

ACCREDITATION AND LICENSURE

The National Commission for Further and Higher Education of Malta (NCFHE) accredited and licensed (License Number: 2016-002) the American University of Malta (AUM). The license permits AUM to deliver academic degree programs at Levels 6, 7, and 8 (Bachelor, Master, and Doctorate) of the Malta Qualifications Framework (MQF). The NCFHE individually accredits all degree programs at AUM.

At the appropriate times AUM will also seek accreditation from international disciplinary accrediting bodies and from a regional accrediting body in the United States.

NOTICE

To keep University policies in compliance, AUM may without prior notice change policies, regulations, procedures, and fees in this Catalog.

The University reserves the right to change curricula, rules, fees, admission requirements, and other requirements without notice. The provisions of this Catalog do not constitute a contract, express or implied, between any applicant, student, faculty member, or any other person, and American University of Malta.

STUDENT DATA PROTECTION

The American University of Malta (AUM) abides by the General Data Protection Regulation (GDPR) of the European Union and the Family Educational and Privacy Act (FERPA) of 1974 as amended of the United States. Appropriate technical and organizational measures are used to protect personal data in accordance with the principles of each law.

The AUM has identified the following student information, under FERPA, as “directory information”: student’s name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, height and weight if a member of an athletic team, dates of attendance, degrees and awards received, and the most recent educational institution attended. This information may be released without the student’s written consent. However, students have the right to restrict the release of directory of information by completing and submitting a Restriction of Directory Information form to the Registrar’s Office located in room 110.

Regular photographs and videos of school events and activities either in university or on outings are taken regularly. These photographs are used in classroom displays as well as for communication purposes, such as school newsletters, the school website, television, newspaper reports and social media coverage. The written consent of the student is required before taking and using photographs/video for any of the above purposes.

Students have the right to access their own official records. The written consent of the student must be received before personally identifiable data is released from the student’s records to any third party other than the exceptions specified below.

AUM is authorized to provide campus officials and employees, who have a legitimate educational interest, access to students’ records. These persons are those who have responsibilities in connection with the academic, administrative, or service functions of the university and who have reason to access student records connected with their academic or other university responsibilities. Disclosure may also be made to other persons or organizations under certain conditions (e.g., as part of an accreditation or program evaluation; as part of an immigration process for international students; in response to a court order or subpoena; in connection with financial aid; or to other institutions to which the student is transferring).

EMPLOYEE AND STUDENT NON-DISCRIMINATION POLICY

AUM prohibits discrimination in terms consistent with Maltese law and American practice, and according to its published policies. AUM is committed to providing its students, faculty, staff, trustees and alumni an environment in which they can pursue their studies, careers, teaching and research free from discrimination. AUM does not discriminate on the basis of gender, sex, race, color, gender identification, gender expression, sexual orientation, religion, creed, national origin, age, veteran status or disability. Retaliation is prohibited by AUM policy. Employees who believe that they have been denied opportunities because of discrimination may file a grievance.

MESSAGE FROM THE PROVOST



Welcome to the American University of Malta (AUM), a dynamic institution located in the island of Malta, in the heart the Mediterranean! The American University of Malta combines the structure and rigor of American higher education with the multicultural environment and exciting opportunities of the European Union. We welcome students and faculty members from around the world in the spirit of the Malta's openness, tolerance, and ambition to achieve greatness. Our inspiring students are the embodiment of the university's motto that "Learn today. Lead tomorrow."

The AUM offers a total of thirteen undergraduate and graduate programs that connect theory to practice and equip students with skills and knowledge that make them ready to join the dedicated industry and be prepared to become leaders in their chosen fields. Our classes emphasize critical and creative thinking, practical skills, and current knowledge. AUM instructors combine professional and academic expertise with a passion for teaching to provide a strong education in a dedicated classroom environment.

The AUM is a welcoming place, so browse our online resources and reach out to me or any office here. We are a young university that offers particular attention and engaging extracurricular activities so students can pursue their passions and develop lifelong friendships. We encourage a diverse student body by encouraging applications from people of all ages, backgrounds, nationalities, and religions, and we motivate students to achieve their dreams.

Join us in a journey of knowledge, learn more, and become a leader of tomorrow.

Prof. Dr. Narcisa Roxana Mosteanu

Provost

ACADEMIC CALENDAR

The Registrar in consultation with the Provost and the Director of Administration will determine the dates of the academic calendar. An annual rolling five-year university academic calendar will be published annually in the university catalog. The regular academic calendar of AUM consists of 16-week fall and spring semesters, and one summer session. AUM may offer courses within the 16-week semesters. However, unless an exception has been approved by the Provost, all courses will end prior to the last day of the examination period for that semester.

American University of Malta		
Fall 2020		
August	18	Placement Tests
August	19	New Faculty Orientation
August	20 -21	Orientation and New Student Course Registration
August	24	First day of Class; Tuition and Fee Payment Deadline
September	7	Last day to Add/Drop
September	8	Victory Day*
September	21	Independence Day*
October	9 - 16	Mid-term Exams
October	20	Mid-term grades due
October	26	Last date to withdraw from a course without grade 'F'
November	9	Registration opens for spring semester
November	26 -27	U.S. Thanksgiving*
December	4	Last Day of Classes
December	8	Immaculate Conception*
December	11 -17	Final Exams
December	13	Republic Day*
December	20	Final exam grades due
December	21	Grade Appeal
December	22 Dec – 11 Jan	Intersession
Spring 2021		
January	12	Placement Tests
January	13	New Faculty Orientation
January	14 -15	Orientation and New Student Course Registration
January	18	First Day of Class; Tuition and Fee Payment Deadline
February	1	Last Day to Add/Drop
February	10	Feast of St. Paul's Shipwreck*
March	12-18	Mid-term Exams

March	19	Feast of St. Joseph's*
March	23	Mid-term Grades Due
March	26	Last Date to Withdraw from a Course without an "F"
March	28 Mar – 10 Apr	Spring/Easter Break
March	31	Freedom Day*
April	2	Good Friday*
April	12	Classes Resume
April	12	Registration opens for summer/fall semesters
May	1	Workers' Day*
May	13	Last Day of Classes
May	14-21	Final Exams
May	22	Commencement
May	25	Grades Available
May	26-29	Grades Appeal

* National and AUM Holidays

AMERICAN UNIVERSITY OF MALTA AT A GLANCE

AUM is a private university founded by Sadeen Education Investment Ltd. The Sadeen Group itself committed to establishing a university on the American model that would deliver a university education of the highest international standards. After high-level discussions, it was determined that the Republic of Malta would be the right location for the university. After a rigorous review process of all aspects of the proposed university, including its planned physical plant, academics, and financing, the American University of Malta was officially born on 16 September 2016, with the issuing of its license and accreditation (License Number 2016-002) by the National Commission for Future and Higher Education of Malta (NCFHE).

Our Vision

The American University of Malta secures a bright future for all by producing the next generation of leaders that have an ethical, entrepreneurial and innovative spirit.

Our Mission

The American University of Malta is an American comprehensive university dedicated to nurturing those who are inquisitive of mind, ambitious of heart and robust of spirit.

Our Values

The American University of Malta values Integrity, Quality, Relevance and Courage.

Strategic Initiatives

1. Commit to Excellence in Everything AUM
2. Foster a holistic learning environment, preparing students for a lifetime of success
3. Challenge students to reach beyond their expectations
4. Build a global brand and presence
5. Operate on the leading edge of technology in education
6. Contribute to the community and economy of Malta and the region

General Purpose of the Catalog

This Catalog is an official bulletin of American University of Malta where AUM provides general information concerning procedures and fees in effect when the Catalog was published. AUM reserves the right to make changes at any time to reflect current board policies, administrative regulations and procedures, amendments by law and tuition/fee changes. Students remain responsible for observing the regulations contained herein; therefore, they are urged to read this catalog carefully. This catalog does not contain all University rules for which a student is responsible. Students should also consult other publications, such as the American University of Malta Student Handbook.

A student who is admitted and enrolls at AUM during any academic year may graduate under the general requirement provisions of the catalog in effect at the time of enrollment. A student may choose to graduate under the general requirements of a subsequent catalog, provided he or she completes all those requirements. Students have seven years to complete the requirements from the current catalog at the time of their admission or matriculation. After seven years, if not graduated, students must follow the new requirements of the most current catalog.

Academic Integrity

AUM HonorCode

Students are responsible for understanding the Code's provisions. Cheating and attempted cheating, plagiarism, lying, and stealing of academic work and related materials constitute Honor Code violations. To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of AUM community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honorcode:

Student members of the American University of Malta community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

In the spirit of the Code, a student's word is a declaration of good faith and acceptable as truth in all academic matters until proven otherwise. To maintain an academic community according to these standards, students and faculty must report all alleged violations to the Office of the Provost.

At the beginning of each semester, faculty members have the responsibility of explaining to their students the policy regarding the Honor Code, and what is considered an integrity violation in their courses with special attention to plagiarism. They must explain the extent to which aid, if any, is permitted on academic work. It is the sole responsibility of the students to request an explanation of any aspect of a faculty member's policies regarding the Honor Code that they do not fully understand. They have an obligation not only to follow the Code and AUM policies themselves, but also to encourage respect among their fellow students for the provisions of the Code and AUM rules and regulations. This includes an obligation to report violations by other students to the Provost Office.

Faculty members are also responsible for maintaining the integrity of the learning and evaluation process. Faculty members may actively proctor exams, prohibit the use of mobile phones in class, or take any other actions they believe are warranted.

For all academic assignments, project work, and presentations, students need to ensure that due acknowledgement is given to the source of any information that they incorporate in their work. Students must ask their professors if they are unsure whether something constitutes academic misconduct in any form. The following are some examples of academic misconduct:

- Cheating or using unfair means in examinations as determined by the professor.
- Using materials such as textbooks, notes, or formula lists during a test without the instructor's permission.
- Collaborating on an in-class or take-home test without the instructor's permission.
- Asking for, accepting, or providing outside help on online assignments or tests.
- Disrespecting an instructor or another student, in class or online.
- Talking, texting, or viewing material unrelated to the course during a lecture.
- Failing to silence one's cell phone during class.

- Posting inappropriate material, or material unrelated to the course, on discussion boards

Cheating is defined as any actual or attempted act that is undertaken with the intention to gain unfair advantage on coursework, assessments, or examinations that includes, but is not limited to:

- Unacknowledged use of information or ideas unless such ideas are commonplace.
- Breaching the word limit of assignments and/or intentionally mentioning the wrong word count.
- Obtaining / accepting /encouraging others to obtain unauthorized access to a copy of a test/exam before the test/exam is administered.
- Distributing for financial benefits or for free, a test before it is administered.
- Changing grades in a gradebook, on a computer, or on an assignment.
- Continuing to work on a test beyond the set time limit, unless authorized by the instructor/exam supervisor.
- Sharing, soliciting information verbally, copying the work of another student, or intentionally allowing another student to copy from one's own coursework, assessment, or examination paper.
- Submitting coursework for credit in more than one course without obtaining the prior written approval of the instructors.
- Submitting coursework that was previously submitted for another course even in instances in which the student is repeating the course without obtaining the prior written approval of the instructors.
- Falsifying the results/findings of research.
- Falsifying citations and references.

Violations of Academic Integrity: Plagiarism

This is a serious academic offense that constitutes the use of someone else's ideas, words, projects, artwork, phrasing, sentence structure, or other work without properly acknowledging its source. Plagiarism is dishonest because it misrepresents the work of someone else as one's own. It is intellectual theft as it robs others of credit for their work. For a student found plagiarizing, the punishment can range from receiving a failing grade on that assignment without the right to redo the assignment up to dismissal from the university.

Plagiarism is defined as misrepresenting someone else's ideas or work as one's own by not acknowledging the original ownership and source.

Plagiarism includes but is not limited to:

1. Using parts or all of an idea, word, sentence, diagram, artwork without proper citation even if minor or major changes have been applied to the original (including paraphrasing).
2. Copying from another student's test or coursework.
3. Allowing another student to copy from your test or coursework.

4. Significant paraphrasing in written academic work.
5. Citing sources which the student has not read or referred to.
6. Copying from another student's paper during an exam or allowing or encouraging another student to copy from your paper during an exam.
7. Having someone else take your exam in your place or taking an exam for someone else.

Coursework/ assignments/ case studies/ essays / research projects/ exams or other similar assessment materials are liable to submission through an online plagiarism detection program (*Turnitin*).

Grade/marks/score penalty if the plagiarism percentage exceeds 0%, but records no more than 20% (after excluding: references/bibliography, quotes, small matches and names):

- 1 –5 % 2 marks deducted
- 5 –10% 4 marks deducted
- 11 –15% 6 marks deducted
- 16 –20% 8 marks deducted

In case of more than 20%, the coursework/ assignment/ case study/ essay/ research project/ exam in question will record a zero grade.

In cases of suspected cheating during an assessment or examination:

- 1) Students suspecting cheating, even by peers or proctors, should report their suspicion to the Student Affairs Department. Members of the Student Affairs Department and Student Academic Conduct Committee are authorized to remove the student from the exam hall and investigate for any suspected evidence of cheating.
- 2) The proctor and/or member of the Student Affairs Department who would have investigated the student is required to submit the Exam Cheating Form, supported with the appropriate evidence, to the Student Academic Conduct Committee.
- 3) The Student Academic Conduct Committee is responsible to investigate the evidence presented, to make a decision on the validity of the cheating suspicion, and subsequently to communicate this decision to the Provost Office and the Student Affairs Department.
- 4) The decision of the Committee is to be communicated by the Provost Office and Student Affairs Department in writing via the University official email within 48 hours later.

Reporting Violations of Academic Integrity/Misconduct

In cases of suspected plagiarism:

- 1) The faculty member can investigate, together with the student, any suspicion of plagiarism in the absence of the results of plagiarism detecting software or if the said results confirm the occurrence of plagiarism. The faculty member can then proceed to immediately apply the grade penalty as outlined in the policy.
- 2) The faculty member is to notify the Student Academic Conduct Committee about the plagiarism case along with the appropriate evidence.
- 3) The Student Academic Conduct Committee is to apply the appropriate disciplinary measure as outlined below and notifies the student within 48 hours in writing via the University official email.

The Academic Disciplinary Process

The Provost will make the student under investigation, and all committee members, fully aware of the charges. During the hearing, both the student and the faculty member bringing the charges will be allowed to state their case before the three-member committee. If requested, the parties involved will be allowed an advisor during the proceedings from inside the university community or from the student's immediate family.

Once the committee has heard the evidence, it will come to a judgment and determine sanctions, if warranted, within two working days of the hearing. The judgment and sanctions will be formally submitted in writing to the Provost who will then inform the student immediately and administer the sanctions.

The student can lodge a formal, written appeal with the Provost within seven working days of the committee's findings. Appeals can be granted only based on new evidence, procedural irregularity, or other grounds of a serious nature. The Provost shall review the case and determine the final disposition on the case.

Structure of Sanctions and Penalties for Student Behavioral Misconduct and Academic Integrity Violations

All cases of academic misconduct and violations of the student behavior and academic integrity shall be dealt with fairly and judiciously.

Academic Integrity Violations

The penalty for violations of the present policy are as follows:

- 1) **In case of a First Violation:** If a student cheats or plagiarizes for the first time, the student receives a warning letter that is entered into his/her record and an F in the coursework, assessment, or examination in which the violation has taken place. The student loses any kind of financial support granted by the University including scholarships, grants, or financial aid. The student can retake the course the following semester, but he/she will not benefit from any financial support/aid.

- 2) **In case of a Second Violation:** If a student cheats or plagiarizes for the second time, the student is placed on disciplinary probation and receives an XF in the course in which the violation took place. This becomes part of his/her record.
- 3) **In case of a Third Violation:** If a student cheats or plagiarizes for the third time, the student receives an XF in all courses he/she is enrolled in during the semester in which the violation occurs and is immediately dismissed from the University.

