Herguan University

2008 - 2009

CONTENS

A MESSAGE FROM THE PRESIDENT

To all prospective students:

Welcome to the Herguan University! As we begin the twenty-first century, education is undergoing great changes, merging with the Information Superhighway. Innovations in technology and communications have enabled the educational sector to expand its realm in providing education to a wider range of students in extensive geographic areas.

The Herguan University is dedicated to utilizing the latest technologies in its efforts to bring the best possible education to students all over the world. We seek to challenge our students, and, in doing so, provide them with the services and opportunities necessary to enable them to successfully complete their respective degree programs.

The name of the University comes from the Chinese words “core” (her) “gate” (guan). We believe that you are the core and the knowledge you gain will open the gates to wonderful opportunities.

The Herguan University provides students with a forum to help them demonstrate and apply their research skills and cognitive abilities at every level of the curriculum. As a result, students will gain the theoretical knowledge and real-world application of the skills demanded by today’s dynamic global society.

The objective of the Herguan University is to strengthen the educational foundation and stimulate the professional careers of individuals who are eager to grasp the opportunities of tomorrow’s job market.

I would like personally to invite you to invest in your academic future and professional success by exploring the opportunities available at the Herguan University.

I wish you success in your educational and professional pursuits. Thank you for your interest in the Herguan University.

Herguan University
Dr. Ying Qiu Wang
President

INSTITUTIONAL PHILOSOPHY

It is the goal of the Herguan University to provide meaningful, quality education, and professional training compatible with the needs of mature adults, for individuals having completed a minimum of a bachelor's degree.

The University believes that students and educators are to be held equally accountable for the quality of their interaction, and the responsibility for learning must be shared by all individuals involved in the educational circle. The University fills the need for innovative programs while maintaining high standards for the quality of education provided.

Our challenge is to assist our students in developing a program around their personal interests and goals, thereby creating a synthesis of thinking and learning. Our faculty will provide guided inquiries into areas of knowledge, beliefs, and value systems. With the proper organizational guidelines and administrative support, students will acquire and demonstrate a greater breadth and depth of knowledge, critical thinking, and clear self-expression, as well as gain the research skills necessary to maintain a high level of competence in the students' areas of expertise. It is our responsibility to aid in the development of responsible citizens by maintaining an up-to-date and relevant curriculum in order to achieve the knowledge base and skills required in an ever-changing society. This includes the ability to develop concern for moral perception, self-actualization, and academic discipline.

MISSION

The MISSION of the Herguan University is to expand the understanding and application of the latest research in business, engineering, science, electronics or medical management practices; the development of intellectual, analytical, and critical abilities, and the fostering of values and commitment to pursue lifelong learning; to prepare graduate level students to research, learn and apply the business, engineering, science, electronics or medical management skills in their current businesses or working in leadership roles in business, life or medicine in order to improve the way we work, learn and play.

EDUCATIONAL OBJECTIVES

Our Educational Objectives are as follows:

- Provide state of the art learning programs and systems that expand the understanding and application of known and new business, engineering, science, electronics or medical management practices.
- Prepare a professional workforce capable of using their newly acquired business skills in all their organizational operations and decision-making.
- Produce graduates who will pursue life-long learning and professional development.

APPROVALS

Bureau of Citizenship and Immigration Services (BCIS)
Herguan University is approved under the Department of Homeland Security to enroll non-immigrant alien students for attendance by non-immigrant international students (I-20).

Bureau for Private Postsecondary and Vocational Education
The California Bureau for Private Post-secondary and Vocational Education (BPPVE) has granted Herguan University approval as a California degree granting institution prior to closing.

GOVERNING BOARD

Our Board of Directors governs Herguan University. Board members consist of HGU faculty members, Scholars and Community leaders.

This Catalog outlines current programs and curriculum requirements, faculty information, course descriptions and policies as per the effective date of issuance. The materials presented here constitute the rules and regulations of the University, and are intended to be accurate, complete, and binding. However, the University reserves the right to update or change any or all of these regulations to meet with any and all of the above accreditation subjects and the University's changing conditions. In such event, written notice will be given, and such notice will form an addendum to the Catalog. All information in this University Catalog is current and correct and is so certified as true by the President of the institution at the time of publication.

UNIVERSITY LOCATION

The Herguan University is surrounded by many world famous high-tech companies in Silicon Valley, such as Microsoft, Apple, IBM, Sun Microsystems, Hewlett-Packard, Juniper, AMD, etc. It can be reached conveniently from highways 101, 85, 237 and 280.

Herguan University
1183 Bordeaux Drive,
Sunnyvale, CA 94089
Tel: (408) 481-9988
Fax: (408) 745-7580

Corporate Site is located at:
970 W. El Camino Real
Sunnyvale CA 94087
Tel: (408) 733-1878

LIBRARY

The students are encouraged not only to learn from classes but also to pursue independent research by using resources provided by the library services. The development of information technology has brought worldwide information into the grasp of anyone interested, with accessibility unlimited by neither time nor distance. All students enrolled in the University have access to the libraries in the City of Sunnyvale and Stanford University along with the University's library books, journals, audio/visual materials, and other library items, the HGU e-library has incorporated commercially available digital libraries as well as information conveniently provided by the vast world-wide-web into the library's online services. Computer stations allow students access to current information on the Internet and educational CD-ROM. The library is open daily during the week for student and faculty use.

ACADEMIC CALENDER 2008-2009

Fall Term 2008: (September 29, 2008 - January 11, 2009)
September 15 - September 30 Registration
September 26 New students orientation
September 29 Classes begin
October 13 Last day for Registration/Last day for add/drop without records
October 27 Last day for withdrawing from classes
November 9-15 Mid-term exams
December 1 – December 15 Advanced registration for Spring term 2009
December 28 Last day to file for graduation for this term
December 28 - January 11 Final exams

Spring Term 2009
(January 19 – May 3, 2009)
January 5 - January 20 Registration
January 16 New students orientation
January 19 Classes begin
February 2 Last day for Late registration/Last day for add/drop without records
February 16 Last day for withdrawing from classes
March 1-7 Mid-term exams
March 23 – April 6 Advanced registration for Summer term 2009
April 20 Last day to file for graduation this term
April 20 – May 3 Final exams

Summer Term 2009
(May 11 – August 23, 2009)
April 27 – May 12 Registration
May 8 New students orientation
May 11 Classes begin
May 25 Last day for registration/Last day for add/drop without records
June 8 Last day for withdrawing from classes
June 21 – 27 Mid-term exams
July 13 - 27 Advanced registration for Fall term 2009
August 9 Last day to file for graduation for this term
August 9 - August 23 Final exams

ADMISSIONS

General Admissions

An individual is eligible for admission to the Master's Degree Program by meeting the following criteria:

1. Possession of an applicable Bachelor's Degree or equivalent from an accredited or international institution; and

2. The attainment of a 2.3 grade average or better from the student's Bachelor's Degree Program.

Admissions Requirements

All applicants are required to submit the following for admission before the deadline:

1. Complete an application form either online or hard copy;

2. Submit a one-time, non-refundable $50 application fee;

3. Official transcripts for all completed university course work and certification of degree for all completed degree programs must be sent directly to the HGU Admission Office from the institutions. All foreign transcripts must be accompanied by an official translation. All students must possess a US accredited bachelors degree. Foreign students must possess the equivalent of an earned US bachelor's degree as evaluated by a transcript evaluation company complying with AACRAO standards.

Once the above has received, the HGU Admissions Office will start an individualized admission evaluation service. A copy of the evaluation report will be sent to the accepted applicant.

For any question regarding admission, please contact:

Herguan University
Admission Office
1183 Bordeaux Drive, Sunnyvale, CA 94089
Tel: (408) 481-9988 Fax: (408) 745-7580
E-mail: info@herguanuniversity.org

Foreign Students (I-20)

(HGU is authorized under Federal law to enroll non-immigrant alien students.)

The Herguan University welcomes foreign–student applications and is very fortunate to have many students from around the world joining our Master's degree Programs. We are committed to expanding our international student-body population and to providing full support to all students in order to ensure a smooth and rewarding academic journey for all.

Foreign students must submit the following to verify that they have adequate resources to pay for their living expenses (tuition, food, lodging, books, travel, and incidentals) for the length of the program:

4. A Certificate of Account Balance from their (or, if applicable, their parents' or their spouse's) bank account, showing a minimum of $15,000 on deposit in U.S.-dollar equivalents, or a notarized I-134 form (Affidavit of Support issued by the U.S. Immigration Office).

5. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her previous I-20 form and request the other school's international student advisor to complete the International Student Transfer Record form for HGU and conduct the required SEVIS transfer process. Upon the receipt of their acceptance letter and other required legal documents, a student's I-20 visa can be issued.

6. Upon arrival at HGU, international students must provide the Designated School Official (DSO) with a copy of the I-20 form, I-94, visa, and passport. The United States Immigration and Naturalization Service requires that all international students maintain a full-time program of study at HGU (at least 9 units), attend classes regularly, and maintain satisfactory progress towards completion of the degree or diploma objective.

7. Documentation verifying English proficiency to qualify the student for taking degree courses. Non-English speaking students without proof of English proficiency will be required to take an on-campus English assessment examination. The exam results determine whether the student is required to take English as A Second Language (ESL) classes and at what level. ESL classes are offered at HGU.

8. Entrance assessment tests for the MBA program. The scores are for reference purpose and will not affect the admission evaluation for the applicants. Those who are required to enroll in ESL classes will be allowed to take the entrance assessment tests after they have passed the advanced ESL classes. Applicants are also encouraged to submit their resumes.

Questions regarding visa status, accommodations, etc., should be directed to the Admissions Office.

English Proficiency Requirement

Applicants who have completed an undergraduate degree program in an English speaking country or school are considered meeting the entrance English requirement for enrolling in degree courses at HGU. Those who have taken college English courses without earning a degree in an English speaking country or school will be assessed for their English proficiencies, in writing and conversation, based on the official transcripts they submit to HGU's Admissions office. International students who have earned a graduate degree (not an undergraduate degree) in an English speaking country or school will also be assessed for their English proficiencies in both writing and conversation when they report to HGU.

English Placement Examination

All other applicants must be assessed for their English proficiencies by either taking a standardized test, such as TOEFL or IELTS, or HGU's on-campus English Placement Examination (EPE) before or upon reporting to HGU. The exam results indicate the student's English proficiency level in several categories. HGU also accepts the English assessment reports from several English Language Institutions in the U.S. Applicants whose standardized test scores do not include writing or conversation assessment will be assessed in these areas at HGU. EPE assesses the student's proficiency in listening, grammar, reading, conversation, and writing.

TOEFL has been administered by the Educational Testing Service (ETS) in various forms – a TOEFL score of 550 on the paper based, 213, on the computer based and 79 on the internet-based test is required. For more details on the TOEFL exam visit www.toefl.org.

English as A Second Language Classes (ESL)

English as A Second Language classes (ESL) are offered to those students whose English assessment results require them to take the classes to improve their English proficiencies. The classes are offered at the following levels: high-beginner, intermediate, and advanced. The students are placed into these classes based on their placement examination results.

The ESL classes are offered at HGU with the same trimester schedule as the degree courses. The subjects cover listening comprehension, grammar, pronunciation and accent reduction, vocabulary development, reading, conversation, writing, and presentation skills. The instructor for each class assesses each student's

performance in the class and at the end of each semester, the instructor determines whether to promote the student to the next higher level of ESL courses or not. Students placed in the highest levels of ESL classes may be allowed to concurrently take a limited number of degree classes at HGU, provided that this optimizes their learning objectives. Students passing the English placement exam or the highest ESL classes are considered meeting the entrance English requirement for degree programs.

Background preparation

The background preparation for each graduate program is described at the beginning of each program. In the admission evaluation report received by each applicant, background deficiencies are identified, if any. The student is required to clear the deficiencies at HGU before taking graduate level courses. The graduate student may clear each background deficiency by taking and passing the subject course (an undergraduate course). With advance approval by the academic Council, the student may be allowed to clear a deficiency by taking a challenge exam on the subject. Graduate students in the business programs have the option to take the preparatory module studies to clear their deficiencies.

