer, User Interface Designer, Content Designer, Quest Designer, Game Designer, Design Director, and Creative Director.

Degree Requirements

Number of Credits & GPA

The Bachelor of Arts in Game Design (BAGD) requires completion of at least 147 semester credits with a cumulative GPA of 2.0 or better. The program usually spans eight semesters of 15 weeks each, or four academic years.

Grade Requirements and Core Courses

Students must receive a grade of "C-"or higher in all core courses for the BAGD major. (In a non-core course, a grade of "D" is considered passing.) The core courses are defined as follows: all courses taken to fulfill the Projects, Art, Mathematics, Computer Science, and Specialization requirements, PSY 101, ENG 110, ENG 120.

Humanities and Social Science Requirements

The following courses are required: COL 101, COM 150, ENG 110, ENG 120, HIS 100, HIS 150, MGT 451, and PSY 101. Three additional credits must be selected from other courses with the designation COM, ENG, ECN, HIS, LAW, PHL, PSY, or SOS. (Total: 25 credits)

Art Requirements

The following courses are required: ART 101 or ART 102, ART 110, ART 125 or ART 126, ART 260, ART 310, CG 102 or CG 201, CG 125 or CG 225, FLM 151, and FLM 275. (Total: 27 credits)

Projects Requirements

The following courses are required: GAM 100, GAM 152, GAM 202, GAM 252, GAM 302, GAM 352, GAT 110, GAT 210, GAT 211, GAT 212, GAT 240, GAT 250, GAT 251, GAT 315, GAT 316, GAT 330, and GAT 405. Two courses from the following list are also required: GAM 375, GAM 390, GAM 400, GAM 450, and GAM 490. (Total: 61 credits)

Mathematics Requirements

Students must take MAT 103. (Total: 4 credits)

Science Requirements

Students must take PHY 115 or PHY 200. (Total: 3 credits)

Computer Science Requirements

The following courses are required: CS 116, CS 170 or CS 175, and CS 176 or CS 225. A combination of CS 120 and CS 101 or CS 120 and CS 100 can replace CS 116. (Total: 10 credits)

Specialization

Students are required to take 15 credits of "specialization" courses, which must be selected from any of the following offered at DigiPen: any ENG, ART, CG, or ANI course, any 200 level or higher FLM, SOS, HIS, PHL, PSY, MAT, CS, PHY, or BIO course. The following cannot be counted as "specialization" courses: ENG 450, ART 210, ART 299, ART 400, ART 410. (Total: 15 credits)

Electives

At least two credits from any courses in any departments at DigiPen. (Total: 2 credits)

Note on General Education Courses

The following courses satisfy the general education requirement for the BAGD: ART 110 (3), COM 150 (3), ENG 110 (3), ENG 120 (3), HIS 100 (3), HIS 150 (3), MAT 103 (4), PSY 101 (3), PHY 115 or PHY 200 (3), and one Humanities and Social Sciences elective (3), for a total of 31 credits.

Recommended Course Sequence

Listed on the following page is the recommended course sequence for the Bachelor of Arts in Game Design. Please note the following:

students must receive a "C-" or higher in the core courses to earn credit toward this degree.

Recommended Course Sequence Chart (BAGD)

[Updated 2012]

Semester	Course	Course Title	Core	Credits
	COL 101	College Life and Academic Skills		1
Semester 1	ENG 110	Composition	X	3
	CS 116	Introduction to Computer Technology and Programming	X	4
	GAM 100	Project Introduction	X	3
	GAT 110	Game History	X	3
	PSY 101	Introduction to Psychology	X	3
	MAT 103	Precalculus with Discrete Mathematics	X	4
			Semester Total	21
	ART 102	Fundamentals of Visual Expression	X	3
	ENG 120	Research, Reasoning, and Writing	X	3
er 2	GAT 210	Game Mechanics I	X	3
Semester 2	GAM 152	Scripting Project	Х	3
Serr	CS 175	Scripting Languages	Х	3
	PHY 115	Introduction to Applied Math and Physics		3
			Semester Total	18
	GAM 202	Game Usability and Analysis	X	1
	FLM 151	Visual Language and Film Analysis		3
e	CS 176	Advanced Scripting	Х	3
Semester 3	GAT 211	Game Mechanics II	X	3
me	GAT 250	2D Game Design I	X	3
ő	ART 126	Principles of Composition and Design	X	3
	ART 110	Fundamentals of Visual Communication and Design Process	X	3
			Semester Total	19
	GAT 251	2D Game Design II	X	3
	GAM 252	Advanced Usability and Process	X	1
4	ART 310	Architectural Spaces, Design, and Lighting I	Х	3
ster	COM 150	Interpersonal and Work Communication		3
Semester 4	GAT 212	Advanced Game Mechanics	X	3
Š	CG 102	2D Raster Graphics and Animation for Designers	X	3
	CG 125	Introduction to 3D Production for Designers	Х	3
			Semester Total	19

Semester	Course	Course Title	Core	Credits
	GAT 315	3D Game Design I	X	3
Semester 5	Specialization Course	Any course from the "specialization" list.	X	3
	FLM 275	Fundamentals of Music and Sound Design		3
	Specialization Course	Any course from the "specialization" list.	X	3
	ART 260	Graphic Design, User Experience, and Input	X	3
	GAM 302	Project for Game Designers	Х	5
			Semester Total	20
	Specialization Course	Any course from the "specialization" list.	X	3
9	GAT 316	3D Game Design II	X	3
ster	GAT 240	Technology for Designers	X	3
Semester 6	Specialization Course	Any course from the "specialization" list	X	3
	GAM 352	Project for Game Designers	Х	5
			Semester Total	17
	HIS 100	Introduction to World History		3
	GAT 330	Interactive Narrative and Character Creation for Games	Х	3
er 7	GAT 405	Advanced Game Design	Х	3
Semester 7	Specialization Course	Any course from the "specialization" list.	x	3
0,	GAM 400	Project IV	Х	5
			Semester Total	17
	HIS 150	Introduction to World History II		3
г 8	HSS Elective	Any three-credit course from the Department of Humanities and Social Sciences offered at DigiPen		3
este	Elective	An elective of the student's choice from any department at DigiPen.		2-3
Semester 8	MGT 451	Project Management		3
0,	GAM 450	Project IV	х	5
			Semester Total	16-17
	•	De	gree Program Total	147 minimun

Note: Please see the previous page for an explanation of core courses.

BACHELOR OF SCIENCE IN ENGINEERING AND SOUND DESIGN

Program Overview

The BS in Engineering and Sound Design offers extensive training in basic science and software engineering fundamentals as well as solid training and project work in game development, music technology and sound design. Students have the opportunity to work on both individual and teambased projects to produce software technology and sound effects for video games, simulations, and other interactive media. Through lab courses in four of the eight semesters, these students gain experts in working with computer software and hardware that is essential to the sound design and synthesis process. In three of the four years, students work on game development team projects, solidifying their skills as software developers. The balance between foundational science such as calculus, acoustics, and data structures, and applied laboratory project work in game development and sound design, gives the student the technical and creative experience to be a software engineer with special emphasis on the art and science of sound.

Graduates of this program will have the training necessary to enter the software industry in entry-level positions such as: software engineer/developer, sound engine developer, audio programmer, or sound designer for video games. They will also be prepared for roles in the recording and music production industries in positions such as recording engineer, audio engineer, sound technician, and audio production editor.

Degree Requirements

Number of credits and GPA

The Bachelor of Science in Engineering and Sound Design requires completion of 141 credits with a cumulative GPA of 2.0 or better. The program usually spans eight semesters of 15 weeks each, or four academic years.

Computer Science Requirements

Required courses are: CS 100, CS 100L, CS 120, CS 120L, CS 170, CS 170L, CS 180, CS 225, CS 230, CS 245, CS 246, CS 251, CS 280, and six CS elective credits. (Total : 39 credits.)

Electrical and Computer Engineering Requirements

Required courses are: ECE 200. (Total : 3 credits.)

Game Projects Requirements

Required courses are: GAM 100, GAM 150, GAM 200, GAM 250, GAM 300, GAM 350. (Total : 24 credits.)

Humanities and Social Sciences Requirements

Required courses are: COL 101, COM 150, ENG 110, LAW 115, and three HSS elective credits. (Total : 13 credits.)