Copyright Regulations

Maltese and international copyright laws govern the making of photocopies or other reproduction of copyrighted material. All students are expected to familiarize themselves with the policies on "fair use." The photocopy or reproduction is not to be used by students for any purpose other than private study, scholarship, or research. If copying or reproduction of copyrighted materials is in excess of what constitutes "fair use", students may be liable for copyright infringement and risk losing their library privileges and/or be subject to legal action.

Non-Academic Misconduct

Refer to the American University of Malta Student Handbook.

UNDERGRADUATE

Undergraduate Admission Policy

Undergraduate Admissions:

Applicants for the AUM undergraduate programs need to submit the following:

- Official AUM application: to be submitted online.
- Scanned copies of Secondary School qualifications certificates and transcripts in the original language, as well as certified English translations, if necessary. If admitted to AUM, all original documents must be presented to the Admissions Office in order to be permitted to officially enroll. Details of acceptable Secondary School qualifications are provided below.
- Proof of English Proficiency
 - The English language proficiency requirement may be waived if you are a native speaker of English and you have completed your secondary education in a country where English is the official language and English was the language of instruction where you graduated.
 - AUM reserves the right to request English test results from any applicant.

Examining Boards recognized by AUM and minimum scores required:

	IELTS	TOEFL	PTE	iTEP Academic Plus	iTEP – EAP Institutional
Undergraduate	6.0	65	48	3.7	4.5

***Note that all score reports will only be valid if issued within 2 years from the date of matriculation at AUM.**

All applicants to any undergraduate program of study (MQF 6) at the American University of Malta must satisfy one of the following entry requirements:

1. For candidates following the Maltese education system:

- i. A Matriculation (MATSEC) certificate, with two subjects at an Advanced level, three other subjects at Intermediate level and Systems of Knowledge, and a pass at Grade 5 or better in the Secondary Education Certificate (SEC) examinations in English Language. If you are not in possession of a SEC certificate in English, you might be asked to carry out an Institutional iTEP test.

OR

- ii. Three subjects at Advanced Level (MQF 4), and a pass at Grade 5 or better in the Secondary Education Certificate (SEC) examinations in the English Language. If you are not in possession of a SEC certificate in English, you might be asked to carry out an Institutional iTEP test.

Conditional admission is offered to all applicants who are still waiting for their MATSEC results. These results must be submitted by the student to the Admissions Office within 1 week of receipt.

2. Candidates following the US system must submit scanned copies of the transcripts for the last two years of High School. Students must be in possession of an average GPA of 2.0 for admission.

3. Candidates following the British system (GCSE/IGCSE - General Certificate of Secondary Education/ International GCSE) must be in possession of one of the following:

- i. Levels - Five subject exams with grades of D or above on each, or
- ii. A/S or A Levels – Three subject exams with a minimum of grade D on each.

4. An International Baccalaureate Diploma obtained at 24 points or higher.

5. Any other qualifications that in your home country give you access to a college/university education will be assessed independently by AUM for comparability, e.g., European Baccalaureate, Advanced Placement, etc.

To be eligible to apply for any of AUM's undergraduate programs, you need to have completed your secondary school education within 5 years from the start of the semester for which you are applying at AUM.

Additional Requirements: Please note that specific degree programs may have additional requirements to those indicated above.

Conditional admission is offered to all applicants who meet all requirements except English proficiency. Conditional admits must enroll as full-time students in the AUM English for Academic Purposes program.

Transfer Credit

Undergraduate students applying for transfer to AUM must have a minimum average GPA of 2.0.

Only courses with a "C" or better will be considered for transfer into AUM. Such credits should have been earned not more than five years prior to the transfer. Transfer credits will be noted on the transcript with a grade of "TR."

Undergraduate transfer credit may be awarded up to limits established in the AUM catalogue. Furthermore, students must meet the general education, major and upper-level course requirements in order to graduate.

Grades earned in transferred courses do not count in the student's cumulative GPA (CGPA), though transferred credits count toward the cumulative earned hours and may apply towards meeting graduation requirements.

Tuition and Fees for Undergraduate Students 2020-2021

Tuition and Fee Payment Deadlines

Semester	Deadline	Payment Information
Fall Semester	24 Aug 2020	Tuition and fees can be paid by wire transfer. Other forms of payment may be accepted on a case-by-case basis.
Spring Semester	18 Jan 2021	

Tuition

Programs	Amount (EUR)	
EAP – all levels	750	Per 8-week program
Undergraduate programs	9750	Per semester
After scholarships are applied		
Non-EU (International students)	2500	Per semester
EU Students	1500	Per semester
Maltese Nationals and Residents	1000	Per semester

Fees

Fee Type	Amount (EUR)	
Activity Fee	100	Per semester, non-refundable
Transcript Fee	10	Per Official Transcript

Tuition Refund Policy

Withdraw By	% Refund
End of First (1st) Week of Semester	100%
End of Second (2nd) Week of Semester	75%
End of Third (3rd) Week of Semester	50%
End of Fourth (4th) Week of Semester	25%
Beyond the end of the 4th Semester Week	No Refund

Undergraduate Academic Policies

Every AUM student is responsible for knowing the university's rules, regulations, requirements, and academic policies. The Student Handbook, the University Catalog, and the institutional website are repositories of policy statements. Corrections, changes, or interpretations may be communicated by other means, including electronically. Any student in doubt about an academic matter should consult the Registrar's Office or his or her assigned faculty advisor. Students are subject to the university's stated policies regarding patents and copyrights.

Academic Advising

Each full-time faculty at AUM is assigned a group of students as advisees. These assignments, and any subsequent changes, are made by the Provost. Undergraduate students beyond their first year of study are normally advised by a faculty member in their disciplines. Undergraduate student advisees may be reassigned once they have declared a major or if they elect to change their major. First year students and students who have yet to declare a major may be assigned to a faculty member teaching in the general education program. During student orientation, all students will meet with their academic advisor to discuss their program study and to map out a tentative program of study. Thereafter students should meet with their advisor prior to course selection for the next semester. In this meeting, faculty should discuss academic progress with their advisee and make any necessary changes to the study plan.

Students who are not in good academic standing are advised of the support services, including tutoring, that are available to them and the steps they need to take to return to good standing.

Students on probation are required to meet with their academic advisor on a regular basis to assess their progress and to report their use of AUM's resources for academic support. Students violating AUM's attendance policy or, at the discretion of the faculty member are deemed to be doing poorly at mid-term are also required to meet with their advisors. If students have concerns, comments, or recommendations about their educational experiences at AUM, they should contact the Provost.

Assessments in Determining Grades

AUM Faculty shall ensure that the academic assessment of undergraduate students is fair, accurate, aligned with learning outcomes and program goals and is commensurate with the level of the course. Students shall undergo a minimum of three (3) assessments distributed evenly throughout the semester. Assessment tools could include but are not necessarily limited to:

- Examination.
- Project.
- Paper.
- Presentation.
- Homework assignment.

- In class quiz.
- Case Study/Analysis.

In addition to the above-mentioned assessment tools, “in class participation” may be used as an assessment tool. Faculty members must clearly articulate in the course syllabus how a course grade is to be assessed and what weighting is applied to each of these elements. This information must remain valid for the duration of the course. No single assessment tool can count for more than 40% of the total grade. “In class participation” may be used in calculating final grade provided it does not exceed 10% of the total grade. The role of attendance in the final grade is dealt with under “attendance policy.”

Student Attendance

Faculty members of undergraduate courses must post their attendance policy on their course syllabus prior to the start of the semester. Students’ grades are affected by non-compliance with the attendance expectations articulated on the syllabus. Course faculty members are responsible for reminding students of the importance of regular attendance at learning or teaching sessions, and for accurately recording student attendance. Prior to a foreseen absence, a student must notify their faculty member (in person, by phone or by e-mail) if they must be absent for scheduled class sessions. The faculty member may then excuse these absences from the normal class attendance policy or may include the absence as part of the permitted number of absences during the course.

If a student is sick and cannot attend class for 3 or more consecutive classes, they must provide a medical certificate attesting to their illness. Faculty may apply penalties in cases of unexcused absences. Regular and ongoing absences or prolonged absences for illness or otherwise may result in the student being dropped from the class and may receive an “F” (Fail) or “U” (Unsatisfactory) grade. Such absences should be reported to the Registrar and Provost. For students on a visa, unexcused absences exceeding a certain amount, will be reported to Identity Malta and may result in the loss of the visa.

EAP Student Attendance

Attending class regularly is essential to be successful in EAP.

The attendance policy for any one 8-week session is as follows:

- If a student is not present at the beginning of the class, they are ‘late’. Being ‘late’ 3 times is equivalent to one absence.
- Students who are absent for 2 classes will receive an attendance warning.
- Students who are absent for 3 classes will have to meet with the EAP Director.
- Students who are absent for 4 classes will receive a failing grade for the class but may need to continue to attend classes to maintain their AUM student status.
- Students who are absent for 10 classes will be suspended from AUM and may be reported to the Central Visa Unit.

Excused Absences

Excused absences will only be given in exceptional circumstances, such as, upon presentation of a doctor's certificate or other mutually agreed valid reasons. A faculty member may allow work missed due to an excused absence to be made up within two days of the absence.

EAP Satisfactory Progress

Students applying to AUM may need to take remedial English (EAP or English for Academic Purposes) before they can matriculate into bachelor's programs or masters level programs. For institutional integrity, students should progress through the sequenced EAP courses in a defined and reasonable period of time. Students who are unable to progress through the EAP sequence in a reasonable period of time may be dismissed from the institution.

At the time of enrollment, the admissions department will assess the English competence of the prospective student, asking for official IELTS documents or those from similar systems such as TOEFL. If the student's certification is below the desired level of competence, but the student meets all other admissions requirements, he/she is conditionally enrolled into AUM, and upon successful completion of the EAP program enrolls in credit courses as a regular student.

If the student does not have an English language certification and is deemed by admissions to require additional English tutoring, he/she will be referred to the director of EAP for testing. It is compulsory for all conditionally admitted students to enroll in the EAP program.

The EAP program is divided into 5 levels which consists of 8 weeks per level.

- EAP 90 - Student level (IELTS or equivalent) between 2.0 – 2.9 (Beginner)
- EAP 92 - Student level (IELTS or equivalent) between 3.0 – 3.9 (Beginner – Elementary)
- EAP 94 - Student level (IELTS or equivalent) between 4.0 – 4.4 (Elementary – Pre-Intermediate)
- EAP 96 - Student level (IELTS or equivalent) between 4.5 – 4.9 (Pre-Intermediate – Intermediate)
- EAP 98 - Student level (IELTS or equivalent) between 5.0 – 6.0/6.5 (Intermediate - High-Intermediate)

The progression of students to the next level is dependent on achieving the required test score and attendance of no less than 75%.

Change of Status/ Address

AUM requires students to maintain current contact information with the Registrar's Office and Student Affairs' Office including permanent and local addresses, telephone numbers, student number, and legal name (as written in their passport). Addresses should be updated via the MyAUM portal or through the Registrar's Office on the appropriate form. Each student must also claim their university email account assigned at the time of admission. Students are responsible for responding to official communications via their AUM e-mail account. Name

and other official identification changes require official documentation and must be processed according to the requirements of the student's nationality.

Changing Major

Students who wish to declare a new major or minor must first contact their advisor. Advisors will discuss major requirements including an explanation of any prerequisite courses needed to be satisfied, courses accepted for major approval and all other major and general education requirements required for the degree being pursued. If all requirements for the major are satisfied, a major change request will be sent to the Registrar, the student record will be updated, and a new academic advisor may be assigned.

Class Periods and Credit Hour Definition

Each course (excluding the EAP program) has a credit value. That credit value applies to specific degree programs but does not apply to all degree programs. Regardless of the format or the time period in which the course is offered the student work expectation for all courses is the same. One semester credit hour (2 ECTS) represents about 50 contact/learning hours over the course of a 15-week semester plus an additional 120 minutes of outside work on average during each week of the semester.

At AUM classes normally meet three times a week in 50-minute periods or two times a week in 75-minute periods. In some cases, usually advanced courses and practical work, class may meet once per week for 150 minutes. The university holds classes five days a week from Monday through Friday. If necessary, make up classes may be held on Saturdays. University administrative offices are closed on Saturday and Sunday.

All classes are expected to meet on the days and times published in the course schedule. Changes may only be made with the approval of the Provost and the assent of every student in the class. Independent study or research, internships and other programs for experimental learning, and other study opportunities may follow a different approved time frame and schedule.

Student Classification

The designation of a student's class shall be determined by the number of academic credits completed. The designations are as follows:

- 0 - 29 hours Freshman
- 30 - 59 hours Sophomore
- 60 - 89 hours Junior
- 90 - plus hours Senior

Official Communications with Students

AUM requires students to maintain current contact information with the Office of the Registrar's Office and Student Affairs' Office including permanent and local addresses, telephone numbers, student number, and legal name (as written in their passport). Addresses should be updated via the MyAUM portal (OIS) or through the Student Affairs Department on the appropriate form. Name and other official identification changes require official documentation, and they must be processed according to the requirements of the student's nationality.

Following instructions on the AUM website, each student must also establish their university email account assigned at the time of admission. **The university assigned student email account is AUM's official means of communication with all students. Students are responsible for all official information sent to their university assigned email account.** Students are responsible for checking their AUM e-mail account and for responding to official communications via their AUM email account. If a student chooses to forward messages to another account, the student remains responsible for all information, including attachments.

Communication related to student academic matters (academic status, registration, courses schedule) will be conducted through the Registrar's Office on the appropriate form.

Communication related to student academic life, other than academic status, registration, courses, or similar educational issues, will be conducted through Student Affairs' Office.

Kindly note that all students are required to provide AUM with their current address in Malta, cell number, personal email address and contact details of a nominated family member or friend who should be contacted in an emergency.

Email: studentaffairs@aum.edu.mt

Concurrent Enrollment

Students who apply for admission to AUM usually do not seek simultaneous enrollment at another institution. Should students seek concurrent enrollment, they must obtain advance written approval from the Provost. Such approval enables a student to enroll elsewhere in a course unavailable at AUM that is relevant to their academic goals. If the concurrent enrollment is not approved, AUM may consider the student to have a part-time status and may be obligated to report the student to the immigration authorities.

Catalog numbers and descriptions of courses to be taken elsewhere must be submitted with the request for approval to the Provost or their designee. As for any transferred courses, students must submit an official transcript to the Registrar's Office. Grades earned at another institution are not computed into the AUM GPA. Students who enroll elsewhere without advance written permission while enrolled at AUM may not receive transfer credit for the course work taken.

Course Numbering and Sequencing

Each course offered by the university has a designated course prefix (or code) and number. The course prefix represents the discipline or field of study, and the number indicates the level of the course content. MAT 101 thus indicates that the course is Mathematics and is appropriate for students in or beyond their first year of study. FIN 450 indicates that the course is in Finance and is generally intended for fourth year students, although the course may be taken by juniors if there are no unmet pre-requisites or it is only offered in alternate years.

The following course levels and uniform course numbers are defined at AUM to ensure consistency throughout the university curriculum.

000-099	Preparatory Courses that do not carry credit.
100-299	Lower-level undergraduate courses.
300-499	Upper-level undergraduate courses.
500-699	Graduate-level courses.

- 100 - Introduction to subject or survey of a discipline
- 200 - Increased depth of study combined with application of theory
- 300 - Analysis, synthesis, evaluation of theory or data
- 400 - Creation of new ideas, behaviors, objects of art
- 500 - 600 graduate level work

Course Prerequisites and Corequisites

Course prerequisites or corequisites reflect necessary preparation and conditions for attempting a course. It is the student's responsibility to be aware of these requirements as stated in the University Catalog, and they must have taken required prerequisites recently enough to be of value. The faculty member may drop students who have enrolled in a course for which they have not met the prerequisites or are not enrolled in a corequisite.