Entrance Assessment Tests

The entrance assessment tests are required for reference purpose. They will not affect the admission evaluation for the applicants. Applicants for the MBA program are required to take either the GMAT or the on-campus equivalent test. Those who are required to enroll in ESL classes are allowed to take the test after passing the advanced ESL classes.

Conditional Admission

In rare situations students may be admitted to the University prior to meeting all the requirements for admission. The University Academic Council may grant conditional admissions status. In such cases, a time limit of one trimester is given or the assigned date on the conditional admission agreement, during which students must fulfill all the requirements in order to be granted full admission status. Grade reports and transcripts will be withheld, and registration for subsequent terms will be denied until this requirement is met.

Unqualified Applicants

Those wishing to apply before they are qualified for admission may attach a cover letter to their application explaining their plans for becoming qualified. The Admissions Officer will advise them about the requirements for admission.

Registration

Registration for the following trimester is conducted prior to the end of the current trimester. The dates and times of registration will be announced through the Administration Office. A late fee of $25 is charged to those students who do not register by the posted registration deadline. Registration for new and continuing students will be by appointment. Tuition and fees are due and payable in full at the time of registration unless the student has signed up for a tuition payment plan.

Registration is complete when all fees are paid. The University is not responsible for billing students. All students who wish to register must complete the registration form available from the Administration Office.

ACADEMIC POLICIES

Full-time and Part-time Students

To be considered a full-time student, a student must enroll for a minimum of 9 units per trimester. A student may not take more than 15 units in any trimester without the prior permission of the Director of Academic Affairs. Students who enroll less than 9 units per trimester are considered part-time students. All international students must be enrolled as full-time student. An international student on academic probation is not allowed to take a trimester break. The maximum program length is equal to the number of units required for the student to complete the program times 1.5.

Non-Degree-Seeking Applicants

Admission for non-degree-seeking students must be approved through the standard application procedure and must meet all regular admissions requirements. They are welcome to do so under the following policy.

*$50 Application Fee
*Proof of citizenship
* An official educational transcript from colleges previously attended or currently attending.
*A Non-Matriculate Plan signed by the student and the Academic Dean prior to registration.

"Non-matrics" must meet the pre-requisites for any courses they want to take. "Non-matrics" may earn up to 12 units of the courses required for the degree program; thereafter, they must either discontinue their enrollment or enroll in the degree program. Non-matriculating students are subject to the same fee schedule and school policies as matriculating students, except for non-matriculation policies. "Non-matrics" receive grades, and their transcripts will be stamped "Non-matriculating." Non-matriculating student enrollment is limited in each class so our matriculating students receive the attention from the instructor they deserve.

Transfer Credit Policy and Procedures

HGU may grant transfer credits on a course-by-course basis for courses taken previously, provided:

The course name, credits, and available course descriptions must indicate that the coursework is similar in content and class/contact hours similar to classes offered at HGU.

Courses need to be completed within the previous ten (10) years. If courses were completed more than ten (10) years ago, students have the option of repeating the courses or taking challenge examinations (please see the Challenge Examination policy in the catalog). Students may also petition to transfer credit for coursework over (10) years old if they can prove that they have been continually active in the related field for that period of time.

The specific number of credit hours accepted for transfer is evaluated on an individual basis. No more than 25 percent of the credit hours can be transferred from an accredited graduate school or an equivalent foreign institution unless otherwise determined by the Academic Council. Transferring credits for courses are accepted only when the student received a grade of B or above for the similar courses taken elsewhere.

Each transfer course must be completed with a grade of B (3.0) or better.

All transfer credits must be completed by the end of the first term of study at Herguan University

Official Student Academic Transcript

Upon written request, official and unofficial copies of a student's academic records may be forwarded either to the student or to a designated addressee. Requests for transcripts are submitted to the Administration Office. Academic transcripts are withheld if the student has failed to submit required administrative documents or if the student has an unpaid balance of fees or charges due to the University.

Adding or Dropping a Course

Students may add or drop courses before the beginning of classes without incurring additional fees.

When adding or dropping courses, students must fill out an Add/Drop Form (available in the Administration Office) and submit the completed form to the Administration Office for processing.

Students dropping a course after classes have begun will receive a pro-rated refund for the unused portion of the tuition and other refundable charges provided the students have dropped classes before the ninth meeting of the class. The exact terms and conditions are set forth in the enrollment agreement. Students who drop classes after the ninth meeting of the class will not be eligible for a tuition refund. Withdrawals are not permitted during the final three (3) weeks of instruction except in cases of serious accident, illness or other extreme situation. Failure to drop a course officially will result in full tuition charges for the course and a failing (F) grade. A $25 processing fee will be charged for each course added or dropped after classes have begun.

Grading System

The University uses the following standard academic grading system in assessing student progress in course work, examinations and course evaluations:

A	= 4.0 grade points	= 94-100%
A-	= 3.7 grade points	= 90-93%
B+	= 3.3 grade points	= 87-89%
B	= 3.0 grade points	= 83-86%
B-	= 2.7 grade points	= 80-82%
C+	= 2.3 grade points	= 77-79%
C	= 2.0 grade points	= 73-76%
C-	= 1.7 grade points	= 70-72%
D+	= 1.7 grade points	= 67-69%
D	= 1.0 grade points	= 63-66%
D-	= 0.7 grade points	= 60-62%
F	= 0.0 Fail	= 0-59%

I	= Incomplete
NR	=Grade not reported
W	= Withdraw after 5th wk/ before 12th wk
CR	= Credit awarded for transfer
NC	= No credit
P	=Pass – not reflected in GPA (credit granted “B-” or above in concentration area, credit granted “C-” or above in elective courses)
NP	=Failure – not reflected in GPA (credit granted “C+” or below in concentration area, credit granted “D+” or below in elective courses)
AUD	=Audit
CHP	Challenge exam taken and passed
IP	=In Progress

Students with an “Incomplete” grade must arrange with the instructor to complete the necessary make-up work after the final class meeting, with a specified date of completion. This agreement must be submitted in writing to the Director of Academic Affairs. All “Incomplete” grades must be converted within one trimester. Students who fail to convert their “Incomplete” grade after one trimester will receive a “Fail” grade for the course.

Course examinations that are taken late, or taken at an irregular time may be subject to a grade reduction. The instructor will make the final determination on a case-by-case basis. A late exam fee will be charged. All late fees are payable to the HGU Administration Office and not to the individual instructor.

A grade of “F” (Failure) may be remedied by repeating the course. Multiple failure grades may result in academic probation and/or academic dismissal. Any student with an “F” grade in a course must repeat that class in its entirety. Tuition is charged for each repeated course.

Unit/Clock Hour Conversion

One unit is equivalent to one hour of didactic instruction per week for a 15-week term (15 hours per unit). Students will receive one unit credit for each 30 hours of laboratory courses.

Grade Appeal

Grades, which are given at the discretion of faculty, reflect the academic achievement of the student. Any students wishing to appeal a grade awarded must initiate the appeal in writing and submit the appeal to the instructor concerned. If the student is not satisfied with the instructor's explanation or action, the appeal may be presented to the Director of Academic Affairs, who will then render a final decision.

Audit Policy

Students may register to audit a class when they have completed all of the course prerequisites. All audits are subject to availability and must be approved by the Director of Academic Affairs. Availability is limited since credit-earning students are a priority. Auditing students cannot take up the time of the teacher or distract credit-earning students from their education. Students auditing classes must abide by all the pertinent rules and regulations such as rules on attendance, academic policies, etc. Students will not be able to take mid-term and final examinations. Failure to abide by the relevant rules will be deemed student misconduct.

Attendance

Attendance is mandatory for all courses. Inconsistent attendance is a matter of serious concern as it jeopardizes the educational process. Students are expected to attend all scheduled classes for which they are registered. Faculty members are asked to record student attendance. Students who miss more than three classes in any course will fail the course. Absences may be excused for childbirth, a documented illness, an injury, and a death in the family, or other emergency situation acceptable to the Academic Committee. Students should call the Registrar or the Dean as soon as practical on the first day of absence and give an estimate of the duration of the absence. Special arrangements may be made to make up missed classes.

The University emphasizes the importance of developing respectful and ethical conduct. Decorum is an integral part of the learning process. Tardiness, unexcused absences, inappropriate attire, poor attitude, use of cell phones or other distracting devices, eating during class, and other unprofessional behavior are all considered disrespectful and may be grounds for allegations of student misconduct that could result in dismissal.

Student Conduct

HGU expects a high standard of honesty and integrity from all members of its community. The University seeks students who are knowledgeable, forthright and honest.

At the discretion of the Director of Administrative Affairs, students may be dismissed from the University for behavior disruptive to the educational mission of the University, continual violations of the policy of the University, for academic dishonesty and for any conduct or carelessness that endangers life. The following is a listing of such, but not limited to those as stated below:

- Excessive unexcused absences or tardiness
- Unauthorized possession, use or consumption of alcoholic beverages or illegal drugs while on the HGU premises or at a HGU-sponsored event
- Intoxication, dishonesty, altercation, stealing
- Possession, use or abuse of a weapon, dangerous material, or unlawful substance
- Disruptive behavior in class or the library
- Dominating classroom discussions to the exclusion of others
- Intent to undermine the goals of the institution
- Grave personal misconduct
- Misuse, unauthorized use of, or damage to HGU property

- Engaging in competition with HGU or converting business opportunities of HGU to personal gain
- Sexual or physical assault on-campus
- Unlawful harassment of an employee, student or other person
- Failure to meet financial obligations or commitments to HGU
- Unauthorized release of confidential information about HGU employees, faculty, alumni, students or patients
- Violation of general HGU rules and regulations
- Unauthorized removal of library materials
- Cheating or the compromise of test materials

The President of HGU may place on probation, suspend or expel students for one or more of the causes enumerated above. No fees or tuition paid by or for such students for the term in which they are suspended or expelled shall be refunded. Any probation, suspension or expulsion will be indicated on the transcript.

Satisfactory Academic Progress

Students must maintain satisfactory academic progress (SAP). SAP for all students requires that students must maintain a minimum grade point average (GPA) of 3.0 each trimester. Students not meeting this requirement are placed on "academic probation." In order for a student to maintain their SAP, they must successfully come off of academic probation within two semesters. Students not meeting this requirement must meet with the Director of Academic Affairs. The student must present strong reasons that contributed to their poor progress or they will be dropped from the program. Students that are dropped from the program will not receive any refunds. The maximum program length is equal to the number of units required for the student to complete the program times 1.5.

Academic Probation and Dismissal

In order to maintain good academic standing, students must maintain a minimum grade point average (GPA) of 3.0 each trimester. Students whose GPA falls below 3.0 will be placed on academic probation for a period of two trimesters. During the probationary period, the students' GPA must be maintained at 3.0 or higher. Probationary students who have maintained a GPA of 3.0 or higher for the duration of the entire probationary period will have their probationary status removed and will be considered to be in good academic standing. Students who do not clear probation within two trimesters may be dismissed from the University. Students will be given an academic notice when they have failed a course twice. The University may dismiss students whose third attempt at passing the course is unsuccessful.

The course load of students on academic probation will be determined in consultation with the Director of Academic Affairs. To avoid automatic dismissal, students on academic probation are advised to meet with the Director of Academic Affairs for academic counseling.

Subsequent to academic dismissal, students' transcripts will bear the notation "Academic Dismissal."

Appeal of Dismissal

A student has one week from the time of notification of dismissal to file an appeal. He/she may request an appeal of dismissal by writing a letter of response to the dismissal charges and requesting an appeals hearing. If the hearing is granted, based on the student's reply letter, the individuals involved in the process will convene to hear the appeal. If an appeal is granted, the student may resume course work at NPU. The following process must be followed to appeal disciplinary action/probation served to a student:

1) The appeal is made in writing to HGU's President for presentation of any extenuating circumstances or evidence the student believes applicable.

2) The President then sets up a hearing with an administrative appeals committee to review the appeal. The committee will be comprised of a minimum of two administrators and one student member. Copies of the appeal shall be distributed to each member of the committee prior to the hearing.

3) The student will meet with the committee to explain the appeal.