Mathematics Requirements

Required courses are: MAT 140, MAT 150, MAT 200, MAT 220, and three MAT elective credits numbered higher than 200. (Total : 18 credits)

Music Requirements

Required courses are: MUS 120, MUS 120L, MUS 121, MUS 121L, MUS 150, MUS 150L, MUS 151, MUS 151L, MUS 250, MUS 250L, MUS 251, MUS 251L, and three MUS elective credits. (Total: 23 credits)

Physics Requirements

Required courses are: PHY 200, PHY 250, PHY 320, PHY 321. (Total : 12 credits)

Electives

At least six credits from any courses in any departments at DigiPen. (Total : 6 credits)

Internship Option:

Students have the option to replace the courses: GAM 350 and with the internship course GAM 390. All internships must be approved in writing by the program director and internship coordinator, and comply with the DigiPen internship guidelines.

Grade Requirements and Core Courses

Students must receive a grade of C- or better in all core courses for the Bachelor of Science in Engineering and Sound Design. (In a non-core course a grade of D is considered passing.) The core courses are: CS 100, CS 100L, CS 120, CS 120L, CS 170, CS 170L, CS 180, CS 225, CS 245, CS 246, CS 251, CS 280, ECE 200, GAM 100, GAM 150, GAM 200, GAM 250, GAM 300, GAM 350, MAT 140, MAT 150, MAT 200, MAT 220, MUS 120, MUS 120L, MUS 121, MUS 121L, MUS 150, MUS 150L, MUS 151, MUS 151L, MUS 250, MUS 250L, MUS 251, MUS 251L, PHY 200, PHY 250, PHY 320, PHY 321, and three MUS elective credits.

General Education Courses

The following courses satisfy the general education requirement for the Bachelor of Science in Engineering and Sound Design: COM 150, ENG 110, FLM 115, LAW 115, MAT 140, MAT 150, MAT 200, PHY 200, PHY 250, and three HSS elective credits. Total general education credits: 33. Students must receive special permission in writing from their academic advisor to take more than 20 credits in either of their first two semesters.

Note: HSS stands for Humanities and Social Sciences, and includes courses with prefixes: COM (Communications), ECN (Economics), ENG (English), HIS (History), LAW (Law), MGT (Management), PHL (Philosophy), PSY (Psychology), and SOS (Social Sciences).

Recommended Course Sequence Listed below is the recommended course sequence for the

Listed below is the recommended course sequence for the Bachelor of Science in Engineering and Sound Design. Please note:

• students must receive a "C-" or higher in the core courses to earn credit toward this degree.

Recommended Course Sequence Chart (BSESD) [Updated 2012]

Semester	Course	Course Title	Core	Credits
	COL 101	College Life and Academic Skills		1
Semester 1	CS 100	Computer Environment I	Х	3
	CS 100L	Computer Environment I Lab	X	1
	CS 120	High-Level Programming I – The C Programming Language	Х	3
	CS 120L	High-Level Programming I Lab	Х	1
	GAM 100	Project Introduction	Х	3
	MAT 140	Linear Algebra and Geometry	X	4
	MUS 120	Music Theory and Musicianship I	Х	2
	MUS 120L	Music Theory and Musicianship I Lab	Х	1
			Semester Total	19
	CS 170	High-Level Programming II – The C++ Programming Language	X	3
	CS 170L	High-Level Programming II Lab	Х	1
2	CS 230	Game Implementation Techniques		3
Semester 2	GAM 150	Project I	Х	3
me	MAT 150	Calculus and Analytic Geometry I	Х	4
Š	MUS 121	Music Theory and Musicianship II	Х	2
	MUS 121L	Music Theory and Musicianship II Lab	Х	1
			Semester Total	17
	CS 180	Operating System I: Man-Machine Interface	X	3
	ECE 200	Electric Circuits	X	3
e	ENG 110	Composition		3
ster	MAT 200	Calculus and Analytic Geometry II	Х	4
Semester 3	MUS 150	Sound Design Project I	Х	2
Š	MUS 150L	Sound Design Project I Lab	Х	2
	PHY 200	Motion Dynamics	Х	3
			Semester Total	20
	CS 225	Advanced C/C++	X	3
	CS 245	Introduction to Interactive Sound Synthesis	Х	3
4	FLM 115	History of Film and Animation		3
ster	MAT 220	Mathematics of Digital Sound Processing	Х	3
Semester	MUS 151	Sound Design Project II	Х	2
Š	MUS 151L	Sound Design Project II Lab	Х	2
	PHY 250	Waves, Optics, and Aerodynamics	Х	3
			Semester Total	19

Semester	Course	Course Title	Core	Credits
	CS 246	Advanced Sound Synthesis	X	3
Semester 5	CS 251	Introduction to Computer Graphics	Х	3
	GAM 200	Project II	X	4
	MUS 250	Sound Design Project III	X	1
	MUS 250L	Sound Design Project III Lab	X	2
	PHY 320	Acoustics I	X	3
			Semester Total	16
	CS 280	Data Structures	Х	3
	CS Elec.	Computer Science Elective	X	3
er 6	GAM 250	Project II	Х	4
Semester 6	MUS 251	Sound Design Project IV	X	1
Sen	MUS 251L	Sound Design Project IV Lab	Х	2
	PHY 321	Acoustics II	Х	3
			Semester Total	16
	COM 150	Interpersonal and Work Communication		3
~	CS Elec.	Computer Science Elective	Х	3
ster	GAM 300	Project III	Х	5
Semester 7	Gen Elec.	General Elective		3
Š	MAT Elec.	Math Elective		3
			Semester Total	17
	GAM 350	Project III	Х	5
œ	Gen. Elec.	General Elective		3
Semester 8	HSS Elec.	Humanities and Social Sciences Elective		3
eme	LAW 115	Introduction to Intellectual Property and Contracts		3
Se	MUS Elec	Music Elective	X	3
			Semester Total	17
		D	egree Program Total	141 minimun

Note: Please see the previous page for an explanation of core courses.

BACHELOR OF ARTS IN MUSIC AND SOUND DESIGN

[Updated 2012]

Program Overview

The BA in Music and Sound Design offers extensive training in music fundamentals such as music theory, music history and literature, composition, and ear-training, as well as solid training and project work in music technology and sound design. Students have the opportunity to work on both individual and team-based projects to produce musical scores and sound effects for video games, animations, and other interactive media. Through lab courses in each of the eight semesters, these students gain expertise in working with computer software and hardware that is essential to the sound design and synthesis process. The balance between music fundamentals, including composition, instrumental or vocal performance, and laboratory projects, gives the student the technical and creative experience to be a sound designer.

Graduates of this program will have the training necessary to enter the music and software industries in positions such as entry-level sound designer for animation or video games. They will also be prepared for roles in the recording and music production industries in positions such as recording engineer, assistant audio engineer, sound technician, manager of post production and media assets, and audio production editor. Additionally, graduates will be qualified to join the ranks of musicians/performers as freelance performers, composers and teachers.

Degree Requirements

Number of Credits and GPA

The Bachelor of Arts in Music and Sound Design requires completion of 135 credits with a cumulative GPA of 2.0 or better. The program usually spans eight semesters of 15 weeks each, or four academic years.

Computer Science Requirements

Required courses are: CS 116, CS 175. (Total : 7 credits)

Game Design and Development Requirements

Required courses are: GAT 110. (Total : 3 credits)

Humanities and Social Sciences Requirements

Required courses are: COL 101, COM 150, ENG 110, ENG ELEC, LAW 115, and 9 HSS elective credits. (Total : 22 credits)

Mathematics Requirements

Required courses are: MAT 120. (Total : 3 credits)

Music Requirements

Required courses are: MUS 110, MUS 111, MUS 120, MUS 120L, MUS 121, MUS 121L, MUS 150, MUS 150L, MUS 151, MUS 151L, MUS 210, MUS 211, MUS 220, MUS 220L, MUS 221, MUS 221L, MUS 230, MUS 231, MUS 250, MUS 250L, MUS 251, MUS 251L, MUS 260, MUS 261, MUS 310, MUS 311 or MUS 316, MUS 320, MUS 321, MUS 322, MUS 330, MUS 331, MUS 350, MUS 350L, MUS 351, MUS 351L, MUS 410 or MUS 415, MUS 411 or MUS 416, MUS 450, MUS 450L, MUS 451, MUS 451L, and 9 MUS elective credits. (Total: 79 credits)

Physics Requirements

Required courses are: PHY 115, PHY 116. (Total : 6 credits)

Electives

At least nine credits from any courses in any departments at DigiPen. (Total : 9 credits)

Internship Option

Students have the option to replace one of the pairs of courses: MUS 450 and MUS 450L, or MUS 451 and MUS 451L, with the internship course MUS 390. All internships must be approved in writing by the program director and internship coordinator, and comply with the DigiPen internship guidelines.