Double Majors and Concurrent Degrees

All bachelor's degrees must be awarded with a major. A student may be awarded a bachelor's degree with more than one major by completing the general education requirements and all requirements in each major as specified in the catalog. At AUM a double major is defined as a single degree with two majors (for example a BS in two distinct disciplines). Concurrent degrees are defined as two different degrees (e.g., BS and BA) each with their own major. A double major may be approved provided that the student has a cumulative GPA of at least 3.0 at the time of electing a second major, has completed 2 full years of study towards the first major but no more than 100 US/200 ECTS credit hours.

In order for the second major to be recognized, the student must meet all the degree requirements for both majors, including general education, and complete at least 30 credits (60 ECTS) in addition to those required by the first major, i.e., the coursework must have at least 30 credits of specialized, program-specific coursework that is unique to each degree. No

course substitutions will be available (to a student) in order to complete the requirements for a double major. Overlap in major requirements for each degree is limited to 12 academic credits. Students must apply for each degree separately and will receive a diploma for each degree earned.

Final Exams

Final exams are given at the end of undergraduate courses, usually in the 16th week of the semester. Except for project submissions, laboratory courses, and studio courses, no exam or assessment mechanism of any kind may be given during the last week of classes. Exams may not exceed the scheduled length (2 hours for most courses). Normally the final exam should not be more than 40% of the combined course grade distribution. The exact contribution of the final examination to the final grade must be included in the syllabus.

The final exam schedule is established prior to the beginning of the semester by the Registrar's Office. Faculty members will include the day and time of the final exam on their syllabi. No final exam may be given at any date and time other than that established by the Registrar at the beginning of the semester. Notification of take-home exams or significant end-of-course papers or projects will be included on the faculty member's syllabus at the beginning of the course. Take-home exams should be distributed by the beginning of the last week of classes. Take-home examinations will be due no earlier than the day of the formally assigned final examination for the class in question. Re-taking (or re-sitting) a final exam is not permitted.

Absences from Final Exams

Absences from midterm and final exams are not to be excused except for sickness on the day of the exam or for any other reason approved by the Provost. The effect of an unexcused absence from a final exam shall be determined by the weighted value of the exam as stated in the course syllabus provided by the faculty member. If absence from a final exam is unexcused, the grade for the course may be entered as "F."

Grade Report

Students may print a grade report for their own records or to issue to a third party. Official transcripts and official semester grade reports for tuition reimbursement are obtained through the Registrar's Office.

Independent Study

Each academic program may include an Independent Study course, which provides an opportunity for advanced work for undergraduates under the close supervision of a faculty member. This course should be designed to enable students to pursue problems or issues of special interest within the student's field of study or discipline with the guidance of the faculty member in conferences. Students should normally meet weekly with the faculty member for

guidance respective course work. To be eligible to enroll in an Independent Study course, students must have completed a minimum of 60 US/120 ECTS credits, must have a 3.0 (B) or better average, and must seek approval through a completed Independent Study Permission form that is submitted to the Provost by the faculty supervisor. The faculty member, for a proposed independent study course, will recommend the number of appropriate credits for this work. If approved by the Provost, the form will be forwarded to the Registrar and the student's record will be updated accordingly. An Independent Study course carries variable credit, from 1-4 US/2-8 ECTS. Independent Study may be repeated once for a maximum of 8 US/16 ECTS credits.

Independent study should not be used as a way to take a course that is normally offered in the traditional format and listed in the University Catalog, nor may students repeat courses via an independent course format.

Instructions for Students:

- Discuss your interest in doing an independent study with your faculty advisor to make sure that it meets the requirements of your degree plan.
- Meet with the faculty member whom you wish to direct your study.
- Be certain you understand what is necessary to complete the project and the work you need to do for a desired grade.
- Work with the faculty member to complete the Independent Study Permission form.
- Sign the form, acknowledging your desire to register for the course and your understanding of what it will require.
- Check with the Registrar's Office to make sure the form was approved and your registration for the course completed. Independent Study has the same add/drop deadlines as all other courses at AUM.

Instructions for Faculty Members:

- Meet with any student requesting an independent study.
- When reviewing requests, be sure that the students are very clear and specific about their responsibility for completing the study with specific tasks, reports, and readings.
- Assign the number of credits that are appropriate for assessing the study and include that information in the written request.
- Be specific regarding your standards for assessing the study and include the standards in the written request.

- Send the signed, completed form to the Chair/ Coordinator of the department for approval and signature.
- Chair/Coordinator forwards the signed form to the Provost for approval and signature.
- Provost forwards the signed form to the Registrar, with copies to the Department Chair/Coordinator, faculty members, and the student's advisor.

Intellectual Property

Intellectual property (IP) is property (an idea, invention, or process) that derives from the work of the mind or intellect. IP is also an application, right, or registration of an idea, invention, or prose. AUM deems copyrightable works, including publications and patentable works developed in connection with course work by students who are not AUM employees to be intellectual property that belongs to the student. However, AUM may claim copyright ownership of a work or ownership of a patentable invention when extraordinary use of university facilities, personnel, or resources is made in the development of the materials or invention. Students are subject to the university's stated policies regarding patents and copyrights.

Student Leave of Absence

Occasionally, students must leave the university for a semester because of circumstances beyond their control. Others find they simply need a break from studying. In such circumstances, taking a leave of absence might be construed as a wise course of action. Students who have an approved leave of absence for a semester or a year may register for the semester in which they plan to return without applying for readmission. Unless there are extenuating circumstances such as illness, a leave of absence is not normally given to a student who leaves the university during a semester.

A leave of absence maintains the student's status for one semesters. Students who wish to take a leave of absence must do so through the Office of the Provost. All requests for a leave of absence require the completion of the Leave of Absence Form, and the Provost's approval. If the Leave of Absence request is approved, and the student has cleared all financial obligations, the effective date of the leave of absence is noted on the student's permanent academic record. The effective date is the date used for calculating billing or refunds. No grades for the current semester other than a "W" for the current semester are recorded.

Midterm Exams

All midterm exams will be scheduled by the faculty member during the eighth week of the semester. A faculty member may choose not to have a midterm exam if they choose other ways of monitoring progress throughout the semester. The date of the midterm exam must be included in the course syllabus. The midterm exam may only include content covered during the previous weeks. Normally midterm exams should not be more than 20% of the course grade distribution. The exact contribution of the midterm examination to the final

grade must be included in the syllabus. If the faculty member teaches multiple sections of the same course, the date for a common midterm exam must be scheduled, and the students informed of the date at the beginning of the semester. Students may be excused from the midterm exam by the Provost and given a makeup exam on another date only if there is documented evidence of illness or other extenuating circumstances.

Assignment Reports

Faculty report midterm progress for all semester-long courses so that students will have a clear idea of their standing in each course midway through the semester. The reporting period extends from the fifth through the ninth week of the semester, allowing flexibility as to when individual faculty provide reports for their classes. Normally grades are reported as letter grades. Students should check with their faculty members as to when reports will be complete and available for viewing.

Repeating Courses

Unless restricted by a specific program's requirements, undergraduate students may repeat any failed course no more than two times. In each case, the more recent grade is counted for the cumulative GPA, although all grades are recorded on the student's transcript. The student receives credit for a course only once regardless of how many times it is repeated. If repeating a course for the second time, the student must have 12 additional credits to be considered full time. Undergraduate students may repeat a course only once if they have previously passed the course, unless a second repeat of a previously passed course is necessary, due to program requirements, in which case the student must have full-time status exclusive of the credits for the repeated course.

The original grade and the most recent grade will appear on the transcript, but only the most recent grade will be calculated into the GPA. Students may not repeat courses in an independent course format.

A grade in an AUM course will not be excluded from the accumulative GPA based on the subsequent taking of an equivalent course at a transfer institution. Note that individual programs may disallow undergraduate students from retaking certain high-demand courses simply for the purpose of improving their grade.

Under no circumstances may scholarships be applied to tuition for repeated courses.

Requests for Academic Actions

All requests for academic actions, such as special permissions or exceptions to published academic regulations as found in the University Catalog, must be submitted to the Provost. Students should consult with the Registrar for assistance on requests.

Schedule of Classes

AUM makes available in the Registrar's Office the list of courses offered around mid-semester for the following semester's classes.

Second Degree Requirements

A student who has been awarded a bachelor's degree from an accredited institution may earn an additional bachelor's degree at the AUM. Students cannot major in a discipline if they've earned a major or a minor in the same or substantially similar discipline from a prior degree. The student must satisfactorily complete all major requirements. The general education requirements for a second degree are considered waived. Students must also complete the minimum residency requirement of 36 US credits (72 European Credit Transfer Credits (ECTS)).

Semester Grades

Students may access and print their semester grades and other academic information from the AUM student portal.

Student Directory Information

Under provisions of the Family Education Rights and Privacy Act of 1974 (FERPA), as amended, students have the right to withhold disclosure of directory information as listed.

20 U.S.C. 1232g(b)(4)(a). Directory information consists of student's name, local and permanent address, telephone number, date and place of birth, major field of study, classification, participation in officially recognized activities and sports, height and weight if a member of an athletic team, date of attendance, degrees, awards and honors received, enrollment status (part-time, full-time, undergraduate, graduate), the most recent educational institution attended and other information which would make the student's identity easily traceable.

Students should carefully consider the consequences of a decision to withhold directory information as future requests from non-institutional persons and/or organizations will be refused. Filing a request to withhold information will also keep a student's name from being listed for publication for honors such as Dean's List or in the graduation program. A request form to withhold directory information must be filed in the Registrar's Office, no later than the 6th class day of the fall or spring semesters or third-class day of summer sessions. A request to withhold directory information remains in place until the student informs the Registrar in writing to remove it.

Summer Term

During the summer term a student may register for one or two courses. All attendance, grading, and other academic policies apply to the summer term as in the two academic semesters.

Student Transcripts

AUM's transcripts are the formal record of student attainment. Transcripts are issued by the Registrar. Each course attempted by a student is recorded on this transcript along with their level of attainment. The only notations on the transcript are:

Letter Grades: As defined by the faculty member of record, undergraduate student grades are A, A-, B+, B, B-, C+, C, C-, D, F and XF. These are the only grades that are used in determining a student's GPA.

Satisfactory/Unsatisfactory (S/U) in EAP Classes: An "S" grade reflects passing work in a course (A, B); a "U" grade reflects a failure (C, D, F, XF). "S" and "U" have no effect on grade point average.

Incomplete (I): An incomplete may be issued when the quality of work is satisfactory, but some minor yet essential requirement has not been completed, for reasons acceptable to the faculty member. Faculty and students should develop a contract outlining the requirements. Contracts should be filed in the Registrar's Office. The student must complete all the requirements within one month of the commencement of the subsequent semester, excluding the summer session, and the faculty member must turn in the final grade within a week of the due date. Unless the faculty files an explicit written extension, the grade of "I" is changed to an "F" to indicate that the course requirements have not been fulfilled. Students who have filed their intention to graduate have 30 days from the date of degree conferral to resolve any incomplete grades. Any unresolved incompletes will be changed to an "F" after the 30-day period ends.

In Progress (IP): The grade of "IP" indicates that the student is making progress in a course, writing a thesis, dissertation or research project, or participating in an internship that extends beyond one semester or summer term. The grade of "IP" has no effect on the student's grade point average.

Withdrawal (W): The grade of "W" on a course indicates that the student has withdrawn from the course. While it has no effect on the GPA, withdrawn courses are part of attempted course credits that serve as the basis for the student's credit level. A "W" for all courses in a given semester and the transcript notation "withdrawn" indicates that the student withdrew from AUM.

Cheating/plagiarism (XF): The XF grade is recorded on the transcript of student who following review by the Student Academic Conduct Committee is found guilty of plagiarism and/or cheating. The XF grade is equal to 0.0 points which affects student GPA.

Student Conduct: Any misconduct that results in suspension will be noted in the student's official transcript for as long as the suspension is in effect. A sanction of dismissal will be noted on the student's transcript.

Students may obtain official transcripts from the Registrar's Office via the MyAUM portal (OIS) or submit a transcript request form to the Registrar's Office for processing. There is a fee for

official transcripts. Unofficial copies can be obtained at the portal at no cost. Transcripts will not be furnished for students or former students whose financial obligations to the college have not been satisfied.

The AUM official transcript and diploma is printed in English. Student names are printed in English exactly as they are printed on their passports or if not in English on their official identity cards from Malta.

Transfer Credit

Only courses with a "C" or better will be transferred into AUM. Such credits should have been earned not more than five years prior to the transfer. Credits for transfer must be approved by the Provost or designee in writing. Transfer credits will be noted on the transcript with a grade of "TR."

Undergraduate transfer credit may be awarded up to limits established in 'Degree Requirements'. Furthermore, students must meet the general education, major and upper-level course requirements in order to graduate.

Grades earned in transferred courses do not count in the student's cumulative GPA (CGPA), though transferred credits count toward the cumulative earned hours and may apply towards meeting graduation requirements.

An enrolled student is eligible to apply to take courses at another college/university during the summer with the intention of transferring credits to AUM provided the following conditions are met:

- Contact/credit hours for the course at the host university must be equivalent to or greater than the contact/credit hours required for its equivalent course at AUM, if equivalency is sought.
- The language of instruction of the course(s) taken at the host university must be English (except for language courses conducted in other languages), unless otherwise approved by AUM.

Students should verify in writing with the Registrar prior to enrolling in any courses at another college or university to ensure the course/credits will transfer back to AUM.

Withdrawing from the University

Official withdrawal removes students from any academic program and cancels student status at AUM. In order to return to the university, students need to apply for readmission through the Admission Office. Students who wish to withdraw must complete a Withdrawal Form available in the Registrar's Office and get clearance from all university departments. If the student completes the withdrawal process satisfactorily and all financial obligations to the university clear, the Registrar will record the effective date of withdrawal and all courses will be marked with a "W" on the student's permanent academic record for that semester. AUM uses the effective date for calculating billing or refunds.

ACADEMIC PROGRESS

Academic Standing

Semester and cumulative AUM grade point averages (GPA) are calculated for each student. The GPAs are noted on the academic transcript. Academic standing for continuing students is based on the term and cumulative AUM GPA. Academic standing is defined as one of the following conditions:

- Good Standing: Undergraduate students with a semester and cumulative GPA of 2.0 and above.
- Probation: After completing 15 US/30 ECTS credit hours of study, any undergraduate student with a cumulative or semester GPA below 2.0 is placed on probation. While on academic probation, undergraduate students may not register for more than 12 credit hours (24 ECTS) in any semester.

Furthermore, students on academic probation are ineligible to hold or run for office in any organization or activity associated with the university; travel to or compete in any event; or serve as a working member of any student organization. Students will remain on academic probation until they meet the requirements to be in Good Standing.

- Suspension/Dismissal: Students on probation who do not return to good standing within two semesters will be suspended or dismissed from AUM. At the end of each semester, the Registrar will identify cases of non-compliance with the academic standards and will advise students of their suspension or dismissal. Students on suspension may not enroll for at least one full academic semester (not including summer semesters). If a student is placed on suspension a second time, they may not take courses for one full academic year. A third suspension results in dismissal from the University. They must officially request readmission and write a letter to the Provost stating what they have been doing during their period of suspension, and what they plan to do differently upon return if readmitted to AUM. Students who have been suspended and are readmitted may be subject to dismissal if they do not earn a minimum of a 2.0 (C) average during their first semester after readmission.

Dean's List

To honor academic excellence, an AUM Dean's List is published each semester. Students who, in the preceding semester, have a CGPA equal to or greater than 3.75 after completing at least 12 credits are eligible for consideration for the Dean's List. Further qualifications for this honor include having completed all work assigned, i.e., no grades of "I"; no grade below a "B" and no courses are repeated to improve the GPA.