4) The committee will make its decision based upon the evidence presented and the interview with the student making the appeal.

5) The decision of the committee will be communicated to the student making the appeal within three business days of the final decision.

Withdrawal From The University

A student who fails to register for two (2) consecutive semesters without the Director's approval will be considered as withdrawn from the University. Such students must apply for re-admission if they wish to complete their program of study at Herguan University and pay ALL the associated fees. Nonattendance of classes or stopping a check for payment does not constitute withdrawal from the University. Notification must be in writing. Students who withdraw from the University, or discontinue their studies without filing a Withdrawal form shall receive a grade of "F" in each course not completed. The following must take place for any student to officially withdraw from the University:

1. Notify the Director of Academic Affairs or Registrar of intent to withdraw by completing a Withdrawal Notice form.
2. Clear all outstanding debt with the University.
3. Return all books, materials or equipment owned by the University.

NOTE: Any outstanding fees owed to the University by the student will be deducted from the tuition refund.

Requesting a Leave of Absence, Rules and Form

A student who requests a Leave of Absence from the University and wishes to maintain his/her enrollment status may do so under the following conditions:

1. File a request for a Leave of Absence. The student must sign and date the form prior to the leave of absence, unless unforeseen circumstances prevent the student from doing so.

2. Receive approval for the leave of Absence request by the Director of Academic Affairs or by the Foreign Student Advisor (if F-1 visa student).

Challenge Examinations

Prior academic instruction or experience from another country in a HGU-required course may qualify students for a Challenge Examination for that course. The Director of Academic Affairs must approve all Challenge Exams. Score of 70% or higher advances the students to the next level of study. Students who pass the Challenge exam are awarded credit and the grade of "Pass." All grades and the credits are entered into the students' academic records. Students who fail the examination will be required to take the course at the current full tuition rate. Students must formally request the challenge exam on an Examination Request form and must pay the challenge exam fee together with any required fees prior to the examination. Credits awarded are not considered when calculating unit loads for a trimester. Partial credits will not be issued for portions of the exam passed by the student.

Honors List

To graduate with Highest Honors, students must attain a cumulative GPA of 4.0. To graduate with Honors, students must attain a minimum cumulative GPA of 3.70.

Graduation Requirements

The HGU catalog serves as the school's contract with the students. Therefore, students fall under the graduation requirements written in the catalog used at the time of student's entering the program as a degree-seeking student. The section on Academic Policies describes the rules for the student to follow the graduation requirements. All students will be responsible for satisfying all graduation requirements that are

in effect at the time of their admission to the University unless a regulating agency requires compliance to new rules or requirements.

To graduate from the program, a student must

- Complete all required classes
- Maintain at least 3.0 GPA
- File a Notice of Candidacy for Graduation one trimester in advance
- Clear all financial obligations, including mandatory graduation fees
- Return all library loaned materials to HGU.

Student Records

Current records are stored in written form for a period of five years. Academic records of each student are stored for fifty years.

In accordance with the Family Educational Rights and Privacy Act (FERPA), the University protects the privacy of student records, including address, e-mail address, phone number, grades, financial information and attendance dates. A copy of the University's FERPA policy is available from the Registrar. The Act provides each current and former student with the right to inspect and review information contained in his/her academic file. A student interested in reviewing his/her file must submit a request in writing to the Registrar. A time will be scheduled for the student to review his/her file. A student also has the right to submit written requests for amendments to his/her academic record.

In compliance with Public Law 93-380, Section 438 (The Buckley Amendment), student grades, records, or personal information may not be given to third persons including parents without written consent of the student. Permission must be given by the student in order for information in his/her file to be used as reference checks for credit or employment evaluation by third parties, and the student must file a written declaration to this effect, which will be kept in the student's file(s). The declaration can be all-inclusive or on a case-by-case access basis. (The provision to release financial aid data to authorized agencies is not a violation of the Buckley Amendment.)

Note: All admission documents become the property of the University and will not be returned to the student. It is the student's responsibility to monitor his/ her own progress toward graduation and to take all appropriate required courses each semester.

Personal Integrity

Any evidence of improper communication, use of books, notes, electronic equipment or other nefarious action in the classrooms during examinations will be sufficient basis for an instructor or proctor to take the examination paper from the student and dismiss the student from the room with an automatic "F" grade for that test. Any cheating discovered by other students or the instructor on student assignments are not acceptable. Such offenses customarily result in a grade of "F" for that course and students being placed on academic probation. Additionally, the student may be expelled.

Faculty, staff and students are required to report all instances of cheating to the Director of Academic Affairs. When reported by the proctor or instructor, the Director Academic Affairs and the University's administration will handle cheating offenses like any other offenses within the University community.

Sexual Assault and Harassment

It is the policy of HGU to provide an educational, employment and business environment free of sexual harassment or any other verbal or physical conduct or communication constituting sexual harassment as defined and prohibited by state and federal regulations. If you believe you have been assaulted or sexually harassed by any member of the HGU community, or while participating in a HGU sponsored activity, you are urged to bring the matter to the immediate attention to Director of Administrative Affairs.

Compliance with the Reform Act of 1989

The University intends to comply with the Educational Reform Act of 1989. To this end it will publish the relevant specifications of the act in its student, staff and faculty handbooks and will urge its personnel to become familiar with such provisions of the Act as may apply to them or their duties and responsibilities. Personnel found in willful violation of the Act will face disciplinary action and may, in extreme cases, be permanently separated from the University.

Nondiscriminatory Policy

In compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990, Herguan University does not discriminate in its educational programs, employment, or any other activities on the basis of race, sex, color, national origin, ancestry, religion, creed or disability.

Students may complain of any action that they believe discriminates against them on the grounds of race, color, national origin, religion, sex, sexual orientation, disability or age. For more information and procedures, please contact the Director of Administrative Affairs.

Grievance Procedures

The HGU has designed the following Grievance Protocol so that appropriate and fair channels exist for students to address their concerns regarding the HGU policies, procedures, working conditions, supervisory discipline, dismissal, or other actions. The HGU Grievance Procedures provide students with a fair, impartial method for presenting and resolving a grievance as soon as possible at the lowest possible level. No retaliation or reprisals will be taken because a student has initiated the grievance process.

The Grievance Policy and Procedures are as follows:

The student attempts to resolve the grievance by discussing it with the administrative staff member involved within ten (10) working days from the date of the event, which led to the grievance. The administration will have ten- (10) working days in which to provide the student with a response.

If the grievance is not satisfactorily resolved, the original grievance should be presented in writing to the Director of Administrative Affairs. The material submitted must include the following:

A historical account of the grievance the specific policy, procedure, agreement or law alleged to have been violated; any relevant supporting documentation the desired resolution

The Director of Administrative Affairs may invite the student and the administrative staff involved to an informal conference. If a mutually agreeable solution is not achieved, the Director of Administrative Affairs must convene the Grievance Committee within ten (10) working days.

The Grievance Committee consists of: two (2) faculty members; one chosen by the President and one chosen by the faculty two (2) student representatives chosen by the student body Three (3) administrative staff chosen by the Director of Academic Affairs and the Director of Administrative Affairs.

The committee elects a chairperson. The individual against whom the grievance was made will be notified within ten (10) days by the chairperson to provide the following information to the Grievance Committee:

A written response to each issue raised in the written grievance received including all supporting documentation concerning the written grievance received.

The Chair of the Grievance Committee will set a date and a time for a hearing and the student and individual against whom the grievance was made will be notified in writing about the hearing. The Committee will seek to obtain all relevant and reliable evidence pertaining to the grievance before

convening, to assure that the hearing is conducted in a complete and unbiased manner consistent with the grievance policies and procedures.

Both parties are entitled to call witnesses. After the hearing, the Committee will present its findings and recommendations, in writing, for a satisfactory resolution to the President. The President will have fifteen-(15) working days in which to provide all concerned parties with a decision in writing. By initiating this procedure, it is agreed by the HGU Administration and the parties involved that the decision of the President will be binding and final. If the Grievance is about the President, the student's written appeal is to go to the Board Chairman for consideration.

Failure by the student to comply with time limits and procedures set forth in the notification may result in the withdrawal and/or waiver of grievance. The time limits and provisions set forth in this section may be extended or waived by a mutual written agreement of both parties. In the event that a student is unable to contact the appropriate individual(s), he/she may extend the grievance by providing written notice to the administration within the applicable time limitations.

If a student is not satisfied that the program has adhered to its policy or has been fair in its handling of the complaint, the student may contact the Bureau for Private Postsecondary and Vocational Education (BPPVE) at:

BPPVE
400 R Street Suite 5000,
Sacramento, CA 95814-6200
P.O. Box 980818
West Sacramento, CA 95798-0818
(916) 445-3427 or
(866) 785-9663 or
E-mail bppve@dca.ca.gov

STUDENT SERVICES

Student Health, Safety, and Housing

All full-time students are required to have their own health insurance coverage. HGU will assist students in contacting appropriate insurance companies. HGU does not offer on-campus housing. The city of Sunnyvale and the neighboring communities of Santa Clara, Cupertino and Mountain View have extensive rental apartments and housing in all price ranges. The University is also within commuting distance from a number of other residential communities including Los Altos, Saratoga, Campbell, San Jose, Milpitas and Fremont.

The University bears no responsibility in finding or assisting students in finding housing. The University does, however, have a bulletin board for student use to communicate opportunities for shared housing or for other community and professional listings. The Admissions Officer is available to make suggestions and help with resources to find housing, but it is the responsibility of the student to find acceptable housing within their own circumstances and needs.

Academic Counseling

The Director of Academic Affairs and other designated administrative officers provide academic counseling to students. All students are strongly encouraged to meet with the Academic Counselor at least once each trimester during registration periods for academic advising and determination of Satisfactory Academic Progress. Faculty members and senior students are also available to help students with academic problems.

Placement Assistance

HGU provides a variety of services to assist students in planning, and achieving their career goals. Workshops will be held regularly on career planning, including self-assessment, resume writing, interviewing skills, and job search strategies. Professionals from various fields will be invited to attend the weekly "Joint Seminar" required for all students to present information concerning career opportunities. Students are encouraged to take advantage of the Joint Seminar to further their career development. A special program of informational interview will connect students with alumni in a variety of fields.

Student Lounge

Students are welcome to use the student lounge during class breaks and between classes. The student lounge may be used for social interactions, eating, resting, or studying. The kitchen is equipped with wireless Internet access, a refrigerator, a microwave oven, and a washbasin to facilitate preparation of meals.

Student Governance

The HGU Student Association offers students the opportunity to participate in the governing of the institution. Elected officers interact regularly with assigned faculty advisors to coordinate student functions, organize extra-curricular activities, and offer student input concerning university policy.

Student Organizations

Students at HGU are free to organize and to join associations whose stated purpose is consistent with the University's mission. All student organizations seeking HGU support must be registered. The HGU

Smoking Control Policy

Students and all staff need to exhibit a life style of health. Therefore smoking is prohibited in all areas within the HGU campus and parking areas.

Lockers

HGU provides lockers for students to keep their books or backpacks. Students must bring their own lock. At the sole discretion of the University lockers are subject to search.

Computer Facilities

Computer stations with Internet access are available in the HGU library reading area for students and faculty use. Wireless computers as well as high-speed Internet access are provided to the students on campus. Students and all staff are expected to use proper netiquette when using University computers. If the University determines their computers and Internet access have been used improperly, staff can be dismissed and students expelled.

Lost and Found

Items found on campus will be turned in to the Administration Office. To inquire about any lost or misplaced items, please contact the Administration Office.

Alumni Association

Graduates from HGU are important to the continued growth and development of the institution. Alumni interactions enhance the sharing of experiences between the current students and other graduates. Alumni support the University by participating in University events, and by serving as mentors to new students and recent graduates. Alumni Association is operated under the Director of Administrative Affairs of the University, keeping a current list of all alumni, and conducting alumni activities on a regular basis such as class reunions and career counseling.

ADA Services

The University makes every attempt to provide reasonable accommodation to meet the requirements of the Americans with Disability Act (ADA). The University classrooms are wheelchair accessible. Physically challenged students and patients may contact the Administration Office for assistance.