Grade Requirements and Core Courses

Students must receive a grade of C- or better in all core courses for the Bachelor of Arts in Music and Sound Design. (In a non-core course a grade of D is considered passing.) The core courses are: MUS 110, MUS 111, MUS 120, MUS 120L, MUS 121, MUS 121L, MUS 150, MUS 150L, MUS 151, MUS 151L, MUS210, MUS 211, MUS 220, MUS 220L, MUS 221, MUS 221L, MUS 230, MUS 231, MUS 250, MUS 250L, MUS251, MUS 251L, MUS 260, MUS 261, MUS 310, MUS 311, MUS 316, MUS 320, MUS 321, MUS 322, MUS 330, MUS 331, MUS 350, MUS 350L, MUS 351, MUS 351L, MUS 410, MUS 411, MUS 415, MUS 416, MUS 450, MUS 450L, MUS 451, MUS 451L, and 9 MUS elective credits.

Note on General Education Courses

The following courses satisfy the general education requirement for the Bachelor of Arts in Music and Sound Design: COM 150, ENG 110, FLM 115, LAW 115, PHY 115, PHY 116, and 9 HSS elective credits, and 3 ENG elective credits. Total general education credits: 30. Students must receive special permission in writing from their academic advisor to take more than 20 credits in either of their first two semesters.

Note: HSS stands for Humanities and Social Sciences, and includes courses with prefixes: COM (Communications), ECN (Economics), ENG (English), HIS (History), LAW (Law), MGT (Management), PHL (Philosophy), PSY (Psychology), and SOS (Social Sciences).

Recommended Course Sequence Listed on the following page is the recommended course sequence for the Bachelor of Arts in Music and Sound Design. Please note the following:

students must receive a "C-" or higher in the core ٠ courses to earn credit toward this degree.

Recommended Course Sequence Chart (BAMSD) [Updated 2012]

Semester	Course	Course Title	Core	Credits
	COL 101	College Life and Academic Skills		1
	ENG 110	Composition		3
Semester 1	FLM 115	History of Film and Animation		3
	MAT 120	Mathematics of Music and Sound I		3
	MUS 110	Private Lessons I: Instrumental or Vocal	X	1
	MUS 120	Music Theory and Musicianship I	Х	2
	MUS 120L	Music Theory and Musicianship I Lab	X	1
	MUS 150	Sound Design Project I	Х	2
	MUS 150L	Sound Design Project I Lab	Х	2
			Semester Total	18
	COM 150	Interpersonal and Work Communication		3
	FLM 151	Visual Language and Film Analysis		3
	MUS 111	Private Lessons II: Instrumental or Vocal	X	1
er 2	MUS 121	Music Theory and Musicianship II	Х	2
Semester 2	MUS 121L	Music Theory and Musicianship II Lab	X	1
Sem	MUS 151	Sound Design Project II	x	2
•	MUS 151L	Sound Design Project Lab	x	2
	PHY 115	Introduction to Applied Math and Physics		3
			Semester Total	17
	CS 116	Introduction to Computer Technology and Programming		4
	MUS 210	Private Lessons III: Instrumental or Vocal	x	1
	MUS 220	Music Theory and Musicianship III	x	2
e	MUS 220L	Music Theory and Musicianship III Lab	x	1
Semester 3	MUS 230	Composition I	x	2
mes	MUS 250	Sound Design Project III	x	1
Se	MUS 250L	Sound Design Project III Lab	x	2
	MUS 260	Music History and Literature I	x	3
	PHY 116	Physics of Music and Sound		3
			Semester Total	19
	CS 175	Scripting Languages		3
	HSS Elective	Humanities and Social Sciences at Elective		3
	MUS 211	Private Lessons IV: Instrumental or Vocal	Х	1
r 4	MUS 221	Music Theory and Musicianship IV	X	2
Semester 4	MUS 221L	Music Theory and Musicianship IV Lab	X	1
eme	MUS 231	Composition II	x	2
S	MUS 251	Sound Design Project IV	x	1
	MUS 251L	Sound Design Project IV Lab	x	2
	MUS 261	Music History and Literature II	X	3
			Semester Total	18

Semester	Course	Course Title	Core	Credits
	ENG Elective	English Elective		3
Semester 5	HSS Elective	Humanities and Social Sciences Elective		3
	MUS 310	Private Lessons V: Instrumental or Vocal	X	1
	MUS 320	Conducting and Instrumentation	X	2
	MUS 330	Advanced Composition I	X	3
	MUS 350	Sound Design Project V	X	1
	MUS 350L	Sound Design Project V Lab	X	2
			Semester Total	15
	GAT 110	Game History		3
	MUS 311	Private Lessons VI: Instrumental or Vocal	X	1
9	MUS 321	Introduction to Orchestration	X	3
ster	MUS 322	Adaptive Music for Video Games	Х	3
Semester 6	MUS 331	Advanced Composition II	Х	3
Ň	MUS 351	Sound Design Project VI	Х	1
	MUS 351L	Sound Design Project VI Lab	Х	2
			Semester Total	16
	Elective	Any course from any department at DigiPen		3
	Elective	Any course from any department at DigiPen		3
~	HSS Elec.	Humanities and Social Sciences Elective		3
ster	MUS 410	Private Lessons VII: Instrumental or Vocal	X	1
Semester 7	MUS 450	Sound Design Project VII	X	1
š	MUS 450L	Sound Design Project VII Lab	X	2
	MUS Elec	Any MUS Course	X	3
			Semester Total	16
	Elective	Any course from any department at DigiPen		3
	LAW 115	Introduction to Intellectual Property and Contracts		3
œ	MUS 411	Private Lessions VIII: Instrumental or Vocal	X	1
ster	MUS 451	Sound Design Project VIII	X	1
Semeste	MUS 451L	Sound Design Project VIII Lab	X	2
	MUS Elec.	Music Elective	X	3
	MUS Elec.	Music Elective	Х	3
			Semester Total	16
		Dea	ree Program Total	135 minimum

Note: Please see the previous page for an explanation of core courses.

BACHELOR OF FINE ARTS IN DIGITAL ART AND ANIMATION

[Updated 2012]

Program Overview

As the animation and video game industries mature, there is a noticeable shift by companies to hire employees who demonstrate more than a working knowledge of a specific commercial software package or traditional artistic skills. Industry-quality standards continue to rise, and competition for entry-level positions demands that artists possess sophisticated skill sets before they can even begin their careers. Studios seek artists with a broad and integrated foundation of theoretical, practical, and technical skills in production animation, traditional art, modern computer software, and media story flow. Insight and long-term potential have become increasingly important. The studios also demand professional accountability and consistency.

Digital art and animation remain viable career opportunities for graduates possessing these abilities. Animation is capable of solving informational, educational, and entertainment problems no other discipline can resolve. It provides a cornerstone for many industries including cinema, broadcast entertainment, cable television, software development, the Internet, education, simulation, product design, research, forensic science, architecture, telecommunications, advertising, travel and tourism, and video games. The fact that these industries depend upon qualified candidates accentuates the need for quality digital art and animation education.

The broad scope of these demands presents a series of significant academic challenges. Most art students enter collegiate training with little or no substantial background knowledge relative to this field. Many secondary schools have been forced to cut back on the level of arts training that they are able to provide. Consequently aspiring artists must acquire this foundation while they are also trying to establish their professional focus. The complexity of the individual components of this field demand highly structured curricula and programmed sequencing simply to enable most students to be successful. Some students are capable of the rapid assimilation of the integrated knowledge the studios now require, but most are better served by a deeper and more sequential approach to the material.

DigiPen's Bachelor of Fine Arts in Digital Art and Animation seeks to address these needs. Examples of student projects can be found in the DigiPen's Digital Gallery. Students who successfully complete this curriculum will possess the following skills and appropriate samples of professional work:

- A broad foundation of production experiences in both 2D and 3D art and animation. This base allows students to gain an overview of the profession and provides long-term adaptability.
- An area of production emphasis and focus. This enables students to target a specific sector of the industry upon graduation. Each student will produce a portfolio to support this focus.

- Strong foundational skills in storytelling. This includes visual storytelling, literary traditions, story through dialog, story through acting, and cinematic conventions.
- Strong foundational skills in applied technology using industry-standard hardware and software. Students will be thoroughly familiar with modern interface and workflow conventions. They will also understand how to learn new software while maintaining a production schedule.
- A solid foundation in professional work habits and attitude. Students will understand how to utilize and integrate professional criticism into their work. Additionally, they will be able to identify and create work that meets professional quality standards. They will also understand production flow and be able to generate and maintain appropriate schedules and production goals for their work.
- Social perspective and civic accountability relative to the roles that animation plays in society. Students will explore the long-term ramifications of this industry and be able to intelligently discuss their responsibilities to the betterment of the animation industry and society as a whole.