GRADING INFORMATION

Grades and Determination of Grade Point Average

The following grading system has been adopted by AUM:

Undergraduate Grading System			
Grade	GPA Points	Percentage Scores	Standard
A	4.0	94.00 – 100	Excellent
A-	3.7	90.00 -93.99	Excellent
B+	3.3	86.00 -89.99	Very Good
B	3.0	83.00 -85.99	Very Good
B-	2.7	80.00 -82.99	Good
C+	2.3	76.00 -79.99	Good
C	2.0	73.00 -75.99	Good
C-	1.7	70.00 -72.99	Unsatisfactory
D+	1.5	66 – 69.99	Unsatisfactory
D	1.0	63.00 -65.99	Unsatisfactory
F	0	0.00 - 62.99	Failing
XF	0	0.00	Failing because of cheating/plagiarism
WF	0	0.00	Withdraw with F Grade

Grades for courses taken at AUM appear on both the official and unofficial transcript. Courses not designated as repeatable for credit (i.e., topics courses) are not included in the GPA calculation. If a course is repeated, only the second grade earned of the course is calculated into the cumulative GPA. Credit for nonrepeatable courses is given only once.

Grades recorded as a result of sanctions and/or academic misconduct are included in the cumulative GPA.

Grade point totals are computed by assigning four points for each credit of A, three points for each credit of B, two points for each credit of C, one point for each credit of D, and zero points for each credit of F. The plus sign increases the points assigned the letter grade by 0.33 per credit, and the minus sign decreases the points assigned the letter grade by 0.33 per credit. The grade point average is calculated by dividing total points by total credits of A, B, C, D, F, XF and WF. Grades of I, T, W and the grades of S and U are disregarded in the computation of the grade point average.

Final Grades – Completion and Appeals

All grades except incomplete "I" are final when submitted by the faculty member of record at the end of each semester. No final grade except incomplete "I" may be revised by re-

examination. No change of grade may be made on the basis of reassessment of the quality of a student's work.

A grade can be changed only in cases of computational or recording error, or pursuant to a successful appeal of grade. All changes of final grades must be initiated by the faculty member of record, approved, and recorded by the last day of classes of the next regular semester (spring for fall grades and fall for spring and summer grades). In cases where the faculty member is no longer affiliated with the university, the grade change is initiated by the Provost. All grade changes must be submitted utilizing the Grade Change Request form. It is the responsibility of the Registrar to monitor compliance with this policy.

There are only two reasons for which a student may form a basis for appeal of a final grade. The first is that a technical error was made in computing or entering the grade or that an assignment was given that was unclear. The second reason for an appeal is based on the student's opinion that a grade was assigned arbitrarily or capriciously, (e.g., the faculty member assigned a grade without any apparent system or evaluation or was based on other factors outside of course performance).

A student who believes that his/her grade was reported on the basis of a technical error should first present his/her concerns to the instructor. If the student is not satisfied with the outcome of that discussion or believes that the basis of his/her grade is due to an arbitrary or capricious grading practice, he/she may file a grade appeal.

Student grade appeals must be made within 2 (two) working days after the grade publication.

A student must submit his/her grade appeal directly to the Provost with supporting evidence that addresses one of the specified criteria for the basis of the appeal.

Once a grade appeal is received by the Provost Office, the process of investigation and any necessary remedy is initiated. The resolution of Grade Appeal should take no more than 4 (four) working days, and it will adhere to the following:

1. The student should complete a Grade Appeal Request Form and submit it to Provost Office within 2 (two) working days after the publication of the grade. The Grade Appeal Request should be formal, submitted in writing, with evidence (in case) and signed by the student.
2. The Provost Office will require the Faculty which conducted the exam (the instructor in case) to write his/her observations at the back of the paper justifying changes, if required, or hold the present grade, within 2 (two) working days
3. If there is no change, then the Provost Office will ask the Faculty in case to provide within 2 (two) working days, a copy of the student's final exam paper, along with the subjects and key answers.
4. The Provost will nominate an ad-hoc Committee, which will comprise 2 faculty members, 1 administrator and 1 student. If any of the committee members has a real or perceived conflict of interest, they may be excused from the process. The Provost will determine whether an excuse is warranted.
5. The ad-hoc Committee will examine the final exam paper again, within 2 (two) working days.

6. The Committee will submit a report to the Provost on the case. In addition to the report, the Committee will also submit a recommended resolution and indicate the final grade.
7. Within the day of receiving the report, the Provost is to contact the student and the faculty member regarding the findings of the committee and the outcome.
8. The resolution of the Committee, regarding the student's grade should be taken as a decisive resolution, and the grade will be taken as final.

GRADUATION INFORMATION

Academic Standing Requirement

A student must be in good academic standing to be eligible for graduation.

Commencement

Commencement provides an opportunity for students and their families to celebrate their achievement. AUM circulates details about commencement within a month of the date of the ceremony.

Degree Requirements

AUM confers degrees in mid-January and mid-June. The exact dates are published as part of the academic calendar. To qualify for a bachelor's degree, students must be admitted, have completed at least 120 US credits (180-240 ECTS credits), or the number indicated in the University Catalog for the specific degree program, fulfilled all degree requirements and be in good academic standing.

Students seeking a bachelor's degree must complete at least 45 US (90 ECTS) credits of upper-division courses (numbered 300 or above) toward graduation requirements. Students may transfer credit from another institution towards their degree requirements in accordance with AUM's policy on transfer credit. However, at least 36 US credits (72 ECTS) must be from courses taken at AUM. At least 30 US credits (60 ECTS) of these 36 US credits taken at AUM must be from upper-division courses.

Graduation Requirements

The University stipulates graduation requirements for any individual student in effect when the student began matriculated studies in the degree program. Every individual student is personally responsible for meeting all graduation requirements as detailed in his or her *University Catalog* year.

Important: Course information, content and prerequisites may be subject to change as a result of the university's commitment to a process of continual improvement in academic programs. Students must comply with the most up-to-date course requirements.

Names on Degrees

AUM spells the names of students in English when printed on degrees exactly as they appear on their passports or identity cards. If a name on a passport or an identity card does not appear in English, then the spelling of the name AUM prints according to the personal preference of the student.

Petition to Graduate

By the end of the fifth week of classes in their final semester, students who expect to complete degree requirements must confirm their intention to graduate through the Registrar by completing a Degree Completion Application form. Concurrent degree seeking students must submit a separate application for each degree sought.

All grade changes, removals of incompletes, final submission of a required thesis to the Library and transfer work necessary for completion of degree requirements must be on file in the Registrar's Office by the last day of classes for that semester. Academic records are sealed thirty days after the conferral of a degree; no changes to the record will be made following that date.

Conferral of degrees is granted only when students apply to graduate, i.e., students will not receive retroactive degrees. Students who fail to complete all degree requirements by the end of the term for which they apply to graduate need not reapply for graduation. Their previous application will be automatically moved to the following semester.

REGISTRATION INFORMATION

Student Academic Load

The minimum load for full-time undergraduate students in the fall and spring semesters is 12 SCH/24 ECTS per semester. Undergraduate students may register for up to 18 SCH/36 ECTS in a semester without special approval. If an undergraduate student wishes to enroll for more than 18 SCH/36 ECTS in a semester they must receive the written permission of both their academic advisor and the Provost. However, within an academic year, a student may not take more than 30 SCH/ 60 ECTS.

An undergraduate student may enroll in the university as a part-time student, which means that the student registers for fewer than 12 SCH/24 ECTS credit hours per semester. Typically, an undergraduate student may study part-time for no more than 7 semesters during their undergraduate degree program.

Add/ Drop

Students may add/drop any class until the last day to add/drop within the first 2 (two) weeks of the semester. If dropping the last enrolled class, see Withdrawal Procedures as outlined in University Catalog for necessary procedures.

Advisor's Permission to Register

AUM requires all students to obtain their faculty advisor's approval for registration. AUM expects all students to consult with their advisors concerning course registration each semester.

Course Registration

The Registrar makes available the Schedule of Classes for the next semester by the middle of the semester. AUM reserves the right to change the class schedule as necessary, and courses listed in the Schedule of Classes may be canceled for insufficient enrollment.

Course Selection and Registration

Courses are offered at the discretion of the Provost. AUM does not offer every course every semester. AUM offers courses at a frequency that enables students to make satisfactory progress toward their degrees. Students must ensure that they pay particular attention to the frequency with which upper-level courses are offered in order to ensure that they take advantage of course offerings that are not regularly part of the schedule.

The Registrar's Office publishes courses offered in the subsequent semester during the 8th week of the current semester. The information included in the schedule of classes includes the course numbers, course titles, meeting days and times, meeting location, faculty members, enrollment counts, prerequisites, and registration restrictions.

Students may select courses in consultation with their academic advisor and then register online via the MyAUM portal. Course pre-requisites and co-requisites reflect necessary preparation and conditions for attempting a course.

It is the student's responsibility to be aware of these requirements as stated in the University Catalog and they must have taken required pre-requisites recently enough to be of value. The faculty member may drop students who have enrolled in a course for which they have not met the prerequisites or are not enrolled in a corequisite. Conversely, the faculty member may decide to waive any pre- or corequisites for students that they believe warrant such an accommodation. Students must present the faculty member's waiver in writing to the Registrar, otherwise they will not be permitted to register for the course.

Registration Changes

The student must complete registration changes within the scheduled adjustment period as indicated in the AUM Academic Calendar.

All students must be registered before the first day of classes for the semester. Retroactive credits will not be awarded to students who are not officially registered.

Students who wish to add classes after the add deadline require approval by the Provost in consultation with both the faculty and academic advisor concerned.

Students are responsible for dropping or withdrawing from their classes. Any classes for which a student enrolls past the drop deadline remains part of the student's official academic record.

Students do not receive written confirmation of schedule changes. They are responsible for checking their schedules via their MyAUM account before the end of the add/drop period to verify that their schedules are correct and that they are properly enrolled. AUM does not allow students to remain in classes unless they are officially registered. Students are responsible, both financially and academically, for all courses in which they are officially enrolled.

Registration Procedure

Students should register for courses prior to the beginning of each semester. AUM advises students to follow these registration procedures:

- Students should start reviewing their academic program and their study plan.
- Students should plan to meet their academic advisors and review the upcoming semester's course schedule to choose their courses and complete the online registration procedure.
- Students must meet with their advisor to approve their schedule of classes prior to online registration.
- After approval from the advisor, the student must enter the approved courses into the online registration system to officially register.
- Once their advisor electronically approves the courses and it is accepted by the system, students must proceed to the Finance Department to settle their bill.

Students must be present at the first meeting of every course (lecture and laboratory) to validate their registration. If students cannot attend the first meeting, they must notify the faculty member beforehand if they intend to continue in that class. Otherwise, their names may be removed from the class roster in both lecture and lab.

Students must pay their tuition in full or they may be dropped from their classes for nonpayment. AUM may also drop students from their classes administratively due to academic suspension, dismissal, or termination.

Schedule of Classes

The list of courses offered is available around mid-semester at the Registrar's Office for the following semester's classes.

GENERAL EDUCATION PROGRAM

Students in all academic programs at AUM must complete the general education program, which complements and contributes to the fulfillment of the mission of the university. AUM requires that students take a set of courses beyond their major to develop their understanding of broad disciplinary areas and the connections between and among them. Courses approved for general education stress experimental and activity-based learning and the application of knowledge to concrete situations. The General Education requirements are a total of 41-42 US credits/82- 84 ETCS.

Program Objectives

- The General Education Program aims to develop self-directed individuals who
- Are engaged and committed citizens aware of the global effect of social, political, and economic change.
 - Understand the nature of tradition and world cultures, understand the impact of the past on the present, and respond sensitively in culturally diverse environments.
 - Are aware of ethical issues and think critically to make informed and responsible decisions.
 - Use empirical and logical reasoning to assess evidence, evaluate data, make decisions, and solve problems.
 - Understand scientific principles and contemporary developments in science and technology and their impact on human life and the environment.
 - Communicate clearly and effectively in writing and speech and understand the theoretical and stylistic strategies that impact diverse audiences for various purposes.
 - Can locate, access, critically evaluate, and use information ethically and efficiently for a variety of purposes and engage in independent investigations and research.
 - Can interpret the meaning of different forms of artistic expression within historical and theoretical contexts and respond to works of art.

Program Learning Outcomes

- Upon graduation the student will have experience in
- Effective written and oral communication skills and the ability to use current technology to create a final written or oral product.
 - Recognition, analysis, and evaluation of ethical issues and the ability to defend their positions through reasoned argument.
 - Effective use of logical and mathematical reasoning to analyze quantitative data and solve problems for personal and professional purposes.
 - Effective use of appropriate tools to access information, evaluate sources, and conduct independent research.
 - An ability to employ the basic concepts of ethics or one of the social sciences to analyze a contemporary issue.

- Recognition, analysis, and resolution of scientific problems through the application of scientific methods.
- Effective use of computers to incorporate technology into academic content and to access information efficiently.

A recognition of contributions from multicultural contexts that enhance human experience, and the interdependence of the global community to facilitate coexistence in multicultural environments; and/ or a recognition of the historical contexts and variety of artistic forms, the nature and norms of creative processes that shape creative works, and the ability to engage in creative production of original artifacts.

General Education Degree Requirements

To achieve these outcomes, the General Education Program requires students to take approximately one third of their total credits in the following five thematic areas:

- Communication in a Global Society (3 courses).
- Data and Quantitative Literacy (1 course).
- Scientific Inquiry (3 courses in three different disciplines for BS, 2 courses in two different disciplines for BA).
- Tradition and Innovation in Arts and Humanities (3 courses BS, 4 courses BA).
- Understanding our Past and Present through Social Sciences (3 courses).

GENERAL EDUCATION (GE) PROGRAM REQUIREMENTS								
THEMATIC AREAS			Bahcelor of Arts			Bahcelor of Science		
			Number of Courses	US CR	ECTS CR	Number of Courses	US CR	ECTS CR
I. Communication in a Global Society		US/ECTS	3	9	18	3	9	18
ENG 101	English Composition I	3/6						
ENG 102	English Composition II	3/6						
ENG 120	American Literature: 1865 to the Present	3/6						
COM 101	Communication in a Multicultural Setting	3/6						
II. Data and Quantitative Literacy			1	3 - 4	6 - 8	1	3 - 4	6 - 8
MAT 101	Intro to Data Analysis, Probability, and Stats	3/6						
MAT 110	Pre-Calculus	3/6						
MAT 120	Calculus I	4/8						
III. Scientific Inquiry (SI)			2	8	16	3	12	24
BIO 101	Unity of Life and Lab	4/8						
CHE 101	Introduction to Chemistry and Lab	4/8						
CHE 111	Introduction to General Chemistry and lab	4/8						
PHY 101	Introduction to the Physical Universe	4/8						
PHY 111	Physics with Calculus I and Lab	4/8						
<i>(More than one course in a single discipline does not meet the requirement)</i>								
IV. Tradition and Innovation in Arts			4	12	24	3	9	18
ATH 101	Arts of the Mediterranean	3/6						
PHI 101	Introduction to Philosophy	3/6						
PHI 102	Applied Ethics	3/6						
REL 101	Religious Worlds in Comparative Perspective	3/6						
V. Understanding Our Past and			3	9	18	3	9	18
HIS 101	History of the Mediterranean	3/6						
PSY 101	Introduction to Psychology	3/6						
SOC 101	Introduction to Sociology	3/6						
GENERAL EDUCATION TOTALS			13	41 - 42	82 - 84	13	42 - 43	84 - 86

BA Degree 41 US / 82 ECTS or 42 US / 84 ECTS
 BS Degree 42 US / 84 ECTS or 43 US / 86 ECTS

ACADEMIC PROGRAMS

A degree program—the major or field—is a program of study that normally requires at least 40 semester courses in general education and a specific field. The degree and major or field appear on the diploma. The Bachelor of Science programs at AUM all require the completion of a minimum of 120 U.S. Carnegie unit credits (US)/240 European Credit Transfer System (ECTS) or approximately 40 courses, including general education courses. Some programs require additional coursework.

Degrees normally take four years to complete with a minimum of three years, assuming summer enrollment. If a degree is not completed within six years, all coursework in the major is re-evaluated for its current relevance. A student who wishes to graduate with a bachelor's degree in two or more areas must meet the requirements for the major in each field.