Annual Security Report

Herguan University will publish an Annual Security Report in compliance with the Federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (previously named the Student Right-to-Know and Campus Security Act of 1990). This report provides information on campus security regulations and campus crime statistics to current, prospective students and others. If you would like to review this document, please ask a University administrator for a copy or review the copy in the library when it becomes available.

Academic Achievement Recognition

Faculty and student awards are given annually during commencement ceremonies to recognize the outstanding achievements of faculty, staff, and students.

Tutorial Program

HGU offers tutorial programs for students with academic difficulties as well as for international students who may need assistance in English.

FINANCIAL

Tuition & Fees

Tuition *:

Courses	$ 295 / unit
Repeat / Audit	$ 150 / unit

Mandatory Fees (Non-refundable fees**):

Application	$ 50
Registration Fee	$ 50 / trimester
Late Registration Fee	$ 25 / trimester
Student Association Fee	$ 10
Graduation (Include ceremony, diploma and process)	$ 250

Additional Fees**:

Add/Drop Course	$ 25
Transfer in Credit	$ 30 / course
Returned Check	$ 20 / check
Challenge Exam	$ 75 / unit
Official Transcript Requests	$ 10 / copy
Late/retake Exam	$ 50 / course
Replacement/Duplicate Diploma	$ 60
Replacement for Student ID	$ 10 each
Express service fee	$ 20

Cost of Tuition Per Term $ 2,655

Note:
No grades or documents will be released if there is an outstanding balance. The University may refuse any type of service to students who have an outstanding balance. The University may also refuse re-admission to a student who has left the University with an outstanding balance. All fees are subject to change.

* Tuition fees are refundable, subject to restrictions.
** Non-refundable fees

Refund Policy

Students have the right to cancel their enrollment and obtain a refund by providing written notice to the Director of Finance. The effective date of termination is either the postmarked date or the date established by the signature of the Director. Verbal or phone requests will not be honored.

Students have the right to a full refund of all charges (except for the application fee, registration fee and other non-refundable charges), if they cancel the agreement prior to, or on, the first day of instruction. Students dropping a course after classes have begun but before the ninth week (or 60% of instruction) will receive a pro-rated refund for the unused portion of the tuition and other refundable charges. Students who drop a class after the ninth meeting (or 60% of instruction) of the class will not be eligible for any tuition refund. An additional 2% deduction will be applied to refunds for tuition/fees paid by credit cards. Books, textbooks and other materials purchased by the student at the University's Bookstore are the property of that student. The University will neither accept return of purchased materials, nor make refunds for services.

Students will receive a full refund of any course that has been cancelled by HGU. Refunds will be paid within 30 days of cancellation or withdrawal.

Refund Chart

Date of Withdrawal	% of tuition refundable
1st Day of Class	100%
Day two of Class through Week One	90%
Beginning of Week Two	80%
Beginning of Week Three	70%
Beginning of Week Four	60%
Beginning of Week Five	40%
Beginning of Week Six	30%
Beginning of Week Seven	20%
Beginning of Week Eight	10%
Beginning of Week Nine	0%

* There is NO refund AFTER the eighth week beginning with week nine!

California Student Tuition Recovery Fund

At this time there is no Student Tuition Recovery Fund (STRF). Students will be subject to this fee when it is reinstituted by the State of California.

Student's Right-to-Know Disclosure

The Student Right-to-Know Act requires schools disclose the completion or graduation rates for a specific cohort of the general student body as determined by the school. This cohort is made up of degree-seeking, full-time, first-time graduate students. Since the rate of graduation changes from one semester to another, please see the Director of Academic Affairs for the information, if you are interested.

Financial Aid

Currently the Federal Student Aid programs are not available to the students at HGU. But Financial Aid program that are available include the following:

Alternative Student Loans

HGU students may receive financial aid for their studies and living expenses through a variety of commercial bank student loan programs, such as Sallie Mae, Key Bank and Teri Loan. These student loan programs operate similarly to federal-sponsored financial aid loans, however, they are "credit-based" as opposed to government guaranteed. This means that the applicant must be "credit-worthy" in the U.S., or have a credit-worthy cosigner. If qualified, the loans (depending on the program) can offer:

- No payments for up to six months after graduation
- No loan fees
- Low student loan rates

- Fast approvals
- Flexible repayment plans

HGU's student on-campus work-study opportunities

Limited openings are available to HGU students who qualify for the positions. HGU work-study application forms are available at the Information desk. Students may apply for Learning Assistantships (LAs) and Administrative Assistantships (AAs). These assistantships are offered primarily on the basis of outstanding academic and professional achievements. Each trimester the administration works with the faculty to assign LAs. The purposes of LAs are to assist faculty grading students' homework and to tutor students who have questions about the class. LAs are available at their offices when the instructors may not be available. The University also assigns administrative assistants (AA) to provide computer systems and administrative services for students.

The objectives of offering assistantships are as follows:

- To provide students with more convenient assistance in mastering knowledge they have learned in class
- To promote student-to-student and student-to-faculty communication and academic contact
- To improve assistants' abilities in solving problems as team leaders and in-handling assignments as qualified professionals
- Highly selective internship opportunities and industrial cooperative projects are available for qualified students with a number of local companies. For further information, please contact the Administration Office.

Industrial Cooperative Projects and Internships Opportunities

Highly selective internship opportunities with a number of local companies are available for qualified students. A job posting board provides the current internship project information to the students. For further information, please contact the Administration Office.

DEGREE PROGRAMS & REQUIREMENTS

Degree Titles and Specialization

1.) Master of Business Administration (MBA)
2.) Master of Science in Electrical Engineering (MSEE)
3.) Master of Science in Computer Science (MSCS)

School of Business:

Master of Business Administration (MBA)

Purpose
Herguan University is dedicated to providing a professional education to qualified students at graduate levels. The school of business' primary focus and commitment is to excellence in teaching. In tandem with this commitment, faculty engage in applied and educational research, develop relationships with the business community, and provide service to the region and their professions. Students are participants in a collaborative learning environment that prepares them to take leadership roles in both public and private organizations.

Faculty
Herguan's emphasis on a community of scholars and integrated education attracts faculty who are as committed to their students' intellectual and moral development as they are to pursuing their own scholarship. Herguan University's faculty members in school of business include experienced professors with advanced degrees in Business Administration and love teaching and helping students to solve problems on academic studies.

Objectives
1.) To develop student's skills in a chosen concentration of study for future careers.
2.) To develop student's decision-making capabilities.

Problem Solving: Each student will be able to systematically diagnose problems and/or opportunities, especially in business settings, and develop alternative courses of actions to resolve the problems or take advantage of the opportunity.

Strategic Thinking: Each student will have an understanding of long-range/strategic management and will be able to develop, implement, assess, and refine a strategic plan in a business setting.

Organizational Change: Each student will be able to systematically diagnose an organization's environment and operations to identify needed changes and to develop plans to successfully implement those changes in ways that achieve the organization's goal(s).

International/Global: Each student will have an understanding of global influences on business decisions/plans and/or develop plans for managing a business in a global environment.

Workgroup Functioning: Each student will be able to contribute to the success of his/her workgroup by occupying a leadership role and/or as a team member.

The M.B.A. Program includes an introductory course, business tools courses, core courses, a culminating experience, and elective course work. The tools courses generally precede the core courses. The culminating experience is generally taken after all required courses have been completed. The M.B.A. Program assumes some fundamental knowledge and competencies related to business. Individuals who were undergraduate business majors would most likely have had these as part of their program. The prerequisite areas that must be satisfied are: accounting—financial, finance, statistics and U.S. business law. In addition, for those who were not business majors, the following two areas are strongly recommended: marketing and production and operation management.

Major: A. Project Management

Concentration of Study: Project Management.

Graduation Requirements: A minimum of 36 units is required, 12 from each of the following categories, Basic courses, Electives, and Area of Concentration. Students must also makeup for any background deficiency by taking additional courses even if 400 level courses may be used as elective units. A grade of "B-" or better must be earned in all basic courses and area of concentration, and a grade of "C-" must be earned for all elective courses. GPA 3.0 or better is required, and students must be in good standings with the university. After fulfilling the requirements stated above, the student may file a petition for graduation and if approved, may graduate.

Master Project/Thesis: Students interested in doing research and development work may choose to do a 3-unit master's project or 6-unit master's thesis to earn elective units. Students should pay attention to the requirements for completing the project/thesis.

Repeat: A student unable to complete the project/thesis in the semester he/she is enrolled in the course is required to continue to enroll in the course the following semester until completion of the project/thesis. Upon completion of the project/thesis, the student or the project team is required to submit a project/thesis report, following the university's project report guide, to the project advisor for approval before submitting it to a technical writer for editing. The student or the project team must also arrange an open-forum presentation to share the work experience with other students.

Grade: The student receives a "P" or letter grade for satisfactory performance and earns the credits, or an "NP" grade for unsatisfactory performance without earning credit in each semester the project is being conducted. Letter grades issued by the advisor are acceptable. Extra credits earned for repeatedly taking the project/thesis cannot substitute for other course requirements.

Electives: Students select 24 units of elective credit to complete their MBA program. Any course offered in conjunction with the MBA program with the exception of those otherwise required or waived is considered an elective.

Herguan typically offers a many electives within an academic year. New courses are continually being developed. Please contact the Registration Office of Herguan for information on new electives scheduled after this catalog was finalized.

Changes in Degree Requirements

HGU policies and requirements are subject to change, and changes may not be immediately reflected on campus websites or publications. New degree requirements, however, will not imposed retroactively on continuing students unless agreed upon by the students. If degree requirements are changed, students may complete their degree programs under the requirements in effect at the time of their initial enrollments (readmission, if key have discontinued degree status). They have the option of electing to be governed by the new requirements if they are so desired and provide that all requirements of one catalog are met.

MBA Background Preparation

Students admitted to the MBA degree program are required to have proper business background preparation for taking the graduate level coursework. The student must clear all deficiencies before being allowed to take the degree required courses. A student with deficiency in any required background subject must clear it by either:

1.) Taking courses for credits at HGU and earning a grade of at least C- or higher or
2.) Taking and passing the appropriate preparatory module of studies. With advance approval by the academic Council, the student may be allowed to take Challenge exams to clear his/her background requirements. The following are the required background subjects:

A. Management and Business Law (MGT310, MGT 451,MGT 481, MGT501, MGT 506, MGT 510, MGT515, MGT530, MGT540, Law 410)
B. Marketing
C. Quantitative Analysis and Information Technologies

MBA Curriculum

The MBA program requires a minimum of 36 semester units of graduate study. A maximum of four 400 level courses are allowed to count towards graduation credits. Before the student takes any one of the courses below he/she must meet the prerequisite requirements.

1.) Basic Courses (12 credits)

The basic courses provide a base for interdisciplinary business theories and techniques and decision-making methodology. A student must take the following courses to complete the required graduate course requirement:

MGT501 Human Resources Management
BUS510 Quantitative Methods for Business
MGT506 Production and Operations Management
FIN510 Financial Management

2.) Area of Concentration (12 credits)

To ensure students are competent in an area, a student must select an area of concentration and complete at least 12 credits in this chosen concentration area besides taking the required graduate courses.
Note: The concentration courses must not overlap the courses taken for the basic requirements.

Area of Concentration: Project Management

(Prerequisites: Advanced graduate standing)
Required courses:
MGT510 Project and Risk Management
MGT515 Supply Chain Management for E-Business
MGT530 Managing for Quality Improvement
MGT540 International Business Management

Select two other graduate courses in this concentration area.

3.) Electives (12 units)

Students may elect graduate-level courses 400 or 500-level, and higher courses in any discipline as electives to meet the elective requirements.