This degree prepares a graduating student for a career in digital art and digital 3D animation, digital 2D animation, and video game or animation pre-production. Some of the careers for which graduates of the BFA in Digital Art and Animation are trained include Props and Environment Modelers, Texture Artists, Level Designers, Character Modelers, Character Riggers, Character Animators, 3D Lighting and Camera Design, Effects Animator, Conceptual Illustration and Character Design, and Storyboard Artists.

Degree Requirements

Number of Credits and GPA

The Bachelor of Fine Arts in Digital Art and Animation requires completion of at least 145 credits with a cumulative GPA of 2.0 or better. Courses are either mandatory or elective and must in either case be passed with a final grade of C- or better (2.0 GPA). The program usually spans eight semesters of 15 weeks each, or four academic years.

Humanities and Social Science Requirements

The following courses are required: COL 101, LAW 115, SOS 115, ENG 116, and ENG 315. (Total: 15 credits)

Art Requirements

The following art courses are required: ART 101, ART 110, ART 115, ART 125, ART 151, ART 201, ART 251, ART 300, ART 350, ART 401, and ART 450. (Total: 34 credits)

Animation Requirements

The following animation courses are required: ANI 101, ANI 125, and ANI 151. (Total: 9 credits)

Computer Graphics Requirements

The following computer graphics courses are required: CG 201, CG 225, CG 275, and CG 300. (Total: 12 credits)

Film Requirements

The following film courses are required: FLM 115, FLM 151, and either FLM 201 or FLM 210. (Total: 9 credits)

Science Requirements

The following courses are required: CS 115, PHY 115, BIO 150, BIO 200. (Total: 12 credits)

Projects Requirements

The following projects courses are required: PRJ 201, PRJ 251, PRJ 300, PRJ 350, PRJ 400, and PRJ 450. Please note that INT 390 and INT 450, internship courses, may be taken in place of PRJ 400 and PRJ 450. (Total: 30 credits)

Electives

Students must take a minimum of 24 credits from any DigiPen courses excluding the following: ART 102, ART 126, ART 210, ART 400, CG 102, CG 125, CG 130, CG 135. (Total: 24 credits)

Note on General Education Courses

The following courses satisfy the general education requirement for the BFA in Digital Art and Animation: ART 110 (3), ART 115 (4), ENG 116 (4), ENG 315 (4), FLM 115 (3), LAW 115 (3), SOS 115 (3), CS 115 (3), and PHY 115 (3), for a total of 30 credits.

BFA Grade Requirements and Core Courses

Certain non-elective courses which are part of the DigiPen BFA course sequence are survey or introductory courses intended to widen the student's understanding and educational experience but are additional to, not central to the degree. These courses (SOS 115, PHY 115, CS 115, and LAW 115) are all 100 level courses which are not taught during the first year of the degree program. As such they are considered to be noncore classes and the grading protocols for non-core courses apply (i.e., credit is given if the class is passed with a grade of "D" or better). All other courses, required or elective, are core courses and students must receive a grade of "C-" or higher to pass.

Recommended Course Sequence

Listed on the following page is the recommended course sequence for the Bachelor of Fine Arts in Digital Art and Animation. Please note the following:

• Students must receive a "C-" or higher in the core courses to earn credit toward this degree.

Recommended Course Sequence Chart (BFA)

[Updated 2012]

Semester	Course	Course Title	Core	Credits
Semester 1	ANI 101	Introduction to Animation - Theories and Techniques I	X	3
	ART 101	The Language of Drawing	X	3
	ART 110	Fundamentals of Visual Communication and Design Process	X	3
	ART 115	Art and Technology	X	4
	ENG 116	Storytelling	X	4
Ň	FLM 115	History of Film and Animation	X	3
	COL 101	College Life and Academic Skills		1
			Semester Total	21
	ANI 125	Acting for Animation	X	3
	ANI 151	Advanced Animation - Theories and Techniques II	X	3
er 2	ART 125	Tone, Color, and Composition	X	3
Semester 2	ART 151	Basic Life Drawing	X	3
Sen	BIO 150	Human Muscular, Skeletal, and Kinetic Anatomy	X	3
	FLM 151	Visual Language and Film Analysis	X	3
			Semester Total	18
	ART 201	Advanced Life Drawing	X	3
ę	BIO 200	Animal Muscular, Skeletal, and Kinetic Anatomy	X	3
Semester 3	CG 201	2D Raster Graphics and Animation	X	3
eme	CG 225	Introduction to 3D Animation	X	3
Ň	PRJ 201	2D Animation Production	X	5
			Semester Total	17
	FLM 201 or FLM 210	Cinematography or Cinematography for Visual Effects.	х	3
	ART 251	Character Design	Х	3
er 4	ART 350	Storyboards	Х	3
Semester 4	CG 251 or Elective	2D Vector Graphics and Animation or any course from the Elective Requirement list.	x	3
	CG 275	3D Character Animation	X	3
	PRJ 251	2D Vector Animation Production	X	5
			Semester Total	20

Semester	Course	Course Title	Core	Credits
Semester 5	ANI 300 or Elective	Acting through an Interface or any Elective	x	3
	ART 300	Perspective, Backgrounds, and Layouts	Х	3
	CG 300	3D Environment and Level Design	Х	3
	ENG 315	Story Through Dialogue	Х	4
	PRJ 300	Limited-Scope 3D Production	Х	5
			Semester Total	18
	ANI 350 or Elective	Voice Acting for Animation or any Elective	x	3
Semester 6	ART 225 or Elective	3D Design and Sculpture or any Elective	x	3
mes	PHY 115	Introduction to Applied Math and Physics		3
Sen	CG 350 or Elective	Graphics for Gaming or any Elective	x	3
	PRJ 350	3D Animation Production	Х	5
		·	Semester Total	17
	ART 401	Conceptual Illustration and Visual Development	Х	3
4	FLM 250 or Elective	Digital Post-Production or any Elective	x	3
Semester 7	FLM 275 or Elective	Fundamentals of Music and Sound Design or any Elective	x	3
	ART 450	Portfolio	Х	3
	PRJ 400	Capstone Project I	Х	5
			Semester Total	17
~	ANI 400 or Elective	Cinematic Animation or any Elective	x	3
ter 8	SOS 115	Media and Ethics: A Social Science Perspective		3
Semester 8	CS 115	Introduction to Scripting and Programming		3
	LAW 115	Introduction to Intellectual Property and Contracts		3
	PRJ 450	Capstone Project II	Х	5
			Semester Total	17
			Degree Total	145 minimum

Note: Please see the previous page for an explanation of core courses.

Course Descriptions for the Academic Year 2012-2013

DEPARTMENT OF ANIMATION AND PRODUCTION

Animation Courses

[Updated 2012]

ANI 350 Voice Acting for Animation (3 Cr.)

Prerequisite(s): ANI 300

This course explores the nature of acting through the medium of the human voice. The curriculum explores narration, expressive reading, diction, and vocal refinement. It introduces students to basic audio technology and recording equipment. The course also covers lip-synchronization techniques in animation and culminates in a series of practical exercises in both 2D and 3D animation.

DEPARTMENT OF COMPUTER SCIENCE

Computer Science Courses

[Updated 2012}

CS 170 High-Level Programming II - The C++ Programming Language (3 Cr.)

Prerequisite(s): CS 120 & CS 120L Concurrent Course(s): CS 170L

This course is a continuation of High-Level Programming I (CS 120). It introduces the C++ language with particular emphasis on its object-oriented features. Topics covered include stylistic and usage differences between C and C++, namespaces, function and operator overloading, classes, inheritance, class and function templates, STL lists, and vectors. Concurrent enrollment in CS 170L is required.

[Updated 2012]

CS 175 Scripting Languages (3 Cr.)

Prerequisite(s): CS 116 or CS 120 & CS 120L

This course covers the concepts and implementation strategies for using high-level scripting languages in game development. Students will focus on object-oriented programming, high-level English-like structure, speed of development, and ease of use. The course includes a survey of commercial languages, as well as proprietary scripting languages from industry applications. Students will examine the process of conceptualizing a syntax for a game-based scripting language and examine how such a language is compiled and interpreted by a game engine. Using the syntax they have created, they will create a number of scripts that could be used in a game. Additionally, the class will cover such relevant topics as data-driven technology, modular coding, function calls, and procedures. [Updated 2012]

CS 176 Advanced Scripting (3 Cr.)