A concentration is a second-order component of a degree program. A concentration consists of at least 12 US/24 ECTS credit hours that are not applied to any other concentration.

Degree Completion Requirements:

- Successful completion of all credit hours as specified by the program curriculum with a minimum CGPA of 2.0.
- Completion of the minimum enrollment period and not exceeding the maximum enrollment period.
- Undergraduate transfer or concurrently enrolled students are required to complete a minimum of 50% of the required credit hours at AUM, including the majority of the final 60 US/120 ECTS credit hours.

Enrollment Periods:

- The standard enrollment period for a Bachelor of Science is eight (8) academic semesters or four (4) academic years. An academic year consists of two (2) academic semesters in addition to an optional summer session or term.
- The minimum enrollment period for a bachelor's degree is three (3) academic years.
- The maximum enrollment period for a Bachelor of Science degree is six (6) academic years.
- Summer session or term is not considered an academic semester for the purposes of calculating enrollment periods.

AUM currently offers 10 bachelor's programs:

Undergraduate Degrees:

- **Accounting** Bachelor of Science (BS)
- **Business Administration** Bachelor of Science (BS)
- **Business and Finance** Bachelor of Science (BS)
- **Civil Engineering** Bachelor of Science (BS)
- **Chinese Language and Culture** Bachelor of Arts (BA)
- **Electronics and Com. Engineering** Bachelor of Science (BS)
- **Game Development** Bachelor of Science (BS)
- **Graphic Design and Animation** Bachelor of Arts (BA)
- **Industrial Engineering** Bachelor of Science (BS)
- **Mechanical Engineering** Bachelor of Science (BS)

ACCOUNTING

Bachelor of Science (BS)

Introduction

The BS in Accounting is intended initially for students who are pursuing an accounting career in an international firm that adopts/recognizes US-based accountancy qualifications. This program contains all necessary courses to prepare for the Uniform CPA Examination as administered by the American Institute of CPAs. International candidates are allowed to sit for the Uniform CPA Exam in a number of international locations.

Program Mission

The mission of the Business Administration program is to provide students with skills and knowledge required to understand and analyze current accounting issues, and to enable students to pursue successful business, management, and accounting careers in a responsible and sustainable way.

Program Objectives

Knowledge

- A broad knowledge of fundamentals of business administration, achieved through the modules of the business score, including:
 - Microeconomics.
 - Macroeconomics.
 - Finance.
 - Management.
 - Operations Management.
 - Management Information Systems.
 - Business Ethics.
 - Organizational behavior.
 - Consumer behavior.
 - Marketing.
- A solid foundation in the theory, principles, and procedures of the discipline and professional practice of accountancy, including the study of financial, managerial and tax accounting and auditing and systems.
- Thorough preparation for professional certification.
- An understanding of the profession of accountancy and its role in modern business environments.
- An awareness of the need for continuing intellectual development through either professional or academic means.

Skills

Undergraduate accounting majors will have the following goals and objectives:

- **Technical Competence.** Students will be able to apply and explain the application of accounting standards and regulation and, where appropriate, international accounting standards.
- **Research Skills.** Students will be able to apply and explain the application of accounting standards.
- **Ethical Awareness.** Students will be able to recognize ethical issues and, where appropriate, resolve those issues.
- **Teamwork.** Students will effectively contribute to the performance of a multicultural, diverse team.
- **Critical Thinking.** Students will be able to apply accounting knowledge in new and unfamiliar circumstances through a conceptual understanding of accounting policies and theory in order to make informed decisions.
- **Global Perspective.** Students will be able to understand global business issues in general and demonstrate an understanding of international accounting standards in particular.

Competences

- Comply with local and international accountancy rules and regulations.
- Collaborate with a management team to lead the financial operations of a business.
- Guide a team in structuring accountancy processes of a business.

Program Learning Outcomes

Communication Skills, the learner will be able to achieve the following:

- **Written Communications:** Students will demonstrate written communication skills appropriate for general business situations with emphasis on technical accounting contexts.
 - **Oral Communications:** Students will create and effectively deliver oral presentations that are concise and informative and conduct research appropriate to the task at hand.
- Learning Skills, the learner will be able to achieve the following:

Learning Skills, the learner will be able to achieve the following:

- Students will be able to proceed to graduate work in Accountancy if they achieve the required academic standards.
- Students will be able to proceed to industry-based experiences that will position them to sit for the US-based Certified Public Accountant Exam.
- Students will be able to analyze complex business and accounting issues.

- Students will be able to display advanced knowledge of business and accounting theories and current business and accounting issues.
- Students will be able to analyze and identify the impact of business and accounting realities on economic, social, and environmental sustainability.

Degree Requirements for Accounting

The BS in Accounting degree is a four-year degree program. In their first and to some extent their second year, students focus on completion of the university's General Education Program (42-43 US/84-86 ECTS credits), with specialized courses in general business and accounting gradually introduced. Into the third- and fourth-year students focus increasingly on business, accounting, and finance topics. To earn a bachelor's degree, students must satisfactorily complete at least 120 US/225 ECTS credits, complete the General Education Program, fulfill all the requirements for the BS in Accounting degree, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years all coursework in the major will be reevaluated for its current relevance.

ACCOUNTING (BS) DEGREE REQUIREMENTS

		Number of Courses	US CR	ECTS CR
I.	University General Education Requirements	13	42-43	84-86
	<i>For Details, See Section University General Education Requirements</i>			
II.	Business Core Courses	14	42	84
	ACC 101 Principles of Accounting I	3/6		
	ACC 102 Principles of Accounting II	3/6		
	ECO 101 Microeconomics	3/6		
	ECO 103 Macroeconomics	3/6		
	FIN 201 Introduction to Finance	3/6		
	FIN 301 Money and Markets	3/6		
	MAT 201 Business Statistics	3/6		
	MGT 101 Principles of Management	3/6		
	MGT 102 Principles of Marketing	3/6		
	MGT 301 Operations Management	3/6		
	MGT 340 Management Information Systems	3/6		
	MGT 350 Consumer Behavior	3/6		
	MGT 360 Organizational Behavior	3/6		
	PHI 220 Business Ethics	3/6		
III.	Accounting Major Courses	7	21	42
	ACC 201 Intermediate Accounting I	3/6		
	ACC 202 Intermediate Accounting II	3/6		
	ACC 210 Managerial Accounting	3/6		
	ACC 301 Advanced Accounting	3/6		
	FIN 310 Taxation	3/6		
	FIN 350 Auditing	3/6		
	FIN 420 Research and Decision Making	3/6		
IV.	Free Electives	5	15	30
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
ACCOUNTING TOTALS		39	120	240
<i>US CR = U.S. Carnegie Credits</i>		<i>ECTSCR=European Credit Transfer Credits</i>		

SAMPLE FOUR-YEAR SCHEDULE

Bachelor of Science in Accounting

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ENG 101	English Composition I	3	6	BIO 101	Unity of Life and Lab	4	8
HIS 101	History of the Mediterranean	3	6	ENG 102	English Composition II	3	6
MAT 101	Introduction to Data Analysis, Probability, and Statistics	3	6	MAT 201	Business Statistics	3	6
REL 101	Religious Worlds in Comparative Perspective	3	6	MGT 101	Principles of Management	3	6
	Free Elective	3	6				
	TOTAL	15	30			13	26

Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ACC 101	Principles of Accounting I	3	6	ACC 102	Principles of Accounting II	3	6
CHE 101	Introduction to Chemistry and Lab	4	8	COM 101	Communication in a Multicultural Setting	3	6
ECO 101	Microeconomics	3	6	ECO 103	Macroeconomics	3	6
	General Education: Arts / Humanities	3	6	PHY 101	Introduction to the Physical Universe and Lab	4	8
	Free Elective	3	6	PSY 101	Introduction to Psychology	3	6
	TOTAL	16	32			16	32

Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ACC 201	Intermediate Accounting I	3	6	ACC 202	Intermediate Accounting II	3	6
FIN 201	Introduction to Finance	3	6	FIN 301	Money and Marketing	3	6
MGT 340	Management Information Systems	3	6	MGT 360	Organizational Behavior	3	6
	General Education: Arts / Humanities	3	6	SOC 101	Introduction to Sociology	3	6
	Free Elective	3	6	ACC 210	Managerial Accounting	3	6
	TOTAL	15	30			15	30

Fourth Year, Semester 1				Fourth Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ACC 301	Advanced Accounting	3	6	FIN 310	Taxation	3	6
MGT 301	Operations Management	3	6	FIN 350	Auditing	3	6
MGT 102	Principles of Marketing	3	6	FIN 420	Research and Decision Making	3	6
PHI 220	Business Ethics	3	6	MGT 350	Consumer Behavior	3	6
	Free Elective	3	6		Free Elective	3	6
	TOTAL	15	30			15	30

TOTAL CREDIT HOURS: 120 US / 240 ECTS

USCR = U.S. Carnegie Credits

ECTS CR = European Credit Transfer Credits

BUSINESS ADMINISTRATION
Bachelor of Science (BS)

Introduction

This flexible program is geared to the student who desires an overall conceptual foundation in business administration. Students majoring in Business Administration might be preparing for law school, planning to join a family business, or intending to embark on some other specialized route. The program has sufficient flexibility to meet the needs of each of these career orientations.

Program Mission

The mission of the Business Administration program is to provide students with the skills and knowledge required to understand and analyze current business administration issues and to enable students to pursue successful business and management careers in responsible and sustainable ways.

Program Objectives

Knowledge

The overall objective of this program is acquisition of knowledge of the many functional areas of a business and of the interrelationships among the functional areas within a business. The core knowledge from studying economics, statistics, accounting, etc. will prepare the students for a well-rounded background in business. The courses from the core will provide a solid background in business knowledge.

Skills

- **Teamwork.** Students will demonstrate effective interpersonal skills and the ability to work effectively.
- **Quantitative Reasoning and Financial Analysis Skills.** Students will demonstrate the ability to perform basic financial analysis.
- **Computer Skills.** Students should demonstrate proficiency in the use of general productivity software in business applications with an emphasis on Microsoft Excel.
- **Global Perspectives.** Students will demonstrate an understanding of global dimensions of business including socio-cultural, political-legal, financial, technological, and economic environments.
- **Ethical Reasoning.** Students will have the skills to make decisions grounded in ethical thinking.

Competencies

- Collaborate as part of a team to solve problems.
- Be responsible for ethical decision-making in business.
- Guide practices in small to medium-size businesses.

Program Learning Outcomes

Written Communications: Students shall demonstrate good written communication skills appropriate for engaging with the various stakeholders of a business.

Oral Communications: Students will create and effectively deliver oral presentations that are concise and informative and will conduct research appropriate to the task at hand.

Students will be able to display advanced **knowledge of business and management** theories and principles for addressing contemporary management issues.

Students will be able to **analyze the impact of business and management** practices on a country's economic, socio-cultural, and technological environments.

Students will have the ability to **collect, develop and evaluate** relevant information for purposes of making informed judgments on different business scenarios.

Our students will **evaluate ethical dilemmas** facing managers of business organizations and apply ethical considerations when making business decisions.

Degree Requirements for Business Administration

The BS in Business Administration degree is a four-year degree program. In their first and to some extent their second years, students focus on completion of the University's General Education Program (42-43 US/84-86 ECTS credits) with specialized courses in business gradually introduced. In the third- and fourth-year students will focus increasingly on Business topics. To earn a bachelor's degree, students must satisfactorily complete at least 120 US/240 ECTS credits, complete the General Education Program, fulfill all the requirements for the BS in Business Administration degree, and achieve a CGPA of or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years, all coursework in the major will be reevaluated for its current relevance.

BUSINESS ADMINISTRATION (BS) DEGREE REQUIREMENTS

		Number of Courses	US CR	ECTS CR
I. University General Education Requirements		13	42-43	84-86
For Details, See Section <i>University General Education Requirements</i>				
II. Business Core Courses		US/ECTS	14	42
	84			
ACC 101	Principles of Accounting I	3/6		
ACC 102	Principles of Accounting II	3/6		
ECO 101	Microeconomics	3/6		
ECO 103	Macroeconomics	3/6		
FIN 201	Introduction to Finance	3/6		
FIN 301	Money and Markets	3/6		
MAT 201	Business Statistics	3/6		
MGT 101	Principles of Management	3/6		
MGT 102	Principles of Marketing	3/6		
MGT 301	Operations Management	3/6		
MGT 340	Management Information Systems	3/6		
MGT 350	Consumer Behavior	3/6		
MGT 360	Organizational Behavior	3/6		
PHI 220	Business Ethics	3/6		
III. Business Administration Major Courses		US/ECTS	6	18
				36
ECO 310	European Economic History	3/6		
MGT 320	International Business	3/6		
MGT 330	Principles of Sustainability	3/6		
MGT 410	Entrepreneurship	3/6		
MGT 420	Global Human Resource Management	3/6		
MGT 450	Principles of Marketing Research	3/6		
IV. Free Electives		US/ECTS	6	18
				36
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
BUSINESS ADMINISTRATION TOTALS			39	120
				240

US CR= U.S. Carnegie Credits

ECTSCR=European Credit Transfer Credits

SAMPLE FOUR-YEAR SCHEDULE

Bachelor of Science in Business Administration

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ENG 101	English Composition I	3	6	ENG 102	English Composition II	3	6
BIO 101	Unity of Life and Lab	4	8	HIS 101	History of the Mediterranean	3	6
MAT 101	Introduction to Data Analysis, Probability, and Statistics	3	6	MAT 201	Business Statistics	3	6
REL 101	Religious Worlds in Comparative Perspective	3	6	MGT 101	Principles of Management	3	6
	Free Elective	3	6	MGT 102	Principles of Marketing	3	6
	TOTAL	16	32			15	30

Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ACC 101	Principles of Accounting I	3	6	ACC 102	Principles of Accounting II	3	6
CHE 101	Introduction to Chemistry and Lab	4	8	ECO 103	Macroeconomics	3	6
COM 101	Communication in a Multicultural Setting	3	6	PHY 101	Introduction to the Physical Universe and Lab	4	8
ECO 101	Microeconomics	3	6		Free Elective	3	6
	Gen Ed: Arts / Humanities	3	6				
	TOTAL	16	32			13	26

Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
FIN 201	Introduction to Finance	3	6	FIN 301	Money and Markets	3	6
MGT 301	Operations Management	3	6	ECO 310	European Economic History	3	6
MGT 340	Management Information Systems	3	6	MGT 360	Organizational Behavior	3	6
PSY 101	Introduction to Psychology	3	6	SOC 101	Introduction to Sociology	3	6
	Gen Ed: Arts / Humanities	3	6		Free Elective	3	6
	TOTAL	15	30			15	30

Fourth Year, Semester 1				Fourth Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
MGT 320	International Business	3	6		Free Elective	3	6
MGT 330	Principles of Sustainability	3	6	MGT 410	Entrepreneurship	3	6
MGT 350	Consumer Behavior	3	6	MGT 420	Global Human Resource Management	3	6
PHI 220	Business Ethics	3	6	MGT 450	Principles of Marketing Research	3	6
	Free Elective	3	6		Free Elective	3	6
	TOTAL	15	30			15	30

TOTAL CREDIT HOURS: 120 US / 240 ECTS

US CR = U.S. Carnegie Credits

ECTSCR = European Credit Transfer Credits

BUSINESS AND FINANCE
Bachelor of Science (BS)

Introduction

The BS in Business and Finance is designed for those students who desire a solid foundation in business with a particular emphasis on finance. The degree is designed for a graduate to be able to be employed in any general area of finance. A graduate will be able to step into a banking institution and be well prepared to handle tasks that would normally require firm training.

Program Mission

The mission of the Business Administration and Finance program is to provide the graduate with the knowledge, skills, and understanding required to work productively and fruitfully in the financial world. It provides the foundation on which to build a strong career in financial industries and services.

Program Objectives

The solid foundation in corporate finance, investments, portfolio management, and international finance will give the student a strong content background. In addition, students will develop communication and presentation skills, active listening skills, the ability to do software analysis, as well as development of teamwork skills and a solid ethical foundation.