Mezzanine Courses for program requirement - Students admitted with a background deficiency in organizational behavior and management must take the course of MGT451 Organizational Behavior and Management course and those with a deficiency in Entrepreneurship and Venture Business must take "MGT481 Entrepreneurship and Venture Business " course at HGU. Credits earned can be counted as elective credits towards the MBA graduation requirements.

a. Area A (Project Management): MGT451

MBA TOTAL REQUIREMENTS (36 credits)

MBA COURSE DESCRIPTIONS

FIN510 Financial Management (3.0 credits)
This class teaches students to apply the essentials of financial accounting to the practice of management. Students will understand the definition, behavior, concepts, and estimation of cost; and also about how cost accounting is applied in manufacturing and service organizations, the principles of planning and control for cost-related management, cash flow statements, capital budgeting, and how to analyze financial statements.
Prerequisite: FIN310 or Instructor's Consent

FIN520 Investments (3.0 credits)
This course will cover the basis of investment and how to manage it. Students will be taught about theory and empirical evidence, related to market efficiency, portfolio theory, assess pricing models, factor models, and option pricing theory. Students are taught to combine market research results and electronic information sources to create investment strategies.
Prerequisite: FIN 510

LAW410 Introduction to Business Law (4.0 credits)
This course is an introductory-level course for students interested in U.S. business law. The course will prepare students in spotting potential legal issues in the operation of businesses so they can operate legally and know when to consult an attorney before taking action. The course begins with an overview of the U.S. legal system, its fundamental structures and processes. Emphasis is placed on the increasing role of administrative agencies, as well as on basic contract law principles. Students will also be exposed to several substantive areas of law affecting business.
Prerequisite: Instructor's Consent

MBA598 Master's Project (3.0 credits)
This course is designed to develop student's research abilities. The student or project group will conduct the project under the close supervision of a project advisor. The research and development approach must employ up-to-date information and methodologies. Students are required to: 1.) Make decisions on the

subject and formulation of the objective, 2.) Plan the research and development procedures and practical approach, 3.) Set a time table and operation instructions, and generate a proposal, 4.) Carry out their plan 5.) Exam and write a report regarding the results at the end. The project advisor must approve the project topic and proposal. The format of the report must be in accordance with HGU's project style guide and be approved by the advisor and tech writer.
Prerequisite: Advisor's approval

MBA599A Master's Thesis - I (3.0 credits)
This is the first part of a 2-part master's thesis course designed for students in the Business Administration program who plans to pursue his/her research interests on a deeper level. Each part requires one trimester to complete half of the entire project work. In this first part, the advisor will assist the student in identifying the research topic, shaping research ideas, and defining the research objectives and scope. The student then performs the following: topic studies, defining the project objectives and procedures, writing a project proposal and submitting it to the administration after obtaining his/her advisor's approval, working on research and implementation of the project, and documenting findings. Students are required to meet with the advisor regularly.
Prerequisite: Advanced graduate standing

MBA599B Master's Thesis - II (3.0 credits)
This is the second part of the master's thesis course. At the beginning of the semester, the student should draw a conclusion on the research and development work for the project and begin to write a thesis report. The student should make and analyze the project work and results. This way, the student will gain in depth knowledge of the selected subject and develop independent thinking and research capabilities. The advisor and a tech writer must approve the report. Upon completion of the project, the student is required to conduct an open-forum presentation of the project.
Prerequisite: MBA599A

MBA 600 Case and independent study (3.0 credits)
Independent studies tailors to student special interest in business administration under the direction of an instructor who is knowledgeable in the field. It may consist of reading, homework, tests, projects or presentations determined by the instructor.

MGT310 Principles of Management (4.0 credits)
Students who take this course will learn the foundations and basic skills of management. Specifically, students learn organizational structure and environment, and develop skills in setting objectives in planning, leading, organizing, decision-making, controlling and motivating, communication and negotiating, and managing information for decision making. SAP R/3 may be introduced as demo software.
Prerequisite: instructor's Consent

MGT451 Organizational Behavior and Management (3.0 credits)
Students who take this course will explore the complex dimension of organizational behavior including examination of experiential and conceptual approaches to communication, self-awareness, motivation, perception and problem solving. Students explore interpersonal and intrapersonal aspects to learn about the management of change, theories in leadership and organizational issues. Students will participate in real case projects.

MGT481 Entrepreneurship and Venture Business (3.0 credits)
This course teaches students the full range of the entrepreneurial process including the evaluation, development, and creation of a successful business. It will help the potential entrepreneurs and professionals visualize and experience entrepreneurial development. The course explores the entrepreneurial approach to resources such as the development of an organizational structure, financing entrepreneurial ventures, market analysis, and screening venture opportunities. Individuals will experiment and evaluate what it takes to be an entrepreneur including developing the plan for a new business.
Prerequisite: Senior standing and MGT 451 or Instructor's Consent

MGT501 Human Resources Management (3.0 credits)
This course provides students and practicing managers with a comprehensive overview of essential personnel management concepts and techniques. The focus is on essential topics such as job analysis, candidate screening, interviewing, testing, hiring, evaluating, training, motivating, promoting, compensating and their associated legal constraints. Additional topics covered include global HR, diversity awareness and training, and sexual harassment legal requirements. Practical applications such as how to appraise performance and benefits and handle grievances are explored. Additionally, developing independent work teams that foster creativity and innovation will be discussed
Prerequisite: MGT451 or Instructor's Consent

MGT506 Production and Operations Management (3.0 credits)
This course is designed to teach students basic theories about production and operations management. Emphases will be on planning, organizing, controlling, and balancing quantitative aspects and behavioral applications in production/operations management; operations strategy will be the guide for topical integration. The students will learn about basic management processes, resource conversions, and behavioral applications within production/operations. Specific topics include operations management, operations strategies for competitive advantage, forecasting in operations, facility and layout planning, product and process design choices, scheduling, inventory control and quality control. The PP, MM, and QM modules of SAP R/3 will be used as demo software.

Prerequisite: Senior standing or Instructor's Consent

MGT510 Project and Risk Management (3.0 credits)
This course is designed for students who are interested in pursuing the project management area of study. Students will be introduced to the principles of project and program management, followed by the roles of project management, matrix organization and project management techniques, leading students to the efficiently execute and complete projects. Students will also learn how to identify and analyze project risks, and how to reduce or eliminate risk-related factors. These techniques are useful in project proposal development. Methods for ongoing risk assessment and project performance evaluation are included. SAP R/3 may be utilized for hands-on experience.
Prerequisite: MGT 451 or Instructor's Consent

MGT 511 Organizational Behavior (3.0 Credits)
This course focuses on the challenges of managing complex systems. We will explore the leadership and motivational skills relevant to performing as an effective manager, and discuss the different roles associated with managing the individual, the unit, the organization, and the larger system.
Prerequisite: Advanced graduate standing or Instructor's Consent

MGT515 Supply Chain Management for E-Business (3.0 credits)
Students taking this course will learn about applying evolving methods in integrating the process of product distribution and supply chain management using electronic business skills. This course will teach students specific methods that will allow them to profitably and efficiently fulfill customer demand through the Internet.
Prerequisite: MGT506

MGT530 Managing for Quality Improvement (3.0 credits)
This course introduces the principles of quality management to students in the context of organizational and cultural change dedicated to the continuous improvement of products and services. The course will focus on quality control and quality assurance in project execution and ongoing operation environment. Students will learn about quality planning and quality management through hands on practice, including quality plan development and execution, quality management processes and implementation. Many quality management techniques and methodologies will be introduced during the course, and students will be lectured about ISO 9000 and other quality standards.
Prerequisite: MGT451 or Instructor's Consent

MGT540 International Business Management (3.0 credits)
This class teaches students to review the classic five functions of management: planning, organizing, staffing, leading, and controlling. Students will compare managerial practices of many countries. The class will also cover the importance of quality and continuous improvement for gaining a competitive edge. Students will learn practical aspects of management from actual case studies, the strategic considerations for management in the international environment, and the roles of the latest information technologies, including computer networks, decision support systems, telecommuting, and CAD, CAM, CAE.
Prerequisite: Advanced graduate standing or Instructor's Consent

MKT 504 Marketing (3.0 Credits)
This course introduces students to the marketing strategies and tactics that provide competitive opportunities for healthcare organizations. The course focuses on the marketing elements of price, place, product and promotion, concepts that are the basis of constructing and implementing a marketing strategy. Other topics include market research, product strategy, new technology and MD's, branding, multi-cultural marketing and promotional decisions, including crisis communications. The class work includes cases, theory and an independent project.
Prerequisite: Advanced graduate standing or Instructor's Consent.

MKT 541 Strategies Marketing
This course teaches students fundamental concepts and practices in marketing research and data analysis, and use of the data and financial analysis to set strategic positioning strategies. Students will learn both the primary source (such as surveys) as well as secondary sources (Internet, publications, etc.) in research techniques and engage to their own marketing research projects. . Emphasis will be on practical marketing research skills of development and basic analysis mechanism leading to strategic marketing. Although statistical analysis will be covered in the course, quantitative analysis skills will be the main focus. The course also supports an overview of quantitative and qualitative tools for strategic marketing, market segmentation process, strategic positioning, and channel marketing issues. Case studies and marketing requirements reports are required.

School of Engineering

The school of engineering offers the following master's degree programs:

- **Master of Science in Electrical Engineering (MSEE)**
- **Master of Science in Computer Science (MSCS)**

PURPOSE:

The purpose of school of Engineering is to meet the increasing needs of skilled manpower of the country in the field of engineering and information technology. HGU strives to foster and promote an environment conducive to teaching and learning as well as excellence particularly in engineering and information technology. The program, curriculum and courses are designed to prepare students with the necessary skills and knowledge for their careers in business, consulting, marketing, information technology, education and other fields. To achieve these objectives the school always works in collaboration with industries and various agencies so that the programs are consistently relevant to the needs of the industry.

FACULTY:

All Herguan engineering faculty members hold advanced degrees in engineering and science disciplines. They bring real-world experience to the classroom that elevates what the students learn from mere theory to "real-world" knowledge. They understand what a graduate needs to be successful on the job.

OBJECTIVES:

- To develop program of study relevant to industrial and national needs
- To produce skilled graduates in engineering and information technology who can contribute to nation building and wealth creation
- To train graduates who have strong fundamentals in relevant areas but at the same time are competent in his or her chosen field of study
- To equip the students with the necessary knowledge and skills in problem solving and analytical thinking
- To expand and broaden knowledge by means of research in engineering and information technology

GRADUATION REQUIREMENTS

The following minimum requirements must be fulfilled to qualify for graduation:

1. A minimum of 36 credits of graduate-level course work for all master's degree programs.
2. Check with your adviser for any additional coursework that may be required for a student whose undergraduate program was in a discipline other than the master's degree program.
3. In each master degree engineering program, there are four categories of course requirements:
    1) Required graduate courses
    2) Area of Concentration courses
    3) Courses for breadth of study
    4) Advanced electives

The following are required for graduation:

- A graduate student entered with undergraduate deficiencies must clear the deficiencies in the first few semesters after joining HGU. The student may clear a subject by either taking the course and earning a passing grade or passing a proficiency exam on the subject.

- Earn a grade of "B-" or better in all required and concentration area courses.
- Earn a grade of "C-" or better in all elective courses.
- Maintain overall G.P.A of 3.0 or better
- Maintain good standing with the university

- The student is approved to graduate after filing a petition for graduation courses numbered in 500's and above are graduate courses.

CONCENTRATION AREA AND CAREER PLANNING

Graduate students at HGU who pursue engineering degrees are advised to plan for their studies and choose a concentration area. To declare a concentration area, students must take at least 12 credits from that area. All students are encouraged to seek advises from our career counselor and utilize the online career center.

MASTER'S PROJECT/THESIS

Graduate students who are interested in research and development work may choose to take a 3-credit master's project or a 6-unit master's thesis to fulfill the requirement in either the concentration area or elective course work. The information packages concerning the project/thesis requirements and guidance are distributed to the enrolled students in the project/thesis orientation workshops held twice each semester. The information is also posted on HGU's website in the HGU online service center.

Advisor: A faculty member serves as the project/thesis advisor to offer guidance to the student. The master's thesis course may be registered as a two-part course, taking a total of two semesters to complete. A student unable to complete the project/thesis in the semester he/she is enrolled in the course is required to continue to enroll in the course the following semester until completion of the project or thesis. The student receives either a "P" or letter grade for satisfactory performance and earns the credits or an "NP" grade for unsatisfactory performance without earning credit in each semester the project is being conducted. Extra credits earned for repeatedly taking the project/thesis course cannot substitute for other course requirements.