Prerequisite(s): CS 170 & CS 170L or CS 175

This course presents game implementation techniques and game architecture in a scripting language environment. Students investigate concepts of game architecture, such as game-system component separation and game flow while learning about essential elements such as the game state manager, input/output handler, and frame rate controller. Students learn how to create several different types of classic games in a variety of scripting languages most commonly used for professional games, learning the specific syntax and approaches of each language in the process. As part of their implementation, students learn how to use the specific graphics, audio interface, physics and math APIs found in the scripting environments used. Students survey concepts in space partitioning, particle systems, map editors and other elements so that they are capable of creating working prototypes of 2D games.

[Updated 2012]

CS 180 Operating System I, Man-Machine Interface (3 Cr.)

Prerequisite(s): CS 100 & CS 100L, CS 101, CS 120 & CS 120L

This course presents an overview of modern operating systems, in particular Windows and Linux/Unix as implemented on modern PCs. After an overview of what an operating system is and does, the following is also covered: organization and design (the kernel and various subsystems), process management (creation and management of processes and threads, including an introduction to multi-threaded programming), networks (the TCP/IP stack and the organization of the Internet), interprocess communication, process synchronization (locks, semaphores, and methods to avoid deadlocks), memory management (hardware and process views of memory layout and demand-paged virtual memory), file systems, and security and protection (viruses, worms, and Trojan horses).

[Updated 2012]

CS 200 Computer Graphics I (3 Cr.)

Prerequisite(s): CS 170 & CS 170L, MAT 140

CS 200 presents fundamental mathematical elements, data structures, and algorithms useful for animating and viewing 2D primitives. The course aims to fulfill two objectives. The first objective is to provide students with a sufficient mathematical and algorithmic background to design and implement 2D graphics applications. The second objective is to prepare students with the knowledge required for writing 3D graphics applications. The first half of the course deals with scanconversion algorithms for rasterizing 2D primitives such as lines, circles, ellipses, triangles, and arbitrary polygons. The second half of the course is concerned with the viewing and animation of these 2D primitives. The course covers topics such as interpolation techniques, transformations, culling, clipping, animation techniques, and the 2D viewing pipeline.

CS 225 Advanced C/C++ (3 Cr.)

Prerequisite(s): CS 170 & CS 170L

This course builds on the foundation created in the first two high-level programming courses (CS 120/170). It presents advanced topics of the C/C++ programming language in greater detail. Such topics include advanced pointer manipulation, utilizing multi-dimensional arrays, complex declarations, and standard library functions. Advanced C++ topics include class and function templates, operator overloading, multiple inheritance, runtime type information, the standard template library, and performance issues.

[Updated 2012]

CS 230 Game Implementation Techniques (3 Cr.)

Prerequisite(s): CS 120 & CS 120L Concurrent Course(s): CS 170

CS 230 presents game implementation techniques and engine architecture. Students investigate foundational concepts of game architecture, such as game-system component separation and game flow, while learning about essential elements such as the game state manager, input/ output handler, and frame rate controller. CS 230 introduces Windows programming, state machines, and collision detection algorithms, which students will integrate into their own remakes of classic games. As part of their implementation, students create and expand their own collision, vector, and matrix libraries, enabling them to incorporate basic physics engines. Students survey concepts in space partitioning, particle systems, map editors, and other elements as a bridge to more advanced concepts in implementation techniques and engine architecture.

[Updated 2012}

CS 245 Introduction to Interactive Sound Synthesis (3 Cr.)

Prerequisite(s): CS 170 & CS 170L, CS 180, MAT 140 & PHY 200

This course explores dynamic sound synthesis, 3D-directional auditory effects, and sonic ambience to real-time simulations and video games. The subjects include mixing audio and modulating dry recorded sounds using wave table synthesis. Students learn how to create collision sounds using additive synthesis, wind effects using subtractive synthesis, natural sounds using granular synthesis and physical modeling, ambiences using layering and spectral filtering, 3D spatialized surround sound panning, inter-aural time difference, inter-aural intensity difference, and Head Related Transforms (HRTFS). Students also study algorithms and techniques for real-time multi-threaded programming and synthesized sound integration for game engines. [Updated 2012}

CS 246 Advanced Sound Synthesis (3 Cr.)

Prerequisite(s): CS 245

This course covers the basic building blocks that go into making a sound engine. Topics may include: audio file formats, sound card architecture, low level sound APIs, high level sound APIs, streaming audio, mixing, digital filters and effects, 3D audio, audio spectra and the Fast Fourier Transform.

[Updated 2012]

CS 251 Introduction to Computer Graphics (3 Cr.)

Prerequisite(s): CS 170 & CS 170L

This course provides a high-level overview of 3D computer graphics. It is intended for game designers and artists to enable them to understand the fundamental components of graphics engine and their applications in real-time simulation and video game software. Course topics include graphics pipeline architecture, 3D transformation operations, viewing and projection, lighting and shading models, surface detail techniques, shadow algorithms, hidden object culling and removal techniques, 3D object modeling, and animation and physically-based motion control. The popular graphics programming languages (GDI plus, OpenGL, DirectX) and shader programming are also discussed in the course.

[Updated 2012}

CS 260 Computer Networks I, Interprocess Communication (3 Cr.)

Prerequisite(s): CS 170 & CS 170L

This course introduces the hierarchical network communication in a distributed computing environment. Course topics cover network technologies, architecture, and protocols. The curriculum gives specific emphasis to the TCP/IP stack and in making students familiar with writing portable socket based software. It prepares students for programming multi-player games in later semesters.

[Updated 2012}

CS 311 - Introduction to Databases (3 Cr.)

Prerequisite(s): CS 170 & CS 170L

This course provides students with a broad overview of database systems. It presents the fundamentals, practices, and applications of computer databases. Topics include database architectures, data modeling, design schemes, relational algebra, query languages, transaction processing, and database implementation. Students will explore massively multiplayer online games (MMOG) to examine a case study of database design and implementation.

CS 529 Fundamentals of Game Design (3 Cr.)

Prerequisite(s): Entrance into the Master of Science in Computer Science program

This course presents techniques in real-time interactive simulation and video game implementations. It introduces the 2D and 3D game engine architecture, including game and system components separation, game flow, game state manager, handling input/output, and the frame rate controller. The course introduces students to the game development environment, such as Windows programming SDK and graphics library DirectX API. It also covers commonly practiced techniques such as space partitioning, AI techniques, particle systems, and collision algorithms. Several physics techniques are discussed and implemented, such as jump and reflection, in addition to behavior algorithms, such as state machines. Different game genres are explained, including Asteroids (2D), Platform (2D), Brix (2D), and Pong (3D). Students learn how to implement and extend collision, matrix, and vector libraries, according to the specific requirements for different games.

[NEW]

CS 550 Physics Simulation (3 Cr.)

Prerequisite(s): PHY 300 or PHY 500

This course covers the implementation of various physics topics, as well as collision detection and collision resolution algorithms. Special topics such as stacking, soft-bodies, and friction may be covered.

[Updated 2012]

CS 560 Advanced Animation & Modeling I (3 Cr.)

Prerequisite(s): CS 529, CS 541, & MAT 500

3D animation and modeling play significant roles in computer simulation and video game software. Game developers need to have a comprehensive understanding of these techniques. This course introduces algorithms for specifying and generating motion for graphical objects. It addresses practical issues, surveys accessible techniques, and provides straightforward implementations for controlling 3D moving entities with different characteristics. The course covers two broad categories. Students first learn an interpolation-based technique, which allows programmers to fill in the details of the motion or shape once the animator specifies certain basic information, such as key frames, paths, coordinate grids, or destination geometry. Then they learn a behavior-based technique, which generates motion that satisfies a set of rules, such as kinematics, physics, or other constraints.

CS 590 Introduction to Computation Theory (3 Cr.)

Prerequisite(s): CS 280, CS 330, or Equivalent

The study of computational complexity is at the core of theoretical computer science. The key issue to understand in complexity theory is the nature of efficient computation. Hence, it is a natural extension of computability theory, which studies the nature of computation without regard for resource bounds. This course addresses questions such as: What is an algorithm? What problems can or cannot be solved by an algorithm? What problems can or cannot be solved efficiently by an algorithm? How can we classify and compare problems according to their intrinsic computational complexity? Exploring this last question will constitute the bulk of the course. Students are introduced to ways to compare computational problems, even when we do not know how to solve them efficiently. They also study the complexity classes (e.g. P, NP, PSPACE, L, NL, BPP, etc.) into which they fall. As the course progresses, students are led to examine more questions, such as: Is it easier (more efficient) to comply seek approximate solutions? Can flipping coins help in designing efficient algorithms? Can biology and/or physics lend a hand?