Knowledge

The core knowledge from studying economics, statistics, accounting, etc. will prepare the students for the study of the financial topics of corporate, investments, international, and institutions, as well as the more specialized topic of Islamic finance. The courses from the core will provide a solid background in business knowledge. The finance courses cover core areas of finance theory.

Skills

- **Teamwork skills.** Collaborate for effective presentations and analysis in diverse teams and develop the interpersonal skills and the ability to work effectively with others.
- **Quantitative Reasoning and Financial Analysis Skills.** Demonstrate the ability to perform basic financial analysis.
- **Research and Computer Skills.** Research complex financial reports and synthesize the results. The use of appropriate software, in particular SAS and Microsoft Excel will demonstrate their proficiency in software for business applications for research and reporting of results.
- **Global Perspectives**
 - Demonstrate an understanding of global dimensions of business including sociocultural, political-legal, financial, technological and economic environments.
 - Effectively function in the diverse nature of the local and global society and translate that knowledge into improved decision making.

- Work effectively in diverse teams to reach sound financial decisions

Learning Outcomes

By the end of this program, students develop the ability to

- Analyze the financial management function in a business organization
- Identify and appraise different sources of business finance
- Describe the structure of financial systems and explain the role of financial intermediaries
- Apply working capital management techniques
- Undertake effective investment appraisal
- Perform business valuations

Degree Requirements for Business and Finance

The BS in Business and Finance degree is a four-year degree program. In their first and to some extent their second year, students focus on completion of the university's General Education Program (42 US / 84 ECTS credits), with specialized courses in general business and finance gradually introduced. In the third- and fourth-year students focus increasingly on business and finance topics. To earn a bachelor's degree, students must satisfactorily complete at least 120 US / 240 ECTS credits, complete the General Education Program, fulfill all the requirements for the BS in Business and Finance degree, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for readmission. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years all coursework in the major will be re-evaluated for its current relevance.

BUSINESS AND FINANCE (BS) DEGREE REQUIREMENTS

		Number of Courses	US CR	ECTS CR
I. University General Education Requirements		13	42	84
<i>For Details, See Section University General Education Requirements</i>				
II. Business Core Courses		11	33	66
	US/ECTS			
ACC 101	Principles of Accounting I	3/6		
ACC 102	Principles of Accounting II	3/6		
ECO 101	Microeconomics	3/6		
ECO 103	Macroeconomics	3/6		
MAT 201	Business Statistics	3/6		
MGT 101	Principles of Management	3/6		
MGT 102	Principles of Marketing	3/6		
MGT 301	Operations Management	3/6		
MGT 340	Management Information Systems	3/6		
MGT 360	Organizational Behavior	3/6		
PHI 220	Business Ethics	3/6		
III. Business and Finance Major Courses		9	27	54
	US/ECTS			
FIN 201	Introduction to Finance	3/6		
FIN 301	Money and Markets	3/6		
FIN 250	Corporate Finance	3/6		
FIN 305	Investments and Portfolio Management	3/6		
FIN 360	International Finance	3/6		
FIN 370	Taxes, Law, and Regulation	3/6		
FIN 380	Financial Statement Analysis	3/6		
FIN 410	Markets, Institutions, and Derivatives	3/6		
FIN 430	Finance: Theory and Applications	3/6		
IV. Free Electives		6	18	36
	US/ECTS			
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
	Free Elective	3/6		
BUSINESS AND FINANCE TOTALS		39	120	240
US CR = U.S. Carnegie Credits		ECTS CR = European Credit Transfer Credits		

SAMPLE FOUR-YEAR SCHEDULE

Bachelor of Science in Business and Finance

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ENG 101	English Composition I	3	6	BIO 101	Unity of Life and Lab	4	8
HIS 101	History of the Mediterranean	3	6	ENG 102	English Composition II	3	6
MAT 101	Introduction to Data Analysis, Probability, and Statistics	3	6	MAT 201	Business Statistics	3	6
MGT 101	Principles of Management	3	6	REL 101	Religious Worlds in Comparative Perspective	3	6
	Free Elective	3	6				
	TOTAL	15	30			13	26
Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ACC 101	Principles of Accounting I	3	6	ACC 102	Principles of Accounting II	3	6
COM 101	Communication in a Multicultural Setting	3	6	CHE 101	Introduction to Chemistry and Lab	4	8
ECO 101	Microeconomics	3	6	ECO 103	Macroeconomics	3	6
PHI 101	Introduction to Philosophy	3	6	PSY 101	Introduction to Psychology	3	6
PHY 101	Introduction to the Physical Universe and Lab	4	8		Free Elective	3	6
	TOTAL	16	32			16	32
Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
FIN 201	Introduction to Finance	3	6	FIN 250	Corporate Finance	3	6
MGT 360	Organizational Behavior	3	6	FIN 301	Money and Markets	3	6
PHI 102	Applied Ethics	3	6	MGT 340	Management Information Systems	3	6
SOC 101	Introduction to Sociology	3	6	PHI 220	Business Ethics	3	6
	Free Elective	3	6		Free Elective	3	6
	TOTAL	15	30			15	30
Fourth Year, Semester 1				Fourth Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
FIN 305	Investments and Portfolio Management	3	6	FIN 380	Financial Statement Analysis	3	6
FIN 360	International Finance	3	6	FIN 410	Markets, Institutions, and Derivatives	3	6
MGT 301	Operations Management	3	6	FIN 430	Finance: Theory and Applications	3	6
FIN 370	Taxes, Law, and Regulation	3	6	MGT 102	Principles of Marketing	3	6
	Free Elective	3	6		Free Elective	3	6
	TOTAL	15	30			15	30

TOTAL CREDIT HOURS: 120 US / 240 ECTS

US CR = U.S. Carnegie Credits

ECTSCR = European Credit Transfer Credits

CIVIL ENGINEERING

Bachelor of Science (BS)

Introduction

The Bachelor of Science in Civil Engineering provides a fundamental background in all civil engineering subdisciplines: construction, environmental, geotechnical, hydraulics, structures and transportation engineering. Graduates will be prepared to immediately contribute in professional practice in those subfields in entry level engineering positions.

Program Mission

The mission of the BS in the Civil Engineering program is to prepare graduates for employment as professional engineers in the wide range of fields associated with civil engineering. The knowledge and skills graduates acquire enable them to work in a wide range of related occupations. Civil engineers plan, design, develop and manage projects for the construction or repair of buildings, earth structures, powerhouses, roads, airports, railways, rapid transit facilities, bridges, tunnels, canals, dams, ports and coastal installations and systems related to highway and transportation services, water distribution and sanitation. Civil engineers may also specialize in foundation analysis, building and structural inspection, surveying, geomatics and municipal planning. Civil engineers are employed by engineering consulting companies, in all levels of government, by construction firms and in many other industries, or they may be self-employed.

Program Objectives

The Civil Engineering Program objectives and indicators are:

Objective 1: Technical Proficiency. Building on fundamental knowledge, graduates will develop technical skills within and across disciplines in civil engineering and/or in closely related fields.

Objective 2: Professional Growth. Graduates will develop and exercise their capabilities for life-long learning as a means to enhance their technical and non-technical skills.

Objective 3: Management Skills. Graduates will develop and refine their knowledge and skills for management, communications, and professional ethics or communications components.

Program Learning Outcomes

Communication Skills, the learner will be able to achieve the following:

- a) prepare professional proposals and reports
- b) competently deliver oral presentations to technical and lay audiences
- c) develop and use effective audio/visual aids
- d) write effective professional communications such as email and memorandums
- e) communicate within the engineering disciplines through plans and drawings

Learning Skills, the learner will be able to achieve the following:

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

Degree Requirements for Civil Engineering

The BS in Civil Engineering is a four-year degree program. In their first and to some extent their second year, students focus on completion of the University's General Education Program (43 US / 86 ECTS credits), with specialized courses in Civil Engineering gradually introduced. In the third- and fourth-year students focus increasingly on Civil Engineering topics. To earn a bachelor's degree, students must satisfactorily complete at least 133 US / 266 ECTS credits, fulfill all the requirements for the BS in Civil Engineering degree, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years all coursework in the major will be re-evaluated for its current relevance.

CIVIL ENGINEERING (BS) DEGREE REQUIREMENTS

		Number of Courses	US CR	ECTS CR
I. University General Education Requirements		13	43	86
For Details, See Section <i>University General Education Requirements</i>				
II. Related Requirements		8	21	50
ENR 102	Introduction to Engineering Lecture Series and Design	3/6		
ENR 211	Dynamics	1/2		
ENR 212	Engineering Economics	1/2		
MAT 105	Introduction to MATLAB I	1/2		
MAT 130	Calculus II	4/8		
MAT 220	Multivariable Calculus	4/8		
MAT 250	Differential Equations	3/6		
PHY 240	Introductory Electricity and Magnetism or CHE 112 General Chemistry II	4/8		
III. Civil Engineering Major Courses		23	70	140
CIE 210	Engineering Graphics	2/4		
CIE 214	Statics	3/6		
CIE 215	Mechanics of Materials	3/6		
CIE 218	Mechanics of Fluids	4/8		
CIE 251	Elementary Surveying	3/6		
CIE 301	Engineering Communication	3/6		
CIE 303	Numerical Analysis for Civil Engineers	3/6		
CIE 310	Probability and Statistics for Civil Engineering	3/6		
CIE 323	Hydraulic Engineering and Design	4/8		
CIE 333	Elementary Structural Analysis	3/6		
CIE 334	Structural Design in Steel	3/6		
CIE 335	Structural Design in Concrete	3/6		
CIE 343	Soil Mechanics	4/8		
CIE 363	Transportation Engineering and Pavement Design	4/8		
CIE 381	Construction Engineering Management	3/6		
CIE 389	Materials Testing Laboratory	1/2		
CIE 408A	Issues in Civil Engineering Practice	3/6		
CIE 408B	Civil Engineering Senior Capstone Design	3/6		
CIE 427	Computer Applications in Hydraulics	3/6		
CIE 440	Foundation Engineering	3/6		
CIE 442	Ground Improvement	3/6		
CIE 463	Traffic Flow and Capacity Analysis	3/6		
CIE 482	Construction Project Planning, Scheduling and Control	3/6		
TOTAL		44	134	268

US CR = U.S. Carnegie Credits

ECTS CR = European Credit Transfer Credits

Bachelor of Science in Civil Engineering

Bachelor of Science in Civil Engineering							
First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ENG 101	English Composition I	3	6	ENG 102	English Composition II	3	6
MAT 120	Calculus I	4	8	SOC 101	Introduction to Sociology	3	6
CHE 111	Introduction to General Chemistry and lab	4	8	PHY 111	Physics with Calculus and lab	4	8
HIS 101	History of the Mediterranean	3	6	BIO 101	Unity of Life and lab	4	8
ENR 102	Intro to Engineering and Eng. Des.	3	6	MAT 130	Calculus	4	8
TOTAL		17	34	TOTAL		18	36
Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ENR 212	Engineering Economics	1	2	MAT 105	Introduction to MATLAB1	1	2
PHY 240	Intro Electricity and Magnetism (w/lab) or Gen Chem II (w/lab)	4	8	COM 101	Introduction to Multicultural Communication	3	6
CIE 210	Engineering Graphics	2	4	CIE 215	Mechanics of Materials	3	6
CIE 214	Statistics	3	6	CIE 310	Prob and Stats for Civil Eng.	3	6
MAT 220	Multivariable Calculus	4	8	CIE 251	Elementary Surveying and lab	3	6
REL 101	Religious Worlds in Comparative Perspective	3	6	MAT 250	Differential Equations	3	6
TOTAL		17	34	TOTAL		16	32
Third Year, Semester 1				Third Year, Semester 12			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
PHI 101	Introduction to Philosophy, or ATH 101 Arts of the Mediterranean	3	6	CIE 323	Hydraulic Engineering and Design	4	8
CIE 301	Engineering Communications	3	6	CIE 334	Structural Design in Steel	3	6
CIE 303	Numerical Analysis for Civ Engineers	3	6	CIE 335	Structural Design in Concrete	3	6
CIE 218	Mechanics of Fluids and lab	4	8	CIE 343	Soil Mechanics	4	8
CIE 333	Elementary Structural Analysis	3	6	CIE 389	Materials Testing Laboratory	1	2
ENR 211	Dynamics	1	2	PHI 102	Applied Ethics	3	6
TOTAL		17	34	TOTAL		18	36
Fourth Year, Semester 1				Fourth Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
CIE 363	Transportation Engineering and Pavement Design	4	8	CIE 408B	Civil engineering Senior Capstone Design	3	6
CIE 381	Construction Engineering Management	3	6	CIE 440	Foundation Engineering	3	6
PSY 101	Introduction to Psychology	3	6	CIE 442	Ground Improvement	3	6
CIE 408A	Issues in Civil Engineering Practice	3	6	CIE 463	Traffic Flow and Capacity Analysis	3	6
CIE 427	Computer Applications in Hydraulics	3	6	CIE 482	Construction Project Planning, Scheduling, and Control	3	6
TOTAL		16	32	TOTAL		15	30

TOTAL CREDIT HOURS: 134 US / 268 ECTS

ELECTRONICS AND COMMUNICATIONS ENGINEERING

Bachelor of Science (BS)

Introduction

The Bachelor of Science in Electronics and Communications Engineering is designed for students interested in a focus on electronics and communications within the broader field of electrical engineering, such as telecommunications engineering, computer science engineering, consumer electronics engineering, electronics circuit design engineering, electronics test and maintenance engineering, or electronics and communications research engineering.

Program Mission

The mission of the BS in Electronics and Communications Engineering program is to prepare graduates for employment as professional engineers in the field of electronics and communications engineering. The knowledge and skills graduates acquire enable them to work in a wide range of related occupations.

Program Objectives

To achieve its mission, the program provides students with the following knowledge, skills, and competences:

Knowledge

Students who major in Electronics and Communications Engineering will acquire knowledge in the following areas:

- Basic Sciences.
- Mathematics.
- Engineering Areas:
 - Electric circuits and associated labs.
 - Electronics and associated labs.
 - Digital systems, computers and associated labs.
 - Signals, systems, & communications and associated lab.
 - Control systems and integrated systems design.
- Students will demonstrate an understanding of professional and ethical responsibility.
- Students will demonstrate the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- Students will develop a recognition of the need for life-long learning.
- Students will demonstrate a knowledge of contemporary issues.

Skills

- Students will develop analytical and critical thinking skills.
- Students will develop appropriate information technology (IT) skills.
- Students will demonstrate an ability to apply knowledge of mathematics, science, and engineering.
- Students will demonstrate an ability to design and conduct experiments, as well as to analyze and interpret data.

- Students will demonstrate an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- Students will demonstrate an ability to function on multidisciplinary teams.
- Students will demonstrate an ability identify, formulate, and solve engineering problems.
- Students will demonstrate an ability to communicate effectively.
- Students will demonstrate an ability to engage in life-long learning.
- Students will demonstrate an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Competences

1. Ability to independently analyze, design, and implement electronic systems
2. Ability to independently analyze, design, and implement communications systems
3. Ability to collaborate effectively with a team to design and development a system involving electronics and/or communications components.
4. Ability to use computer hardware and software to solve engineering problems.
5. Ability to effectively utilize laboratory equipment to analyze electronic systems.
6. Ability to apply mathematics to analyze and design engineering systems.

Program Learning Outcomes

Communication Skills, the learner will be able to achieve the following:

1. Produce effective written lab reports.
2. Effectively communicate orally with team members in the capstone design class.
3. Produce well-written lab reports and give an effective oral presentation of the capstone design project.

Learning Skills, the learner will be able to achieve the following:

1. Secure employment where electronics and communication engineering skills can be utilized.
2. Proceed to graduate work in electronics and communication engineering and related fields.
3. Independently study new emerging technologies, using the frameworks and tools acquired in the program.