Repeat: A student unable to complete the project/thesis in the semester he/she is enrolled in the course is required to continue to enroll in the course the following semester until completion of the project/thesis. Upon completion of the project/thesis, the student or the project team is required to submit a project/thesis report, following the university's project report guide, to the project advisor for approval before submitting it to a technical writer for editing. The student or the project team must also arrange an open-forum presentation to share the work experience with other students.

Grade: The student receives a "P" or letter grade for satisfactory performance and earns the credits, or an "NP" grade for unsatisfactory performance without earning credit in each semester the project is being conducted. Letter grades issued by the advisor are acceptable. Extra credits earned for repeatedly taking the project/thesis cannot substitute for other course requirements.

Electives: Any course offered in conjunction with the MSEE/MSCS program with the exception of those otherwise required or waived is considered an elective. Total 24 units of elective credits need to be completed for their MSEE/MSCS program.

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING (MSEE):

BACKGROUND PREPARATION

Students admitted in to the MSEE degree program are required to have the following Background preparation. A student with any deficiency is required to clear it by either (1) taking the course at HGU and earning a grade of at least C or higher or (2) taking and passing a Challenge exam on the subject. The student is advised clear all deficiencies before attempting to enroll in graduate level courses.

1. ELECTRICAL ENGINEERING SUBJECTS:

- Circuit theory and analysis (EE390, EE410)
- Digital circuits and logic design (EE440)

2. COMPUTER SCIENCE SUBJECTS:

- Programming language and logic (CS404); Students choosing Embedded Engineering concentration also require a background in CS460.
- Unix/Linux operating system (CS430); Students choosing Embedded Engineering concentration also requires a background in CS480.

3. MEZZANINE COURSE: (Students with a back ground deficiency can take these courses and earn graduate credits)

- EE505

MSEE Curriculum

A minimum of 36 semester units of graduate study is required for the MSEE Program. A maximum of four 4xx courses (400 level courses with a designation taken as elective courses) are allowed to count towards graduation credits. The student must meet prerequisite requirements when taking any of the following courses.

1.) Basic Courses (12.0 Credits)

The required courses emphasize understanding the mathematics and modeling Techniques for circuits and other engineering systems, and the design of Modern Computers. A student must take the following two courses to complete the required Graduate course requirement. These two courses cannot be used to meet concentration course work requirements.

EE511 Advanced Engineering Analysis
EE514 Advanced Computer Organization and Structure
EE552 Application Specific Integrated Circuit Design
EE575 Image Processing and Applications

2.) Area of Concentration (12.0 Credits)

To ensure students are competent in an area, a student must select an area of concentration and complete at least 12 credits in this chosen concentration area besides taking the required graduate courses.
Note: The concentration courses must not overlap the courses taken for the basic requirements.

Area A, Chip Design and VLSI
Required Courses:
EE515 Digital IC Design
EE526 Advanced Digital IC Design
EE537 Analog/Mixed Signal IC Design
EE548 VLSI Physical Design-Place and Route

3.) Courses for Breadth of Study (6.0 Credits)

The student is required to take at least 6 Credits in graduate course work outside the chosen concentration area to broaden his/her knowledge in one or two application areas. For example, a student choosing the chip design and VLSI concentration is encouraged to select one or two courses in the DSP applications

such as the course EE580.Courses for breadth of study may be at 400 level with a designation or 500 level and above. The student must observe the limits on the number of 400 level courses with a designation.

4.) Electives (6.0 Credits)

The student may elect graduate-level courses in any discipline, in or outside the Chosen concentration area, to meet the elective requirements. Elective courses May also include mezzanine courses taken to meet the background requirements For the chosen concentration area. The student must observe the limits on the Number of 400 level courses with a designation.

Mezzanine Course For Program Requirement

Students admitted with a background deficiency in microprocessor structure may Take the course "EE505 Microcomputer Structure and Programming" at HGU. Credit earned can be counted as elective credit towards the MSEE graduation Requirements.

* Other Background Requirements For The Concentration Area:

Each concentration area requires certain 400 level background courses. Students May earn credit towards the degree, if observing the limit for the number of 400Level courses for the program, by taking these courses, such as EE455, EE460, and EE471.

MSEE TOTAL REQUIREMENTS (36 credits)

MSEE COURSE DESCRIPTIONS

EE390 CIRCUIT THEORY-I (3.0 Credits)

This course is the first of a 2-part series on the fundamentals of electrical circuits. Topics include analysis of circuits containing resistors, capacitors, inductors, and controlled sources; Kirchoff's Laws; simple resistive circuits; node-voltage method, mesh-current method; Thevenin's and Norton's theorems; operational amplifier and its applications; transient analysis of first and second order circuits, and SPICE simulation.

Prerequisite: instructor's consent

EE410 CIRCUIT THEORY-II (3.0 Credits)

This course is the second of a 2-part series on electrical circuits that covers advanced topics, including sinusoidal steady-state circuit analysis using phases, power calculations in AC circuits, balanced three-phase circuits, Laplace transform and its application in transient circuit analysis, frequency select circuits and filters, Fourier series and Fourier transforms, and two-port networks.

Prerequisite: EE 390

EE422 ANALOG CIRCUIT DESIGN (4.0 Credits)

This course provides students with the opportunity to use the knowledge and experience acquired in previous circuit courses to further understand the design accept of analog circuits and conduct analysis and design of differential amplifiers, current mirrors, frequency response of electronic circuits, feedback circuit analysis, output stages, integrated circuits, filters and oscillators.

Prerequisite: EE410

EE440 LOGIC DESIGN (4.0 Credits)

This course is intended to provide the students the opportunity to use the knowledge and experience acquired in previous digital circuit courses to further understand the design aspect of digital integrated circuits and devices. Hands-on design experience is provided in digital and logic circuits and their applications. The course focuses on various logic design techniques to design a variety of combinatorial and sequential circuits. Timing considerations are analyzed for asynchronous and synchronous circuit designs with emphasis on state machine design approaches. Students will be introduced to modern design techniques using HDL languages and concentration on verification of circuit designs. Simulation tools include Alters MAX + plus II, Xilinx various projects.

Prerequisite: Instructor's consent

EE455 SIGNALS AND SYSTEMS (3.0 Credits)
This course is an introduction to basic concepts and principles of signals and systems. Both analog and digital signal processing techniques will be covered. Topics include analog signals and systems, digital signals and systems, LTI systems, Fourier transform, Z-transform, FFT, system stability, digital filter design, Network. Matlab software will be used to implement some of the DSP algorithms.
Prerequisite: Instructor's consent

EE460 DIGITAL SIGNAL PROCESSING (3.0 Credits)
This course is a study of the concepts in deterministic and statistical techniques for describing, analyzing, and characterizing generic signals and their applications. Topics include signal processing, continuous and discrete Fourier analysis, and fundamentals of methods. Additional coverage includes the fundamentals of the algorithms and computational methods for digital FIR/IIR filter design and basic signal analysis techniques. Simulation exercises using Matlab / C Language are required.
Prerequisite: EE455

EE471 VERILOG HDL AND DIGITAL DESIGN (3.0 Credits)
This course develops the students' ability to design the basic building blocks of modern digital systems and provides them with a fundamental knowledge of the state-of-the-art design methodology, design considerations, and verification strategies for complicated digital hardware design. Topics include Verilog HDL basics, simulation, Synthesis of digital systems using Verilog HDL. The students practice using the tools for design projects on UNIX system or Windows system. Mentor Modelsim for HDL Simulation, Cadence Verilog-XL, and Silo III Verilog Simulator from SimuCAD are available in the Labs. Hands-on practices are required.
Prerequisite: EE440

EE480 APPLICATIONS OF OPERATIONAL AMPLIFIER AND ANALOG INTEGRATED CIRCUITS (3.0 Credits)
This course emphasizes board level analog circuit analysis, design, and simulation. Topics include fundamentals of operational amplifier and its applications, active filters, stability of the feedback circuit, linear and switching regulator, and phase lock loop. Pspice and off-the-shelf analog IC are used by the students for circuit design and design verification. Hands-on practices and projects are required.
Prerequisite: EE422

EE505 MICROCOMPUTER STRUCTURE AND PROGRAMMING (3.0 Credits)
This course is designed for the students to learn microprocessor architecture and gain hands-on experience with at least one popular microprocessor. Topics include microprocessor architecture and development tools - using a popular microprocessor for case study, programming with ASM/C for exercises; instruction set, hardware feature, I/O and timer, interrupt, and a survey of other microprocessors. Hands-on experience in microcomputer programming and applications through laboratory projects is required.
Prerequisite: EE440

EE510 MICROCONTROLLER INTERFACES AND APPLICATIONS (3.0 Credits)
This course is designed for students to get practice in microcontroller-based digital systems design with emphasis on interfacing and data processing. Topics include interfacing, A/D and D/A conversions, data acquisition, input devices, output devices, displays, and application firmware programming. This course is project heavy and students will complete projects, including documentation, prototyping, demonstrations of functionality, presentation, and implementation evaluation.
Prerequisite: EE440

EE511 ADVANCED ENGINEERING ANALYSIS (3.0 Credits)
This course is designed to provide graduate students in Electrical Engineering with the mathematics background and modeling techniques needed to analyze electronic circuits and other engineering systems used in contemporary engineering and technology. In addition, methods will be introduced to describe and

analyze systems of importance in emerging technologies, e.g. nanotechnology. Analytical, numerical, and computational approaches will be used. The emphasis throughout this course will be on applications. Topics will include: probability, stochastic methods, Monte Carlo simulation, Laplace transform, Dirac delta function, Orthonormal functions, Fourier analysis, Z transform, partial differential equations, the importance of nanometer length scale, Schrödinger wave equation, quantum tunneling, and application of wave functions in nanotechnology.
Prerequisite: Instructors consent

EE514 ADVANCED COMPUTER ORGANIZATION AND STRUCTURE (3.0 Credits)
This course is designed to further investigate modern computer design. Topics include an in-depth study of multiprocessor architecture and interconnection networks, pipeline, data flow, algorithm structures, memory system design, cache memory design, and a comparison of the performance and design among various computer architectures. Hands-on project experience is required
Prerequisite: EE505

EE515 DIGITAL IC DESIGN (3.0 Credits)
This is the first of the VLSI design series. The course begins with an introduction to state-of-the-art CMOS VLSI engineering with emphasis on the basic CMOS VLSI design principles and methodologies. Topics include basic MOSFET theories and characteristics, CMOS semiconductor fabrication processes, sub-micron design rules, combinational and sequential CMOS logic gate design styles, data path, interconnection, power and clock distribution, array and memory design. Widely used industry standard tools, such as Cadence's Opus, Composer, Virtuoso, Avant's HSPICE and Mentor's Calibre will be used for all homework assignments and design projects.
Prerequisite: Instructor's Consent or EE440

EE526 ADVANCED DIGITAL IC DESIGN (3.0 Credits)
This course is a continuation of the course EE515 and is designed to cultivate student's ability to design a Standard Cell Library, Data path and other special circuits that can be used as intellectual properties (IP) building blocks for ASIC, SOC (system on chip) and DSP (digital signal processing) applications. In addition to the design subject, students also learn how to generate different views of the circuits to facilitate system integration with various CAD tools for logic synthesis and physical implementations. Topics include standard cell design and characterization, technology mapping, design rules, layout, data path synthesis, memory compiler, IP development and architecture trade-off. Modern CAD tools such as Synopsys, OPUS, Composer, Virtuoso, HSPICE and Mentor's Calibre will be introduced and used for homework assignment and projects.
Prerequisite: EE515

EE537 ANALOG/MIXED SIGNAL IC DESIGN (3.0 Credits)
This course is designed to cultivate the student ability to design comes analog integrated circuits. Topics include review of opamp networks, frequency response to Linear integrated circuits, level sensing amplifiers, phase detectors, voltage controlled oscillators, charge pumping techniques, and A/D,D/A converters, HSPICE, are used for assigned homework and projects.
Prerequisite: EE526