DEPARTMENT OF DIGITAL ARTS

Computer Graphics Courses

[NEW]

CG 310 Game Team Art Production I (3 Cr.)

Prerequisite(s): CG 275

This course consists of the production of art for a game team. Students devise a production schedule at the beginning of the course. Evaluation of the art production comes from a faculty member who oversees the production milestones.

[NEW]

CG 311 Game Team Art Production II (3 Cr.)

Prerequisite(s): CG 310

This course is a continuation of CG 310, consisting of the production of art for a game team. Students devise a production schedule at the beginning of this course. Evaluation of the art production comes from a faculty member who oversees the production milestones.

CG 375 Character Rigging (3 Cr.)

Prerequisite(s): CG 275

This course exposes students to rigging techniques. All students will share models and texture sets and work on learning industry best practices for professional grade character rigs.

DEPARTMENT OF FINE ARTS

Art Courses

[NEW]

ART 110 Fundamentals of Visual Communication and Design Process (3 Cr.)

Prerequisite(s): None

Beginning with the physiology of perception, this course explores the simple building blocks of visual communications and how the viewer understands and responds to shapes, symbols and images. The foundational skills of design process and problem solving methodologies are explored to develop the student's visual problem solving skills.

[NEW]

ART 111 Introduction to Ceramics (3 Cr.)

Prerequisite(s): None

This course builds a foundation in ceramic arts. It provides the opportunity to learn basic techniques of the ceramic process, which include hand-building techniques, wheel throwing and glazing.

[Updated 2012]

ART 210 Art Appreciation (2 Cr.)

Prerequisite(s): None

This introduction to art provides students with a better understanding of the artistic influences upon our modern culture. Along with the history of art, students study the meanings, purposes, styles, elements, and principles of art and the various media used to create works of art. In helping students gain basic awareness, knowledge, and enjoyment of the visual arts, the course provides the groundwork for further personal study in the arts. In turn, this influences the development of their creativity

[NEW]

ART 222 Ceramics - Hand Building (3 Cr.)

Prerequisite(s): ART 111

This course builds upon hand-building techniques learned in "Introduction to Ceramics". Surface texture techniques and basic mold making will be explored, all while working in the certainty of 3D.

[NEW]

ART 223 Ceramics - Wheel Throwing (3 Cr.)

Prerequisite(s): ART 111

This course focuses on building skills developed in "Introduction to Ceramics" to produce simple forms on the potter's wheel such as cylinders, bowls and plates.

DEPARTMENT OF GAME SOFTWARE DESIGN AND PRODUCTION

Game Projects Courses

[Updated 2012]

GAM 150 Project I (3 Cr.)

Prerequisite(s): CS 120 & CS 120L, & GAM 100 Credit may be received for either GAM 150 or GAM 152, but not for both.

This project focuses on the creation of a simple game or simulation. Students work together on teams of three or four members. All projects must be written entirely in C (C++ is not allowed) and cannot use external libraries or middleware of any kind (except those provided by the instructor). Topics include effective team communication, planning, documentation, debugging, source control, testing, and iterative software development techniques.

[Updated 2012]

GAM 200 Project II (4 Cr.)

Prerequisite(s): CS 170 & CS 170L, CS 230, GAM 150, & MAT 140

This project is divided into two semesters and focuses on the creation of a simple real-time game or simulation with 2D graphics (3D games are not allowed). Students work together on teams of three or four members to implement technical features, such as audio effects, music playback, pattern movement, simple artificial intelligence, same-machine multiplayer (networking is not allowed), particle systems, scrolling, and simple physics. All projects must be written with a core of C++ code and cannot use middleware such as preexisting physics engines, networking engines, etc. Additional topics may include basic software architecture, essential development practices, fundamentals of team dynamics, and task prioritization methods.

Game Design and Development Courses

[Updated 2012]

GAT 250 2D Game Design I (3 Cr.)

 $\mathsf{Prerequisite}(s)$: GAT 210, PSY 101, and either CS 170 & CS 170L, or CS 175

Credit may be received for either GAT 250 or for GAT 305, but not for both.

This course focuses on designing and implementing games using a 2D engine. Students work to create several original games in common genres, such as platformers, shooters, brawlers, or puzzle games. Topics may include aesthetics, level construction, enemy placement, resource placement, player guidance, player controls, scripting, and game mechanics in 2D.

[Updated 2012]

GAT 305 2D Level Design (3 Cr.)

Prerequisite(s): CS 170 & CS 170L, or CS 175 Credit may be received for either GAT 305 or for GAT 250, but not for both.

This course is an introduction to level design, focused on how design decisions determine the player experience. Students work to create fully functional levels for one or more professional games. Games used may include any level-centric game with 2D gameplay, such as traditional platformers, real-time strategy games, top-down shooters or brawlers, or isometric RPGs. Topics may include level layout, enemy placement, resource placement, player guidance, and pacing.

[Updated 2012]

GAT 405 Advanced Game Design (3 Cr.)

Prerequisite(s): GAT 251

This course focuses on one or more advanced game design topics based on the expertise of the instructor. Topics may include art games, music games, social games, educational games, serious games, handheld games, alternative input games, radically innovative games, and more. Students work to create one or more prototypes of a game in the areas being covered, either individually or in teams, as appropriate. Emphasis is heavily placed on innovation and students are encouraged to challenge their assumptions about what games are and what games can be.

Management Courses

[Updated 2012]

MGT 500 Management for Art Directors (3 Cr.)

Prerequisite(s):None

This course provides an in-depth examination of techniques and theories for project management of art, film, games and other artistic team projects. Lectures cover various aspects of managing creative teams. Topics may include leadership, communication, team building, marketing, budgeting, longrange project planning, contract negotiations and intellectual property considerations.

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

College Courses

[NEW]

COL 101 College Life and Academic Skills (1 Cr.)

Prerequisite(s): None

This course assists students in developing the classroom and communication skills necessary to succeed in both educational and professional situations. (*Note: This course may not be used to fulfill program General Education requirements*).

Economics Courses

[Updated 2012]

ECN 350 Engineering Economics (3 Cr.)

Prerequisite(s): None

This course gives students a sound basis for making economic decisions in business and industry environments. Students learn how to decide which projects are worthwhile, determine priorities, and select components. Topics in this course include present worth, future amounts, cash flows, salvage value, depreciation, rates of return, income tax, basic cost accounting, and funding sources, including venture capital and SBIR. The course also covers the basics of intellectual property, patents, and copyright.

English Courses

[Updated 2012]

ENG 110 Composition (3 Cr.)

Prerequisite(s): None

This course focuses on generating and discussing ideas for composition and engages in all stages of the writing process, with emphasis on the development and application of critical thinking skills. The primary focus of the course is developing the ability to construct, write, and revise argumentative/ persuasive essays. Assignments may also include other types of writing, such as narrative, descriptive, and comparative essays.

[Updated 2012]

ENG 116 Storytelling (4 Cr.)

Prerequisite(s): None

This course covers the principal elements of storytelling including theme, character, perspective, setting, plot, and dialogue. It encompasses both visual and non-visual media, such as short stories, novels, drama, and film. Through a series of creative writing exercises, students practice developing stories with both words and images.

[Updated 2012]

ENG 150 Mythology (3 Cr.)

Prerequisite(s): ENG 110 or ENG 116

This course studies myths from different world cultures. It provides an in-depth discussion of the Hero's Journey (a basic pattern that appears in many narratives) and its principal archetypes. It also studies mythology across the arts and examines how essential it is to the study of literature, drama, film and video games

[Updated 2012]

ENG 245 Introduction to Fiction Writing (3 Cr.)

Prerequisite(s): ENG 110 or ENG 116

This course provides an introduction to the study and practice of fiction writing including characterization, plot, setting and point of view. It presents selected works of short and long fiction. The course is an opportunity for students to practice their own creative writing skills. They are required to write at least two short stories. [Updated 2012]

ENG 246 American Ethnic Literatures (3 Cr.)

Prerequisite(s): ENG 110 or ENG 116

This course covers prominent themes and techniques in American ethnic literatures such as Native, African, Asian, and Hispanic American literatures. Modern texts are emphasized but pre- or early 20th century classics may also be included.

[NEW]

ENG 250 The Graphic Novel (3 Cr.)

Prerequisite(s): ENG 110 or ENG 116

This course provides an introduction to the study of graphic novels, a unique field of inquiry encompassing many world cultures and drawing on many disciplines. Students will read, discuss, and analyze many different types of novels, such as stand-along, serial, and adaptative books.

[Updated 2012]

ENG 315 Story through Dialogue (4 Cr.)