Degree Requirements for electronics and communications engineering

The BS in Electronics and Communications Engineering is a four-year degree program. In their first and to some extent their second year, students focus on completion of the University's General Education Program (43 US/ 86 ECTS credits), with specialized courses in Electronics and Communications Engineering gradually introduced. Into the third- and fourth-year

students will focus increasingly on Electronics and Communications Engineering topics. To earn a bachelor's degree, students must satisfactorily complete at least 129 US / 258 ECTS credits, complete the General Education Program, fulfill all the requirements for the BS in Electronics and Communications Engineering degree, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years all coursework in the major will be re-evaluated for its current relevance.

ELECTRONICS & COMMUNICATIONS ENGINEERING (BS) DEGREE REQUIREMENTS

			Number of Courses	US CR	ECTS CR
I.	University General Education Requirements	US/ECTS	13	43	86
<i>For Details, See Section University General Education Requirements</i>					
II.	Electronic and Communications Core Courses	US/ECTS	7	25	50
	CHE 112 General Chemistry II and Lab	4/8			
	CSC 201 Introduction to C	3/6			
	MAT 130 Calculus II	4/8			
	MAT 220 Multivariable Calculus	4/8			
	MAT 250 Differential Equations	3/6			
	MAT 260 Linear Algebra	3/6			
	PHY 112 Physics with Calculus II and Lab	4/8			
III.	Electronic and Communications Major Courses	US/ECTS	15	51	102
	ECE 201 Logic and Computing Devices and Lab	3/6			
	ECE 202 Electric Circuits I and Lab	4/8			
	ECE 262 Electric Circuits II and Lab	4/8			
	ECE 272 Computer Organization and Lab	4/8			
	ECE 317 Random Signal Analysis	3/6			
	ECE 320 Electronics I and Lab	4/8			
	ECE 321 Electronics II and Lab	4/8			
	ECE 330 Signals, Systems, and Transforms and Lab	4/8			
	ECE 371 Microprocessor Interfacing and Lab	4/8			
	ECE 382 Electromagnetics	3/6			
	ECE 409 Introduction to Linear Control Systems	3/6			
	ECE 427 Communications Systems	3/6			
	ECE 430 Digital Communications	3/6			
	ECE 467 Introduction to Digital Signal Processing	3/6			
	ECE 495 Integrated System Design I	2/4			
	ECE 496 Integrated System Design II	2/4			
IV.	Technical Electives (select one)	US/ECTS	1	3	6
	ECE 404 Semiconductor Devices	3/6			
	ECE 438 Computer Communications	3/6			
TOTALS			36	124	248

USCR = U.S. Carnegie Credits

ECTSCR = European Credit Transfer Credits

SAMPLE FOUR-YEAR SCHEDULE

Bachelor of Science in Electronics and Communications Engineering

ENG 101	English Composition I	3	6	CHE 112	General Chemistry II with Lab	4	8
CHE 111	Introduction to General Chemistry and Lab	4	8	ENG 102	English Composition II	3	6
MAT 120	Calculus I	4	8	MAT 130	Calculus II	4	8
REL 101	Religious Worlds in Comparative Perspective	3	6	PHY 111	Physics with Calculus I with Lab	4	8
	TOTAL	14	28			15	30

Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
CSC 201	Introduction to Programming in C with Lab	3	6	BIO 101	Unity of Life with Lab	4	8
ECE 201	Logic and Computing Devices	3	6	ECE 262	Electric Circuits II with Lab	4	8
ECE 202	Electric Circuits I with Lab	4	8	ECE 272	Computer Organization with Lab	4	8
MAT 220	Multivariate Calculus	4	8	MAT 250	Differential Equations	3	6
PHY 112	Physics with Calculus II	4	8				
	TOTAL	18	36			15	30

Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
COM 101	Introduction to Multicultural Communication	3	6	ECE 317	Random Signal Analysis	3	6
ECE 320	Electronics I with Lab	4	8	ECE 321	Electronics II with Lab	4	8
ECE 330	Signals, Systems, and Transformations with Lab	4	8	ECE 371	Microprocessor Interfacing with Lab	4	8
MAT 260	Linear Algebra	3	6	ECE 382	Electromagnetics	3	6
PHI 101	Introduction to Philosophy (or ATH 101)	3	6	PHI 102	Applied Ethics	3	6
	TOTAL	17	34			17	34

Fourth Year, Semester 1				Fourth Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ECE 409	Introduction to Linear Control Systems	3	6	ECE 467	Introduction to Digital Signal Processing	3	6
ECE 427	Communications Systems	3	6	ECE 496	Integrated System Designs II	4	8
ECE 430	Digital Communications	4	8	HIS 101	History of the Mediterranean	3	6
ECE 495	Integrated System Design I	4	8	SOC 101	Introduction to Sociology	3	6
PSY 101	Introduction to Psychology	3	6		Technical Elective	3	6
	TOTAL	17	34			16	32

TOTAL CREDIT HOURS: 129 US / 258 ECTS

US CR = U.S. Carnegie Credits

INDUSTRIAL ENGINEERING
Bachelor of Science (BS)

Introduction

The Bachelor of Science in Industrial Engineering provides a fundamental background in all Industrial engineering subdisciplines. Whether it is manufacturing smart phones or superior automobiles, streamlining an operating room in a hospital, shortening a rollercoaster line at an amusement park, or distributing products worldwide, these challenges share the common goal of saving a company money and increasing efficiency. Industrial engineers take courses in a variety of subjects such as production and process design, production planning, optimization, modeling and simulation, information management, facility layout, job/workplace design, engineering management, material flow, and distribution.

Program Mission

The mission of the BS in the Industrial Engineering program is to prepare graduates for employment as professional engineers in the wide range of fields associated with Industrial engineering. Our students combine technical knowledge and skills from engineering, business, and social sciences to design, evaluate, monitor and improve system performance. Industrial engineering graduates go on to a wide variety of careers related to manufacturing, entertainment, shipping and logistics, healthcare, project management, transportation, systems modeling, telecommunications, customer service, and government. Many of our industrial engineers use the foundations we provide to pursue management positions in high tech industries.

Program Objectives

The Industrial Engineering Program objectives and indicators are:

Objective 1: Technical Proficiency. Graduates integrate mathematics, physics, engineering science, operations research, applied probability and statistics, manufacturing technology, production planning, and computer simulation to model and analyze entire systems that are composed of their individual components, subsystems, and processes.

Objective 2: Professional Growth. Graduates develop and exercise their capabilities for life-long learning as a means to enhance their technical and social skills.

Objective 3: Management Skills. Graduates develop and refine their management, communications, and professional skills to increase their effectiveness as team members and team leaders.

Program Learning Outcomes

Knowledge Skills: The learner will be able to achieve the following:

- a) ability to apply knowledge of mathematics, science, and engineering
- b) ability to design and conduct experiments, as well as to analyze and interpret data
- c) ability to design system, component, or process to meet

- d) needs within realistic constraints (d) ability to function on multidisciplinary teams (e) ability to identify, formulate, and solve engineering problems
- e) understanding of professional and ethical responsibility
- f) ability to communicate effectively
- g) broad education necessary to understand the impact of engineering solutions
- h) recognition of the need for, and an ability to engage in lifelong learning
- i) knowledge of contemporary issues
- j) ability to use techniques, skills, and modern engineering tools necessary for engineering practice

Communication Skills: The learner will be able to achieve the following:

- a) prepare professional proposals and reports
- b) competently deliver oral presentations to technical and lay audiences
- c) develop and use effective audio/visual aids
- d) write effective professional communications such as email and memorandums
- e) communicate within the engineering disciplines through plans and drawings

Learning Skills: The learner will be able to achieve the following:

- a) understand the impact of engineering solutions in a global, economic, environmental, and societal context
- b) recognize the need to engage life-long learning
- c) be capable of developing a career plan including options for advanced education or specialized training to enhance career
- d) have the ability to autonomously initiate and engage in lifelong learning

Degree Requirements for Industrial Engineering

The BS in Industrial Engineering is a four-year degree program. In their first and to some extent their second year, students focus on completion of the University's General Education Program (43 US / 86 ECTS credits), with specialized courses in Industrial Engineering gradually introduced. Into the third- and fourth-year students focus increasingly on Industrial Engineering topics. To earn a bachelor's degree, students must satisfactorily complete at least 133 US / 266 ECTS credits, fulfill all the requirements for the BS in Industrial Engineering degree, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years all coursework in the major will be re-evaluated for its current relevance.

INDUSTRIAL ENGINEERING (BS) DEGREE REQUIREMENTS

		Number of Courses	US CR	ECTS CR
I. University General Education Requirements		13	43	86
<i>For Details, See Section University General Education Requirements</i>				
II. Related Requirements		7	25	50
CIE 214	Statics	3/6		
CIE 301	Engineering Communications	3/6		
CHE 112	General Chemistry II	4/8		
ENR 102	Introduction to Engineering Lecture Series and Design	3/6		
MAT 130	Calculus II	4/8		
MAT 220	Multivariable Calculus	4/8		
PHY 240	Introductory Electricity and Magnetism	4/8		
III. Industrial Engineering Major Courses		22	65	130
IEE 175	Computer Programming for Engineering Applications	3/6		
IEE 250	Introduction to Systems and Industrial Engineering	3/6		
IEE 265	Engineering Economics	3/6		
IEE 277	Object-Oriented Modeling and Design	3/6		
IEE 270	Mathematical Foundations and Numerical Computation	3/6		
IEE 295	Systems and Industrial Engineering Soph. Colloquium	1/2		
IEE 305	Introduction to Engineering Probability and Statistics	3/6		
IEE 321	Probabilistic Models in Operations Research	3/6		
IEE 330R	Engineering Experimental Design	3/6		
IEE 340	Linear Programming	3/6		
IEE 367	Engineering Management	3/6		
IEE 370	Embedded Computer Systems	4/8		
IEE 377	Software for Engineers	3/6		
IEE 383	Integrated Manufacturing Systems	3/6		
IEE 406	Quality Engineering	3/6		
IEE 410A	Human Factors and Ergonomics in Design	3/6		
IEE 431	Simulation Modeling and Analysis	3/6		
IEE 457	Project Management	3/6		
IEE 462	Production Systems Analysis	3/6		
IEE 464	Cost Estimation	3/6		
IEE 498A	Cross-disciplinary Design	3/6		
IEE 498B	Cross-Disciplinary Design	3/6		
TOTAL		42	133	266
<i>US CR = U.S. Carnegie Credits</i>		<i>ECTS CR = European Credit Transfer Credits</i>		

SAMPLE FOUR-YEAR SCHEDULE

Bachelor of Science in Industrial Engineering

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ENG 101	English Composition I	3	6	ENG 102	English Composition II	3	6
MAT 120	Calculus I	4	8	SOC 101	Introduction to Sociology	3	6
CHE 111	Introduction to Gen. Chem. and lab	4	8	BIO 102	Unity of Life and lab	4	8
HIS 101	History of the Mediterranean	3	6	MAT 130	Calculus II	4	8
ENR 102	Introduction to Engineering and Eng. Design	3	6	PHY 111	Physics with calculus I and lab	4	8
TOTAL		17	34			18	36
Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
IEE 175	Computer Programming for Engineering Applications	3	6	IEE 250	Introduction to Systems and Industrial Engineering	3	6
CIE 214	Statics	3	6	CHE 112	General Chemistry II and lab	4	8
REL 101	Religious Worlds in Comparative Perspective	4	8	IEE 277	Object-Oriented Modeling and Design	3	6
PHY 240	Introductory Electricity and Magnetism and lab	4	8	COM 101	Introduction to Multicultural Communications	3	6
MAT 220	Multivariable Calculus	3	6	IEE 265	Engineering Economics	3	6
TOTAL		17	34			16	32
Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ATH 101	Arts of the Mediterranean	3	6	IEE 340	Linear Programming	3	6
IEE 270	Mathematical Foundations and Numerical Computation	3	6	IEE 410A	Human Factors and Ergon in Des.	3	6
IEE 295	Systems and Industrial Engineering	1	2	IEE 321	Probabilistic Models in Oper. Res.	3	6
IEE 305	Introduction to Engineering Probability and Statistics	3	6	IEE 383	Integrated Manufacturing Systems	3	6
IEE 377	Software for Engineers	3	6	IEE 370	Embedded Computer Systems	4	8
IEE 367	Engineering Management	3	6				
TOTAL		16	32			16	32
Fourth Year, Semester 1				Fourth Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
PHI 102	Applied Ethics	3	6	CIE 301	Engineering Communications	3	6
IEE 431	Simulation Modeling and Analysis	3	6	IEE 462	Production Systems Analysis	3	6
IEE 498A	Cross-Disciplinary Design	3	6	IEE 498B	Cross-Disciplinary Design	3	6
IEE 330R	Engineering to Psychology	3	6	IEE 406	Quality Engineering	3	6
PSY 101	Introduction to Psychology	3	6	IEE 464	Cost Estimation	3	6
				IEE 457	Project Management	3	6
TOTAL		15	30			18	36
TOTAL CREDIT HOURS: 133 US / 266 ECTS							

USCR=U.S. Carnegie Credits

ECTS CR=European Credit Transfer Credits

MECHANICAL ENGINEERING
Bachelor of Science (BS)

Introduction

The Bachelor of Science in Mechanical Engineering provides a fundamental background in all Mechanical Engineering subdisciplines. Mechanical engineers design and manufacture everything from small individual parts and devices to large systems such as automobiles and spacecraft. To accomplish this, a broad range of skills are needed including the ability to analyze and model the mechanics of solids, fluids and the flow of heat and energy. Since these skills are required for virtually everything that is made, mechanical engineering is perhaps the broadest and most diverse of engineering disciplines. Mechanical engineers play a central role in such industries as aerospace, automotive, biomedical and manufacturing. Therefore, a degree in mechanical represents an entry point into today's modern high-tech workforce. This course fulfills that training requirement.

Program Mission

Mechanical engineering applies mathematics, physics and material science principles to analyze, design, manufacture and maintain mechanical systems. Core topics taught in the curriculum include solid and fluid mechanics, thermal sciences, dynamics and controls, and mechanical design. Students also learn machine dynamics, energy and power systems, mechanical properties of engineering and biomaterials, computational methods, HVAC systems, and instrumentation. Graduates of the Mechanical Engineering program go on to careers in a wide range of engineering sectors, including the defense, biomedical, manufacturing, mining, and automotive industries.

Program Objectives

The Mechanical Engineering Program objectives and indicators are:

Objective 1: Graduates become practicing engineers who contribute to, and succeed and advance within their companies, institutes or agencies.

Objective 2: Graduates succeed in graduate school in mechanical engineering or other fields that benefit from the skills and knowledge gained through their undergraduate education.

Objective 3: Graduates engage in life-long learning and acquire new knowledge and skills through practice and advanced education to adapt to the changing demands of the work environment throughout their careers.

Program Learning Outcomes

Communication Skills: The learner will be able to achieve the following:

- a) Prepare professional proposals and reports
- b) Competently deliver oral presentations to technical and lay audiences
- c) Develop and use effective audio/visual aids
- d) Write effective professional communications such as email and memorandums

- e) Communicate within the engineering disciplines through plans and drawings

Learning Skills: The learner will be able to achieve the following:

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

Degree Requirements for Mechanical Engineering

The BS in Mechanical Engineering is a four-year degree program. In their first and to some extent their second year, students focus on completion of the University's General Education Program (43 US / 86 ECTS credits), with specialized courses in Mechanical Engineering gradually introduced. Into the third- and fourth-year students focus increasingly on Mechanical Engineering topics. To earn a bachelor's degree, students must satisfactorily complete at least 136 US / 272 ECTS credits, fulfill all the requirements for the BS in Mechanical Engineering degree, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years, all coursework in the major will be re-evaluated for its current relevance.