EE548 VLSI PHYSICAL DESIGN-PLACE AND ROUTE (3.0 Credits)
This course is the third in the VLDI Design series and it introduces ASIC place and route. The course introduces the students to state-of-the-art physical design automation tools and techniques. Topics include design flow, library review, tool graphical interface, floor planning, power planning, timing driven placement, static time analysis (STA), CT-Gen, special routing, final routing, engineering change order (ECO), and run batch mode jobs. Hands-on exercises and projects are required.
Prerequisite: Senior standing or Instructor's Consent

EE552 APPLICATION SPECIFIC INTEGRATED CIRCUIT DESIGN (3.0Credits)
This course is designed for students who intend to become logic designers using HDL based design methodologies. Topics include ASIC/CPLD/FPGA Library modeling, Cell characterization, static timing analysis, place and route algorithms design for testability, fault modeling, industry standard formats for

design information interchange, and a survey of the most popular EDA tools. Industry grade design tools such as Synopsys Design Compiler, Cadence Verilog-XL, Synopsys Design Time (under dc_shell), Synopsys Prime Time, Cadence Silicon Ensemble, Mentor Calibre LVS/DRC, and Synplicity Synplify are used for homework assignments and projects
Prerequisite: EE471

EE555 HIGH-SPEED DIGITAL SYSTEM DESIGN (3.0 Credits)
This course offers the concepts of advanced technology in high-speed digital system design. It focuses on the issue of signal integrity, which is most critical in such system design. Topics include an overview of digital system engineering, modeling and analysis of interconnections, circuit analysis, power distribution in high-speed systems, noise in high-speed digital systems, Buffering model, digital timing analysis, and design methodologies.
Prerequisite: EE410

EE566 POWER/SIGNAL INTEGRITY IN ADVANCED IC PACKAGING AND PCB DESIGN (3.0 CREDITS)
This course is an extension of the subjects covered in EE555.It covers the concepts of advanced Technology in high-speed digital system design with emphasis on the applications of advanced
PCB and high-speed packaging design. The course objective is to develop the students' abilities to work on high speed PCB and packaging design.
Prerequisite: EE555

EE571 DATA COMPRESSION (3.0 Credits)
This course surveys current image, data and voice compression standards and studies key components in image, data and voice compression. The course emphasizes minimum redundancy coding, Huffman coding, arithmetic coding, statistical modeling, dictionary-based compression, sliding window compression, LZ78 compression, speech compression, lossy graphics compression, JPEG, wavelet methods, and archiving package. Matlab programming will also be introduced.
Prerequisite: EE460

EE575 IMAGE PROCESSING AND APPLICATIONS (3.0 Credits)
This course offers the fundamentals of image processing. Besides introducing basic concepts and principles, the course takes a practical approach to emphasize various applications of digital image processing. Topics include image fundamentals, image transformations, image enhancement image restoration, information technology, data compression, image segmentation, image presentation and pattern recognition and interpretation. Matlab software is employee for implementing numerous algorithms.
Prerequisite: EE571

EE580 DIGITAL SIGNAL PROCESSOR DESIGN AND IMPLEMENTATION (3.0 Credits)
This course is designed to give advanced graduate students in engineering a thorough examination of all the design considerations of fixed-point (integer) digital signal processors as well as develop their abilities to design a general fixed-point digital signal processor. Topics include a review of general DSP algorithms (FIR, IIR, DFT, IDFT, DCT, IDCT, wavelet), processor architectures, address generation schemes, memory structures, instruction set definition and encoding, single and multiple instruction repetitions, and minimum and maximum searching. Students will design a 16-bit fixed-point digital signal processor that requires incorporation of all design considerations taught in this course.
Prerequisite: EE526

EE585 INTRODUCTION TO NANOTECHNOLOGY (3.0 Credits)
This course is a general introduction to nanotechnology, open to all graduate students. The course will begin with an overview of the field of nanotechnology. The following general areas of nanotechnology, illustrating the scope and depth of the field, will be introduced: electronics and systems, life sciences and medicine, materials and technologies, and business and ventures. Within these general areas, specific topics will be introduced, at a basic level, including: nano electronics, photonics, fabrication, and systems; biosensors, nanotechnology in health and medicine; imaging; nano materials and devices, energy technology and applications, environment and society, nanoscale characterization; business, investment,

and intellectual property. Extensive use will be made of audio-visual presentations. The course will include class field trips to nanotechnology companies and research laboratories in the San Francisco Bay Area.
Prerequisite: A general knowledge of the sciences or engineering or business

EE590 ELECTRONS, PHOTONS, AND NANOTECHNOLOGY (3.0Credits)
Electrons and photons play a key role in nanotechnology. This course introduces the basics of the application of electrons and photons to nanotechnology. Topics include: Introduction and motivation. Why are electrons and photons so important in nanotechnology? The electron: basic electron properties, electrons as waves and their description and application. The photon: basic photon properties, particle and wave aspects. Hands-on computer simulation in nanotechnology, introduction to instruments and techniques, dedicated to the characterization and manipulation of nanostructures, exploiting the basic properties of electrons and/or photons. Electron interactions, application of electron properties in microscopes to study nano devices, application of electron spin property in function of nano devices, photon interactions. Using of photon properties in microscopes to study nano devices, including photon spin property. Combined use electrons and photons to study non-volatile memory devices, impacting on the storage device industry. The course will include class visits to nanotechnology companies, and to state-of-the-art nanotechnology centers at the national research laboratories and universities in the San Francisco Bay area.
Prerequisite: EE585

EE597 Master's Project
This course is designed to develop the creativity of graduate students in Electrical Engineering. Students will design a project under the close supervision of a project advisor from the engineering faculty. The design project must be open-ended, and the design approach must employ modern design techniques and methodologies. Completion of the design project entrails: 1.) Formulation of a design problem statement including realistic constraints such as economic factors, safety, and reliability issues, 2.) Design specifications 3.) Consideration of alternative solutions 4.) Manufacturing procedures, and 5.) Operation instructions. The project advisor must approve the research topic and proposal. The project advisor and tech writer must approve format of the report. Upon completion of the project, the student is required to conduct and open-forum presentation of the project.

EE599A Master's Thesis - I
This is the first part of a 2-part master's thesis course designed for a graduate student in the Electrical Engineering program who plans to pursue his/her research interests in depth. Each part requires one trimester's effort to complete half of the entire project work. In this first part, the advisor will assist the student to identify the research topic, shape research ideas, and define the research objectives and scope. The student then performs the following: topic studies, identifying software and/or hardware requirements, defining the project objectives and procedures, writing a project proposal and submitting it to the administration after obtaining his/her advisor's approval, working on research and implementation of the project, and documenting findings. Regular meetings with the advisor are required.

EE599B Master's Thesis - II
This is a continuation of the first part of the master's thesis course. At the beginning of the semester, the student should draw a conclusion on the research and development work for the project and begin to write a thesis report following the required format. The student should make and analysis of the project work and results. Through this process, the student will gain in-depth knowledge of the selected subject and develop independent thinking and research capabilities. The advisor and a tech writer must approve the report. Upon completion of the project, the student is required to conduct an open-forum presentation of the project.

EE614 ADVANCED VLSI PHYSICAL DESIGN-PHYSICAL SYNTHESIS AND LOW POWER DESIGN (3.0 Credits)
This course is designed to further investigate ASIC front-to -back design automation. The course aims to develop the students' design ability in ASIC by using state-of-the-art EDA backend design tools and

methodology (such as Cadence SE-PKS). It also introduces concepts in advanced industrial deep sub micro backend design. Topics include library review, floor planning in SE, physical synthesis, CTPKS, timing closure, RCextraction, back annotated from back to front, non-default routing rule implementation, double-cut-via implementation for 0.13u and below technology, shielding, and route. Hands-on practices are required.
Prerequisite: EE548

EE681 MAGNETORESISTIVE RANDOM ACCESS MEMORY (3.0 Credits)
This course is intended for advanced graduate students of electrical engineering. In this course the specific example of a leading candidate for next generation non volatile memory MRAM storage cell devices. Topics will include multilayer Magnetic nanostructures, exchange bias, Ferro magnet and anti Ferro magnet materials, magnetic domains, magnetic thin films, ultra fast manipulation of magnetization in the multilayer magnetic nanostructure by spin polarized electron currents and magnetic circular dichroism techniques.
Prerequisite: instructor's consent

Master of Science in Computer Science (MSCS)

BACKGROUND PREPARATION

Students admitted in to the MSCS degree program are required to have the following background preparation. A student with any deficiency is required to clear it by either (1) taking the course at HGU and earning a grade of at least C-or higher or (2) taking and passing a Challenge exam on the subject. The student is advised to clear all deficiencies before attempting to enroll in graduate level courses.

1. ENGLISH/COMMUNICATION:

- English communication (one of the following: CS397or a college English course);

2. COMPUTER SCIENCE SUBJECTS:

- Programming languages and Data structures (CS404, CS460);
- Operating systems (CS430, CS480);

3. ELECTRONIC SUBJECTS:

- (EE390, EE410);

4. MEZZANINE COURSES:

(Students with a background deficiency can take these courses and earn graduate credits)
- Database Design (CS517)
- Computer networks (CS520)

MSCS CURRICULUM

A minimum of **36 semester units of graduate study** is required for the MSCS program. A maximum of four (4) 4xx courses (400 level courses with a designation taken as elective courses)
are allowed to count towards graduation credits. The student must meet prerequisite requirements when taking any of the following courses.

1.) Basic Courses (12.0 credits)

The required courses emphasize understanding of (1) the principles and architecture of Computer networks and (2) the design of modern operating systems. A student must take the following two courses to complete the required graduate course requirement. These two courses cannot be used to meet concentration coursework requirements.

CS501 Computer Architecture
CS517 Database Design
CS533 Advanced Computer Networks
CS536 Operating System Design

2.) Area of Concentration (12.0 credits)

To ensure students are competent in an area, a student must select an area of concentration and complete at least 12 credits in this chosen concentration area besides taking the required graduate courses.
Note: The concentration courses must not overlap the courses taken for the basic requirements.

Area A. Internet Technology and Digital e-Business Systems

Required courses:

CS550 NET Web Programming
CS562 Advanced Java Programming
CS532 Software Engineering
CS560 Algorithms

3.) Courses for Breadth of Study (6.0 credits)

The student is required to take at least 6 units in graduate course work outside the chosen Concentration area. The courses may be at 400 level or 500 level And above. The student must observe the limits on the number of 400 level courses with a designation.

4.) Electives (6.0 credits)

The student may elect graduate-level courses in any discipline, in or outside the chosen Concentration area, to meet the elective requirements. Elective courses may also include Mezzanine courses taken to meet the background requirements for the program and/or for the chosen concentration area. The students must observe the limits on the number of 400 level courses with a designation.

Mezzanine Courses for Program Requirement

Students admitted with a background deficiency in (1) database design and/or (2) computer networks must take the courses (1) "CS517 database design" and/or (2)" CS520 computer networks" at HGU. Credit earned can be counted as elective

* Other background requirements for the concentration area:

Each concentration area requires certain 400 level background courses. Students may earn credit towards the degree, if observing the limit for the number of 400 level courses for the program, by taking the courses such as CS530.

MSCS TOTAL REQUIREMENTS (36credits)

COMPUTER SCIENCE COURSE DESCRIPTIONS

CS 430 INTRODUCTION TO UNIX/LINUX (4.0 Credits)

This course is designed to familiarize the students with the UNIX/Linux environment. Topics include concepts of the UNIX/Linux operating system, Shell commands, Visual editor, file manipulation and securities, UNIX utility commands, Shell features and environment, online manual, controlling user processes and managing jobs, introduction of Regular Expression and its usage with grep, sed, and awk UNIX power utilities, basic Shell programming techniques, large file management, and the user programming environment customization. Hands-on exercises are required.