Prerequisite(s): ENG 116 or ENG 245

This course introduces students to the basics of screenplay writing for film beginning with the fundamentals of dramatic structure, story arcs, character arcs, and dialogue. Through a series of related assignments, students experience the process of developing a script of their own and practice their hand at writing dialogue for film. Students will write at least one original pre-production script in screenplay format.

Psychology Courses

[NEW]

PSY 201 Cognitive Psychology (3 Cr.)

Prerequisite(s): PSY 101

This course emphasizes emergent research on the theory and dynamics of consciousness and the "cognitive unconscious". Students are exposed to recent research that has led to an unprecedented understanding of higher human cognitive processes such as creativity, learning, perception, information processing, and memory.

[NEW]

PSY 250 Psychology of Myth (3 Cr.)

Prerequisite(s): PSY 101

This course addresses the meaning of myth from the perspective of Jungian archetypes, archetypal projections as image, the Amplification Method of dream analysis, and Campbell's mythic parallels. Carl Jung and Joseph Campbell had a radical influence on the study of myth, and their influence generated a new understanding of human psychology.

PSY 320 Psychology of Interactive Drama (3 Cr.)

Prerequisite(s): PSY 201, ENG 110 or ENG 116

The course explores the rhetorical patterns and psychological characteristics of dramatic architecture. The course illustrates how neural processes structure the cognitive unconscious, how this structure is related to image projection and perception, and how it contributes to the interactive learning process. Exercises are designed to help students understand the psychology related to character design and personality development, archetypes, conflict, plot patterns, back-story, dialogue, exposition, *lysis*, premise, and the psychological dynamics of human choice

[NEW}

PSY 350 Psychology of The Media (3 Cr.)

Prerequisite(s): PSY 201

The course explores the psychology of advertising from its emergence, its relationship to the psychology of propaganda, its influence on political thought during the latter half of the 20th century, and its influence on contextual value formations and cultural reality.

DEPARTMENT OF MUSIC

Music Courses

[NEW}

MUS 240 Sound Design Collaborative Project I (1 Cr.)

Prerequisite(s): MUS 150

This course consists of a collaborative sound design project with a team of students working on a video game or animation. Evaluation of the contribution may come from faculty in several departments, which oversee the team project. This course will typically be taken as an independent study and is particularly suitable for student with transfer credit for MUS 150.

[NEW}

MUS 241 Sound Design Collaborative Project II (1 Cr.)

Prerequisite(s): MUS 151

This course consists of a collaborative sound design project with a team of students working on a video game or animation. Evaluation of the contribution may come from faculty in several departments, which oversee the team project. This course will be taken as an independent study and is particularly suitable for students with transfer credits for MUS 151. [NEW}

MUS 340 Sound Design Collaborative Project III (1 Cr.)

Prerequisite(s): MUS 250

This course consists of a collaborative sound design project with a team of students working on a video game or animation. Evaluation of the contribution may come from faculty in several departments, which oversee the team project. This course will typically be taken as an independent study and is particularly suitable for students with transfer credit for MUS 250.

[NEW}

MUS 341 Sound Design Collaborative Project IV (1 Cr.)

Prerequisite(s): MUS 251

This course consists of a collaborative sound design project with a team of students working on a video game or animation. Evaluation of the contribution may come from faculty in several departments, which oversee the team project. This course will typically be taken as an independent study and is particularly suitable for students with transfer credit for MUS 251.

FACULTY & STAFF ROSTER

[Updated 2012]

Academic Leadership

Dean of Faculty & Academic Affairs	Xin Li
Associate Dean	Charles Duba
Associate Dean	Jen Sward
Registrar	Meighan Shoesmith
Program Director - Bachelor of Arts in Game Design	Benjamin Ellinger
Program Director - Bachelor of Arts in Music and Sound Design	Lawrence Schwedler
Program Director - Bachelor of Fine Arts in Digital Art and Animation	Raymond Yan
Program Director - Bachelor of Science in Computer Engineering	Charles Duba
Program Director - Bachelor of Science in Game Design	Benjamin Ellinger
Program Director - Bachelor of Science in Computer Science in Real-Time Interactive Simulation	Samir Abou Samra
Program Director - Bachelor of Science in Engineering and Sound Design	Lawrence Schwedler
Program Director - Master of Science in Computer Science	Dmitri Volper
Program Director - Master of Fine Arts in Digital Art	Alecia Rossano
Internship Coordinator - BSCS in RTIS & Game Design	Jen Sward
Internship Coordinator - Art	Jim Johnson

Department of Computer Science

Samir Abou Samra*	BS Computer Science	Lebanese American University
	MS Computer Science	Lebanese American University
Elie Abi Chahine	BS Computer Science	DigiPen Institute of Technology, Lebanon
	MS Computer Science	DigiPen Institure of Technology
Antoine Abi Chakra	BS Computer Science	DigiPen Institute of Technology, Lebanon
	MS Computer Science	DigiPen Institute of Technology
Claude Comair	Le diplôme d'Ingenieur Archit.	L'Université du Saint Esprit (Lebanon)
	M. Engineering Environmental Engineering	Osaka University (Japan)
Jason Hanson	BS Mathematics	University of Massachusetts
	BS Physics	University of Massachusetts
	MS Physics	University of Virginia
	MA Mathematics	Columbia University
	PhD Mathematics	University of Hawaii
Gary Herron	BA Mathematics	Northern Michigan University
	PhD Mathematics	University of Utah
Pushpak Karnick	Bachelor of Engineering in Computer Engineering	University of Pune, Pune (India)
	Doctor of Philosophy in Computer Science and	Arizona State University
	Engineering	
Stephen Lee	BS Computer Science	University of British Columbia
	Diploma in the Art and Science of 2D and 3D	DigiPen Applied Computer Graphics School
	Video Game Programming	
Xin Li	BS Computer Science	Northwest University (P.R. of China)
	MS Computer Science	Academic Sinica (P.R. of China)
	PhD Computer Science	University of Central Florida
Matthew Mead	BS Computer Science	Portland State University
	MS Computer Science	Portland State University
Patrick Moghames	BS Computer Science	DigiPen Institute of Technology, Lebanon
-	MS Computer Science	DigiPen Institute of Technology
Cody Pritchard	BS Real-Time Interactive Simulation	DigiPen Institute of Technology

Steve Rabin	BS Computer Engineering MS Computer Science	University of Washington University of Washington
Forrest Soderlind	BFA Production Animation AA Computer Animation Computer Programming Certificate	DigiPen Institute of Technology Minnesota School of Computer Imaging Brown College
Scott Smith	BS CS Real Time Interactive Simulation	DigiPen Institute of Technology
Jeff Tucker	BS Computing and Software Systems	University of Washington
Dmitri Volper	BS Mathematical and Computer Science MS Mathematics MS Computer and Information Science PhD Mathematical Sciences	Omsk State University (Russia) Syracuse University Syracuse University Russian Academy of Sciences, Novosibirsk (Russia)

Department of Electrical and Computer Engineering

Charles Duba*	BS Physics MS Physics PhD Physics	University of California, San Diego University of Washington University of Washington
Jeremy Thomas	PhD Geophysics	University of Washington
Hao Wu	BS Electrical Engineering MS Electrical Engineering	Tsinghua University (China) University of Washington
Francis Wang	BS Electrical Engineering MS Electrical Engineering PhD Electrical Engineering	Washington State University Washington State University University of Minnesota

Department of Animation and Production

Jim Johnson*	BA Theater Arts MA Cinematography	Humboldt State University Humboldt State University
Dan Daly	BA English Walt Disney Feature Animations	Whitman College
Suzanne Kaufman	BA Computer Animation and Photography	University of Wisconsin, Madison
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Bill Jarcho	BFA Visual Design in Media Arts	Emerson College
Pamela Mathues	BFA Illustration and Fine Art Walt Disney Feature Animations	Columbus College of Art and Design
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Rick Sullivan	BA Journalism	University of Washington

Department of Fine Arts

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Matthew Buckner	MFA Sculpture BA Art History	Boston University Hunter College, NY
Paul Clark	ВА	Antioch University Seattle
Robert Kmiec	BFA Illustration MFA Illustration	Massachusetts College of Art Syracuse University

Michael Lorefice	BA MFA Studio Arts	Colgate University Memphis College of Art
Monte Michaelis	AAA Computer Animation BS Graphic Design	Art Institute of Seattle Art Institute of Pittsburgh
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Thomas Price	AAA	Art Institute of Seattle
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Eddie Smith	BA Fine Art & Studio Painting	California State University, San Bernardino
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Department of Digital Arts

Kevin Burgess*	BS – Computer Graphics MFA – Animation / VFX Certificate – Multimedia Certificate – Oil Painting	Arizona State University Academy of Art University University of Washington University of Washington
Jay Gale	BA Broadcast Communication	University of Colorado
Chun Lu	BS – Interior Design MA – Environmental Design	University of Missouri – Columbia University of Missouri – Columbia
Michelle Lu	BS – Horticulture Certificate – 3D Animation and Modeling	National Chung-Hsing University Vancouver Film School
Brigitte Samson	BA (Hon) Visual Arts	University of Quebec, Montreal
Alain Schneuwley	Diploma, Computer Analyst and Programmer Federal Diploma of Commerce Certificate of Recommendation in 3D Computer Graphics Animation and 3D Design	IEPIGE (Switzerland) Superior Commercial School (Switzerland) Vancouver Film School/DigiPen Applied Computer Graphics School

Department of Game Software Design and Production

Benjamin Ellinger *	BS Kinesiology	University of Texas
Christiaan Champagne	MA Instructional Technologies MFA Film Production BA General Studies	San Francisco State University Academy of Art College, San Francisco University of Nevada, Reno
John Feil	BA	University of Nevada, Reno
Bill Morrison	AA Commercial Art	Somerset County Technical Institute
Chris Peters	BS Real-Time Interactive Simulation	DigiPen Institute of Technology
Michael Pietraszak	BS Computer & Electrical Engineering	Purdue University
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Douglas Schilling	BS Computer Science	Pacific Lutheran University
Jen Sward	BS Electrical & Computer Engineering	University of California, Davis

Department of Humanities and Social Sciences

Claire Joly*	BA English Language & Literature MA American Studies MA Theatre & African American Studies PhD Comparative Cultures	Sorbonne (France) Sorbonne (France) Smith College University of California, Irvine
Brandon Abood	MFA English BA English	University of Washington Miami University
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Vanessa Hemovich	PhD Social Psychology MA Psychology BA	Claremont Graduate University Claremont Graduate University University of Washington
Sonia Michaels	BA English MA English	University of Washington University of Washington
Matthew Muth	MFA Creative Writing BA Language, Literature, Writing	University of Washington Eastern Michican University
Fara Nizamani	BS Ed. Secondary English Education MA English Literature PhD English Literature	University of Miami Barry University City University of Los Angeles
Stephen Schafer	BA Psychology MA English	University of Denver University of Denver

Department of Life Sciences

Charles Wood*	BA Biology	Kalamazoo College
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	MS Medical Illustration	The Medical College of Georgia
	PhD Physical Anthropology	University of Washington

Department of Mathematics

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Andy Demetre	BS Mathematics MS Mathematics	Reed College University of Washington
Brigitta Vermesi	PhD Mathematics MS Mathematics BS Mathematics	Cornell University Cornell University Rutgers University

Department of Music

Lawrence Schwedler*	BA in Music MFA in Music	University of California Los Angeles University of California Los Angeles
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Department of Physics

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	MS Physics	University of Washington
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Charles Duba	BS Physics MS Physics PhD Physics	University of California, San Diego University of Washington University of Washington
Natalia Solorzano	PhD Space Geophysics MS Meteorology BS Physics	National Institute for Space Research, Brazil National Institute for Space Research, Brazil Federal University of the State of Minas Gerais, Brazil

Learning Resource Center

Judi Windleharth**	Master of Library Science	San Jose State University
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** Director of Learning Resource Center

Research and Development Division

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Antoine Abi Chacra	BS Computer Science	DigiPen Institute of Technology, Lebanon
	MS Computer Science	DigiPen Institute of Technology
Elie Abi Chahine	BS Computer Science	DigiPen Institute of Technology, Lebanon
	MS Computer Science	DigiPen Institute of Technology
Andrew Carlson	BS Real Time Interactive Simulation	DigiPen Institute of Technology
Joshua Claeys	BS Real-Time Interactive Simulation	DigiPen Institute of Technology
Christopher Comair	BS Real-Time Interactive Simulation	DigiPen Institute of Technology
Joshua Davis	BS Real-Time Interactive Simulation	DigiPen Institute of Technology
Ryan Edgemon	BS Real-Time Interactive Simulation	DigiPen Institute of Technology
Andre Eid	BS Computer Engineering	The Lebanese University
Benjamin Ellinger	BS Kinesiology	University of Texas
Michelle Lu	BS – Horticulture	National Chung-Hsing University
	Certificate – 3D Animation and Modeling	Vancouver Film School
Patrick Moghames	BS Computer Science	DigiPen Institute of Technology, Lebanon
-	MS Computer Science	DigiPen Institute of Technology
Christopher Peters	BS Real-Time Interactive Simulation	DigiPen Institute of Technology
Alain Schneuwley	Diploma, Computer Analyst and Programming	IEPIGE (Switzerland)
,	Federal Diploma of Commerce	Superior Commercial School (Switzerland)
	Certificate of Recommendation in 3D Computer Graphics,	Vancouver Film School/DigiPen Applied Computer
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Benjamin Strukus	BS Real-Time Interactive Simulation	DigiPen Institute of Technology
Trevor Sundberg	BS Real-Time Interactive Simulation	DigiPen Institute of Technology
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* Department Chair

† Interim Department Chair

Management

President and Chief Executive Officer	Claude Comair
Chief Operating Officer, International	Jason Chu
Chief Financial Officer	John Bauer
Senior Vice President	Raymond Yan
Chief Technology Officer	Samir Abou Samra
Executive Vice President of Asia-Pacific	Prasanna Ghali
Dean of Faculty & Academic Affairs	Xin Li
Senior Vice President of Administration	Meighan Shoesmith
Senior Vice President of Facilities Management	Melvin Gonsalvez
Vice President of External Affairs	Angela Kugler
Director	Michele Comair

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Director of Administration/Bursar	Yuki Taber
Accounting Assistant	Hiroko Honda
Accounting Assistant	Carol Jacobs

Admissions

Director of Admissions	Angela Kugler
Admissions Application Manager	Danial Powers
Admissions Outreach Manager	Steph Caron
Admissions Outreach Coordinator	Alice Anderson
Admissions Coordinator	Cassidy Werner
Admissions Outreach Coordinator	Jackie Beehler
Admissions Outreach Coordinator	Madeline Starkovich
Admissions On Campus Outreach Coordinator	Rachel Thompson

Compliance

Institutional Compliance Officer Mandy Wong

Financial Aid

Director of Financial Aid	Kim King
Assistant Director of Financial Aid	Marti Jackson
Assistant Director of Financial Aid and Scholarships	Trinity Huttner
Financial Aid Assistant	Blair Buchmayer

Registration

Registrar	Meighan Shoesmith
Assistant Registrar	Asuka Miyahara

Student Affairs

Director of Student Affairs	Gordon Dutrisac
Assistant Director	Marshall Traverse
International Student Affairs Advisor	Heather Sitt
Career and Alumni Services Coordinator	Teresa Lin
Director of Counseling Services and Disability Support Services Coordinator	Kay Widmer
Academic Advisor	Teresa Boyes
Housing Manager	Chris Gunderson
Student Affairs Assistant	Robert Barnum-Reece

Youth Development and Continuing

Education

Director of K12 Curriculum and Teacher Training	Martin Culbert
Director of Educational Partnerships	John Aultman
Director of Administration	Emma Trifari
Program Coordinator	Catrina Chen

Administration

Academic Administrative Lead Coordinator	Bridget Scott
Front Desk	Molly Brady
Human Resource Assistant	Katie Olson

I.T.

Director of I.T.	Atom Powers
Senior Systems Administrator	Ryan Fulcher
Client Services Manager	David Kuehn
Systems Administrator	Mike Hager
Client Services Administrator	Ashley Willis

Marketing and Communications

Director of Marketing and Communications	Linnéa Mobrand
Editorial Manager	Jordan Deam
Creative Director	Steve Haak
Web Designer / Photographer	Jonathan McIntyre
Web Developer	Jered Odegard
Web Developer	Patrick Schafer
Graphic Designer	Katie Bajema
Production Assistant	Christian Gaspar
Content Editor	Flynn Espe

Facilities

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Facilities Support	Rosa Campos
Facilities Support	Doug Dixon

Food Services

Logistics Café Manager	Sara Mills
Baker	lan Shores
Bookstore Lead	Chelsea Stevens
Cashier	Michelle Stapp
Deli Cook	Arianna Scott
Lead Cashier	Violetta Kiss
Lead Hot Line	Tye Clinton
Lead Pantry	Stefan Ferguson
Lead Utility Crew	Eduardo Copca
Line Cook	Ryan Dewitt
Pizza Cook	Melinda Wright
Utility Crew	Saul Mora