Prerequisite: CS350

CS 460 OBJECT- ORIENTED PROGRAMMING IN C++ (3.0Credits)

This course is designed to develop the students' abilities to design, code, and document application programs using object-oriented design and analysis concepts and methodology. Emphasis is on establishment of design objectives, criteria and specifications, processes of synthesis, analysis, construction, testing, and evaluation of open-ended problems. Topics include an introduction to general object-oriented programming as implemented in C++, data types, expression, statements, functions, program scope, run-time memory allocation, function overloading, template functions, class mechanism, derivation, inheritance, and migration from C to C++. Labs may accompany lectures in partial class meetings during the semester. Hands-on exercises are required.

Prerequisite: CS404

CS 480 INTRODUCTION TO OPERATING SYSTEMS (3.0 Credits)

This course is designed to introduce students to basic concepts of modern operating systems, topics include processes, threads, microkernel, concurrency, memory management, file system. Hands on exercises are required.

Prerequisite: CS350

CS 501 COMPUTER ARCHITECTURE (3.0 Credits)
This course focuses on the techniques of quantitative analysis and evaluation of modern computing systems, such as the selection of appropriate benchmarks to reveal and compare the performance of alternative design choices in system design. The emphasis is on the major component subsystems of high performance computers: Pipelining, instruction level parallelism, memory hierarchies, input/output, and network-oriented interconnections. Students will undertake a major computing system analysis and design project of their own choosing.
Prerequisite: Instructor's Consent

CS 517 DATABASE DESIGN (3.0Credits)
This is the first of a series designed to teach relational database concepts, design, and applications. Topics include database architecture, relational model, structured query language (SQL), data manipulation (DML), data definition language (DDL), database design, ER modeling, database normalization, renormalization, and physical database design. Popular database systems, such as Oracle and Microsoft SQL server, are used for hands-on exercises and projects.
Prerequisite: CS404 or Instructor's Consent

CS 520 COMPUTER NETWORKS (3.0Credits)
This course is designed to give students a global picture of computer networks. Topics include network layered models (OSI, TCP/IP), data communication basics, circuit switching, packet switching, routing and internetworking. Hands-on exercises are required.
Prerequisite: CS480

CS 530 JAVA PROGRAMMING AND INTERNET APPLICATIONS (3.0Credits)
This course introduces students to the Java language, programming with object-oriented construct, GUI design and graphics programming and core Java libraries. Students will learn Java language basics such as syntax and classes, inheritance, interfaces, reflection, graphics programming, event handling, user-interface components with Swing, Java applets, exception handling, stream, and files. Hands-on exercises are required.
Prerequisite: CS460

CS 532 SOFTWARE ENGINEERING (3.0Credits)
This course is designed to demonstrate the engineering approach to the development of large, high-quality software projects. Topics include software life cycle, development process, requirement specifications, design and testing techniques, verification and validation, and software management. Students learn to use project management tools, principles, and environment to facilitate development of software programs/systems. Hands-on exercises and projects are required.
Prerequisite: CS460

CS 533 ADVANCED COMPUTER NETWORKS (3.0 Credits)
This is the sequel to CS520, Computer Networks, and is designed for an in-depth study of computer networks. Emphasis is on modern Internet technologies and implementations. Topics include a review of computer networks, OS reference model, a study of emerging Ethernet technologies (Fast, Gigabit), client and server implementation with socket programming, local and wide area networks, TCP/IP, routing, network protocol and architecture, Internet protocol, and IP addressing. Projects are required.
Prerequisite: CS520

CS 536 OPERATING SYSTEM DESIGN (3.0 Credits)
This course offers graduate students an in-depth understanding and hands-on experience in modern operating system design and implementation. Topics include process, memory, file system, I/O, deadlocks, case studies of operating system implementations, modern distributed and network system architectures, communication and synchronization in distributed systems, threads and processor allocation, scheduling in distributed operating systems, distributed file systems, and case studies of modern distributed operating system design. Projects are required
Prerequisite: CS480

CS 540 UNIX/LINUX SYSTEM PROGRAMMING (3.0Credits)
This course is designed for students to gain fundamental knowledge of and hands on experience with programming in UNIX Linux environment. Students will learn to program in c with UNIX Linux system calls and other advanced topics such as UNIX file system, process control, signals and inter process communications. Upon completion of this course, students should be able to develop real world unix/linux applications.
Prerequisite: CS430

CS 545 UNIX/LINUX NETWORK PROGRAMMING (3.0Credits)
This course is designed for graduate students to gain hands on experience in unix/linux programming. The students will learn to develop unix/linux network applications using a number of unix/linux network programming interface techniques including sockets, XTI ,RPC. Topics include: an overview of transport layer, TCP sockets, UDP sockets, threads and client server design, XTI, RPC and Streams.
Prerequisite: CS430

CS 550 NET WEB PROGRAMMING (3.0Credits)
This course provides students with the knowledge and skills needed to develop dynamic web-based applications using ASP.NET and gains an understanding of the new architecture behind ASP.NET. Topics include creating ASP.NET pages, creating Web custom controls and Web user controls, using validation controls and composite controls, using ADO.NET to access data from various data sources, configuring and securing a Web application, state management, error handling and debugging, and migrating existing web applications to ASP.NET.
Prerequisite: CS460

CS 557 NET WINDOWS PROGRAMMING (3.0Credits)
The goal of this course is to provide students with the knowledge and skills they need to develop C# applications and components for the Microsoft .NET Platform, including Visual C# .NET Windows application development with Windows Forms and controls; user interfaces and navigation; error handling and debugging; data binding; consuming and manipulating data; components and .NET assemblies; Windows services; Remote; testing and debugging; application deployment and configuration. Hands-on practice is required.
Prerequisite: CS460

CS 560 ALGORITHMS (3.0Credits)
This course provides an in-depth analysis and efficient use of algorithms to solve problems. Well-structured programs are studied; modular, top-down design is emphasized. Topics include the use of data structures techniques to design efficient algorithms and analyze their complexity, efficient implementation of combinatorial algorithms, sorting, searching, and geometric problems, and branch and bound algorithms.
Prerequisite: CS350

CS 562 ADVANCED JAVA PROGRAMMING (3.0Credits)
This course is designed to give the students an in-depth understanding of Java programming techniques. The course focuses on advanced Java language features and packages that are essential for building a variety of application architectures. Topics include Java techniques of WAP, XML, JNI, thread, network programming, Servlet, JSP, JDBC, and internalization. Upon completion of this course, the students should be well prepared to create enterprise-wide, Java-centric solutions to client/server problems involving Java and networks. Each technology topic will cover its uses, implementation, and language issues. Students are required to implement a project for each Java technique. Hands-on exercises are required.
Prerequisite: CS530

CS 570 DATABASE ADMINISTRATION (3.0Credits)
This course provides an in-depth understanding of the Oracle Database Management System. Emphasis is on the latest Oracle database architecture, database configuration and administration. Topics include logical/physical database layout, database server processes, database creation, various database physical objects; client/server configuration, multi-threaded server configuration, database storage management,

database security, database utilities, database monitoring, partitions, and database backup/recovery methods. Hands-on practices are required.
Prerequisite: CS517

CS 577 ADVANCED DATABASE DESIGN AND DEVELOPMENT (3.0Credits)
This course is intended for graduate students to further explore database server development and database tuning. The course specifically details procedural extensions to SQL to develop stored procedures, functions, packages and database triggers. In addition, it covers database performance tuning from application development point of view by exploring query optimizer, database hints, and various database access methods. Hands-on exercises are required.
Prerequisite: CS517

CS 578 DATABASE AND INTERNET SERVER PROGRAMMING (3.0Credits)
This course introduces current client/server data access concepts on the Internet. It covers the fundamental concepts of the 3-tier model, Internet database access, and major tools and techniques utilized in application development. Topics include N-tier model, JDBC with database applications, Java Servlet, JSP and JavaBean, WML, and XML. Hands-on exercises are an integral part of the course.
Prerequisite: CS517

CS 597 MASTER'S PROJECT (3.0 units)
The course is designed to develop the creativity of graduate students in Computer Science through the exercise of the design effort on a self-selected project. The design project must be open-ended, whereas the design approach must employ the modern design techniques and methodologies in the related fields. Completion of the design project entails 1.) Formulation of a design problem statement including realistic constraints such as economic factors, safety, and reliability issues, 2.) Design specifications, 3.) Consideration of alternate solutions, 4.) Manufacturing procedures and 5.) Operation instructions. The project advisor must approve the research topic and proposal. The report format must be in accordance with HGU's Project Style Guide and be approved by the advisor and tech writer. Upon completion of the project, the student is required to conduct and open-forum presentation of the project.

CS 599A MASTER'S THESIS - I (3.0 units)
This is the first part of a 2-part master's thesis course designed for a graduate student the Computer Science program who plans to pursue his/her research interests in depth. Each part requires one trimester's effort to complete half of the entire project work. In this first part, the advisor will assist the student to identify the research topic, shape research ideas, and to define the research objectives and scope. The student then performs the following: topic studies, identifying software and/or hardware requirements, defining the project objectives and procedures, writing a project proposal and submitting it to the administration after obtaining his/her advisor's approval, working on research and implementation of the project, and documenting findings. Regular meetings with the advisor are required.

CS 599B MASTER'S THESIS - II (3.0 units)
This is a continuation of the first part of the master's thesis course. At the beginning of the semester, the student should draw a conclusion on the research and development work for the project and begin to write a thesis report following the required format. The student should make and analysis of the project work and results. Through this process, the student will gain in-depth knowledge of the selected subject and develop independent thinking and research capabilities, the advisor and a tech writer must approve The report. Upon completion of the project, the student is required to conduct an open-forum presentation of the project.

CS 637 XML AND WEB SERVICE DEVELOPMENT (3.0Units)
Markup language (XML) is rapidly becoming the standard information description language, and has been used in almost all areas related to computer and information technologies, such as Internet, semiconductor, bioinformatics, etc. Its usage will continuously grow. Web Services refer to the infrastructure that supports a rapidly emerging style for developing applications that rely on the Internet and WWW for portions of their functionality.
Prerequisite: either java or c#

CS 678 NETWORK SECURITY IN WIRELESS SYSTEMS(3.0Units)

This is the third in the Network Security series. A secure network is the fundamental requirement for network communication. Network security issues have become ever more important for any organization with network systems. This class mainly addresses the security issue in accessing the network, including the security in wireless access. Many new proposals and technology have been developed in this field. The objectives of the class are to teach students the fundamentals in cryptography, the concept of security, and the practical use of virtual private networks (VPN). Topics include IPSec (IP Security), Web Security, VPN, and wireless network security. Some important RFCs will also be covered for the students to understand its development process in the network industry.

Prerequisite: CS533

FACULTY

Zinovy D. Radovilsky, Ph.D.

• Ph.D. in Economics, Concentration in Operations Research and Operations Management, Scientific Research Institute of Labor, Moscow, Russia. 1984
• M.S. in computer sciences, Odessa State University, Ukraine, 1980
• M.S. in Industrial Engineering, Odessa Polytechnic University, Ukraine, 1976
Statistical analysis, forecasting, project management, inventory analysis, quality management, enterprise resource planning

Sam Shueh

• MLIS, San Jose State University, San Jose
• MBA, University of Louisville, KY
• MSE, University of Missouri-Columbia, MO
• B.S. University of Missouri-Columbia, MO
Project management, webpage development, and computer literacy

Ling Li

• MBA in Project Management, Northwestern Polytechnic University, 2006
• Bachelor of Business Administration and Information System, Northwestern Polytechnic University, 2003
• A.A. Degree of Commerce Accounting, Pajadjaran University Bandung Indonesia, 1994
• A.A. Degree of International Trading, Pajadjaran University Bandung Indonesia, 1991
Project management, international trade, and accounting

Sateesh Gudla

• M.S. degree in Electrical Engineering, University of Missouri – Rolla, 2000
• B.E. degree in Electronics and Communication Engineering, Osmania University, 1998
Electrical Engineering, Processors

Chi Iong Ansjory

• M.S. degree in Computer Engineering, University of Southern California, 2000
• B.S. degree in Electrical Engineering and Computer Science, UC Berkeley, 1999
Networking, Software engineering

Min Zhou

• Ph.D. in Chemistry, University of Illinois, Chicago, IL
• M.S. in Computer Science, University of Illinois, Chicago, IL
• B.S. in Chemistry, University of Science and Technology of China, China
Computer Science