MECHANICAL ENGINEERING (BS) DEGREE REQUIREMENTS

			Number of Courses	US CR	ECTS CR
I. University General Education Requirements			13	43	86
<i>For Details, See Section University General Education Requirements</i>					
II. Related Requirements Courses			10	28	56
		US/ECTS			
CIE 210	Engineering Graphics	2/4			
CIE 214	Statics	3/6			
ENR 102	Introduction to Engineering Lecture Series and Design	3/6			
IEE 175	Computer Programming for Engineering Applications	3/6			
MAT 105	Introduction to MATLAB I	1/2			
MAT 130	Calculus II	4/8			
MAT 205	Introduction to MATLAB II	1/2			
MAT 220	Multivariable Calculus	4/8			
MAT 250	Differential Equations	3/6			
PHY 240	Introductory Electricity and Magnetism	4/8			
III. Mechanical Engineering Major Courses			24	65	130
		US/ECTS			
MEE 207	Elements of Electrical Engineering	3/6			
MEE 230	Introduction to Thermodynamics	3/6			
MEE 250	Dynamics	3/6			
MEE 300	Instrumentation Laboratory	3/6			
MEE 301	Engineering Analysis	3/6			
MEE 302	Numerical Methods	3/6			
MEE 313	Mechanical Engineering Design Laboratory	1/2			
MEE 324A	Mechanical Behavior of Engineering Materials	3/6			
MEE 324B	Engineer Component Design	3/6			
MEE 324L	Mechanics of Materials Laboratory	1/2			
MEE 331	Introduction to Fluid Mechanics	3/6			
MEE 331	R Fundamentals of Materials for Engineers	3/6			
MEE 352	Dynamics of Machines	3/6			
MEE 400	Senior Mechanical Engineering Laboratory	2/4			
MEE 432	Heat Transfer	3/6			
MEE 442	HVAC System Design	3/6			
MEE 445	Renewable Energy Systems and Analysis	3/6			
MEE 452	Planar Multibody Dynamics with Applications	3/6			
MEE 455	Control System Design	3/6			
MEE 460	Mechanical Vibrations	3/6			
MEE 462	Composite Materials	3/6			
MEE 495	S Mechanical Engineering Senior Colloquium	1/2			
MEE 498	A Cross-Disciplinary Design	3/6			
MEE 498	B Cross-Disciplinary Design II	3/6			
TOTAL			47	136	272
<i>US CR = U.S. Carnegie Credits</i>			<i>ECTS CR = European Credit Transfer Credits</i>		

SAMPLE FOUR YEAR SCHEDULE

Bachelor of Science in Mechanical Engineering

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ENG 101	English Composition I	3	6	BIO 102	Unity of Life and Lab	4	8
MAT 120	Calculus I	4	8	ENG 102	English Composition II	3	6
CHE 111	Introduction to General Chemistry and lab	4	8	PHY 111	Physics with Calculus I and lab	4	8
HIS 101	History of the Mediterranean	3	6	MAT 130	Calculus II	4	8
ENR 102	Introduction to Engineering and Eng. Design	3	6	SOC 101	Introduction to Sociology	3	6
TOTAL		17	34	TOTAL		18	36
Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
MAT 105	Introduction to MATLAB I	1	2	MAT 205	Introduction to MATLAB II	1	2
IEE 175	Computer Programming for Engineering Applications	3	6	COM 101	Introduction to Multicultural Communications	3	6
CIE 214	Statics	3	6	MEE 250	Dynamics	3	6
PHY 240	Introductory Electricity and Magnetism and lab	4	8	MEE 207	Elements of Electrical Engineering	3	6
MAT 220	Calculus III	4	8	MEE 230	Introduction to Thermodynamics	3	6
REL 101	Religious Worlds in Comparative Perspective	3	6	CIE 210	Engineering Graphics	2	4
TOTAL		18	36	TOTAL		18	36
Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ATH 101	Arts of the Mediterranean	3	6	MEE 300	Instrumentation Laboratory	3	6
MEE 301	Engineering Analysis	3	6	MEE 302	Numerical Methods	3	6
MEE 324A	Mechanical Behavior of Engineering Materials and lab	4	8	MEE 324B	Engineering Component Design	3	6
MEE 331	Introduction to Fluid Mechanics	3	6	MEE 331R	Fundamental of Materials for Engineers	3	6
MEE 352	Dynamics of Machines	3	6	PHI 102	Applied Ethics	3	6
MEE 313	Mechanical Engineering Design Lab	US	ECTS			US	ECTS
TOTAL		17	34	TOTAL		15	30
Fourth Year, Semester 1				Fourth Year, Semester 2			
Course		CR	CR	Course		CR	CR
MEE 400	Senior Mechanical Engineering Lab	2	4	MEE 455	Control System Design	3	6
MEE 432	Heat Transfer	3	6	MEE 445	Renewable Energy Systems and Analysis	3	6
PSY 101	Introduction to Psychology	3	6	MEE 452	Planar Multibody Dynamics with Applications	3	6
MEE 460	Mechanical Vibrations	3	6	MEE 462C	Composite Materials	3	6
MEE 442	HVAC System Design	3	6	MEE 495S	Mechanical Engineering Senior Colloquium	1	2
MEE 498A	Cross-Disciplinary Design I	3	6	MEE 498B	Cross-Disciplinary Design II	3	6
TOTAL		17	34			16	32
TOTAL CREDIT HOURS: 136 US / 272 ECTS							

GAME DEVELOPMENT

Bachelor of Science (BS)

Introduction

Game development is an ever-evolving multidisciplinary field, focusing on creating interactive tools that can be a stand-alone play, or employed even in real world experiences such as education or business. The Bachelor of Science in Game Development is designed for students interested in game development programming at the highest level, including computer science and computer graphic professionals retooling for the game industry. The program follows an approach that provides students with the knowledge to use and combine powerful multimedia platforms, computer programming environments, and animation techniques, and to apply their vision to complex virtual realities.

With the Game Development degree students gain excellent coding skills. The degree will give students the best knowledge and opportunities to enlighten their career path, whether aiming to create plays for commercial purposes, for use in education, or for something else. Game developers implement code for games based on web, console, PC, or mobile platforms. Students may develop careers by using their abilities in the area of entertainment, business, training, or other applicable area.

Program Mission

The Game Development program strives to provide students with the highest possible quality education in the area of game development in terms of both theoretical and applied foundations and train the students to apply their knowledge to solve real world problems in education, business, etc. and to serve to professional societies and increase their lifelong potential for high quality careers in the challenging job market.

Program Objectives

Knowledge

Game development is not a stand-alone program; rather, it is made up of intersecting, complementary disciplines. Students will be exposed to

- software engineering,
- computer graphics,
- artificial intelligence,
- animation,
- software architecture, and
- networking.

Covering both emerging trends and proven knowledge, the program's content is always relevant and current. This "best of both worlds" combination allows students to understand the connection between realized applied systems and issues they will likely face professionally in years to come.

Skills

- Students will become proficient with Realtime C++ Programming Language.
 - Students will demonstrate programming language C++ concepts: class invocation, over-loaded operators, STL containers, pointers and templates.
 - Students will demonstrate understanding of optimized C++ programming techniques such as data caching, SIMD instructions, return value optimization, proxy objects and implicit conversions.
- Students will be able to design and implement real-time networking for Games.
 - Students will demonstrate serialization of game data transmission by TCP/UDP socket programming.
 - Students will demonstrate bandwidth compensation techniques for slow and intermittent network connection using dead-reckoning estimation technique.
 - Students will create deterministic data driven flow in game applications.
- Students will be able to create and design software architecture systems using Design Patterns technique.
 - Students will demonstrate the ability to identify design patterns used in a program and be able to select an appropriate design pattern to apply to a given problem.
 - Students will demonstrate the ability to design/implement a system using one or more design patterns, such as Factory, Singleton, Observer, Flyweight, Null Object, State, Commander, Composite, Iterator, Object Pool, Visitor, and Strategy Patterns.
 - Students will demonstrate the ability to communicate software designs using UML diagrams.
- Students will understand real-time polygonal video Graphics.
 - Students will demonstrate a thorough understanding of real-time polygonal graphics covering back-face culling, camera, texturing, lighting, and transformation.
 - Students will be able to use 3D Math (Matrix and Vector) and collision primitives to solve Graphics and simulations problems.
 - Students will be able to implement an efficient graphics rendering system using data friendly buffers, such as Vertex Buffer Objects.
- Students will be able to design and implement a real-time Game Engine.
 - Students will demonstrate the ability to design/implement an end-to-end game engine, include game system libraries and full graphics pipeline.
 - Students will demonstrate the ability to design/implement real-time game system components such as Memory, File, Object, Graphics, and Math.
 - Students will demonstrate the ability to create asset conversion tools for 3D models and animations.
 - Students will demonstrate the ability to design/implement a 3D keyframe animation system.
- Students will be able to develop software projects in a local and global environment.
 - Students will demonstrate understanding issues relating to geographic, time related, cultural, economic, and management issues of global software development.

- Students should understand Global software project management, including scheduling, estimating, coordinating, and monitoring of global base projects.
- Students will understand culturally based leadership and conflict resolutions with direct and indirect reporting.
- Students will be able to coordinate and communicate with distributed developers through asynchronous communication.
- Students will be able to evaluate and implement different software project management models, such as Agile, SCRUM, Test-Driven development and Waterfall.
- Students should be able to use Software configuration management (SCM), including version control usage in a large-scale project, including merging, branching, release, and bug tracking.
- Students will be able to understand fundamentals of computer science.
 - Interpret the informal description of an algorithm and translate the description to a program and write tests to determine whether a program solves the intended problem.
 - Analytically determine the running time of a program and validate the analysis experimentally; select an appropriate combinatoric or statistical technique to solve an analytic problem; analyze and select an algorithm based on systems effects.
 - Solve a specific problem by using proper object-oriented techniques and selecting appropriate data structures and algorithms and customize them to the problem.
 - Correlate the input of a compiler and its assembly language output.
 - Criticize a program on the basis of its maintainability and suggest improvements; interpret new APIs and use them in developing computer applications.
- Students will be able to participate in the game development process from initial concept to finished product.
 - Understand game mechanics: Determining how specific play mechanics will be perceived by the player.
 - Understanding of the Game Narrative design: Creating the individual narrative experience.
 - Design and constructing 3D levels in a Game Engine.
 - Script and program behavior of interactive objects and characters in a level.
 - Combining the editor and programmatic controls (scripting, software) to control behavior.
 - Work in a collaborative team environment: Design, prototyping, recursive development.
 - Modify or extend an existing 3D game level for effect.

Competences

Collaborate with a team to develop a medium size computer game from ideation to implementation.

- Be responsible for planning and implementing a medium size computer game.

- Create all necessary components of a medium size computer game.

Program Learning Outcomes

Communication Skills. The learner will be able to

- Discuss game development issues within a structured team.
- Effectively communicate project needs within multicultural and diverse development teams.
- Effectively document in writing one's own coding.
- Effectively communicate with team members utilizing asynchronous tools.
- Articulate orally and in writing the main issues involved in global software development.

Learning Skills. The learner will be able to

- Proceed to graduate work in game development
- Study independently new emerging game related technologies, using the frameworks and tools acquired in the program.

Degree Requirements for Game Development

The BS in Game Development is a four-year degree program. In their first and to some extent their second years, students focus on completion of the university's General Education Program (42-43 US/84-86 ECTS credits), with specialized courses in computer science and game development gradually introduced. Into the third- and fourth-year students focus increasingly on technical topics that develop the student's understanding and skills related to game development. To earn a bachelor's degree, students must satisfactorily complete at least 122 US/244 ECTS credits, complete the General Education Program, fulfill all the requirements for the BS in Game Development, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, and the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years all coursework in the major will be re-evaluated for its current relevance.

GAME DEVELOPMENT (BS) DEGREE

		Number of Courses	US CR	ECTS CR
I. University General Education Requirements	US/ECTS	13	42	84
<i>For Details, See Section University General Education Requirements</i>				
II. Game Development Major Courses	US/ECTS	20	71	142
Computer Science Foundation		5	16	32
CSC 210 Introduction to C++	3/6			
CSC 220 Data Structures	3/6			
CSC 240 Computer Systems	4/8			
CSC 250 Computer Science Theory	3/6			
MAT 230 Discrete Mathematics	3/6			
		5	19	38
Game Systems Foundation	4/8			
CSC 320 Applied 3D Geometry	4/8			
CSC 330 Optimized C++	4/8			
CSC 350 Computer Graphics	4/8			
CSC 360 Game Design Patterns	4/8			
CSC 370 Game Networking	3/6			
	3/6			
	4/8			
Game Design	4/8			
CSC 340 Introduction to Game Design	4/8			
CSC 380 Level Design	4/8			
CSC 410 Game Modification	4/8			
CSC 420 3D Design and Modeling	3/6			
	4/8			
	4/8			
Advanced Game Systems	4/8			
CSC 430 Game Engine I Development	3/6			
CSC 440 Game Artificial Intelligence	4/8			
CSC 450 Game Engine II Development	4/8			
CSC 460 Game Physics	4/8			
CSC 470 Global Software Development				
		1	4	8
Capstone				
CSC 480 Game Development Project				
III. Free Electives	US/ECTS	3	9	18
Free Elective	3/6			
Free Elective	3/6			
Free Elective	3/6			
GAME DEVELOPMENT TOTALS		36	122	244

SAMPLE FOUR-YEAR SCHEDULE

Bachelor of Science in Game Development

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
BIO 101	Unity of Life and Lab	4	8	CSC 210	Introduction to C++	3	6
ENG 101	English Composition I	3	6	ENG 102	English Composition II	3	6
HIS 101	History of the Mediterranean	3	6	MAT 230	Discrete Mathematics	3	6
MAT 101	Introduction to Data Analysis, Probability, and Statistics	3	6	PHY 101	Introduction to the Physical Universe	4	8
	Free Elective	3	6	REL 101	Religious Worlds in Comparative Perspective	3	6
	TOTAL	16	32			16	32
Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
CSC 220	Data Structures	3	6	CHE 101	Introduction to General Chemistry and Lab	4	8
COM 101	Communication in a Multicultural Setting	3	6	CSC 240	Computer Systems	4	8
PSY 101	Introduction to Psychology	3	6	CSC 250	Computer Science Theory	3	6
	General Education: Arts / Humanities	3	6		Free Elective	3	6
	Free Elective	3	6				
	TOTAL	15	30			14	28
Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
SOC 101	Introduction to Sociology	3	6	CSC 350	Computer Graphics	4	8
CSC 320	Applied 3D Geometry	3	6	CSC 360	Game Design Patterns	4	8
CSC 330	Optimizing C++	4	8	CSC 380	Level Design	3	6
CSC 340	Introduction to Game Design	3	6	CSC 410	Game Modification	4	8
	General Education: Arts/Humanities	3	6				
	TOTAL	16	32			15	30
Fourth Year, Semester 1				Fourth Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
CSC 370	Game Networking	4	8	CSC 450	Game Engine II Development	4	8
CSC 420	3D Design and Modeling	4	8	CSC 460	Game Physics	4	8
CSC 430	Game Engine I Development	4	8	CSC 470	Global Software Development	3	6
CSC 440	Game Artificial Language	3	6	CSC 480	Game Development Project	4	8
	TOTAL	15	30			15	30

TOTAL CREDIT HOURS: 122 US / 244 ECTS

USCR=U.S. Carnegie Credits, ECTS CR=European Credit Transfer Credits

CHINESE LANGUAGE AND CULTURE

Bachelor of Arts (BA)

Introduction

The Bachelor of Arts in Chinese Language and Culture is designed for students interested in the various aspects of Chinese culture. This program offers an academic standard-based education in Chinese language and culture. The standards refer to three aspects of learning and teaching: content, performance and proficiency. Their application is across the entire curriculums, including each language and culture course.

Program Mission

The course prepares students for a wide range of careers in the international arena, especially in the China and East Asia-related areas, as well as for the graduate programs that concentrate on special fields in Chinese culture.

Program Objectives

Knowledge

The course provides students with comprehensive knowledge about Chinese language and culture, including Chinese linguistics, literature, history, philosophy, religion, politics, cinema, business and health.

Skills

The students acquire all the four skills of Chinese language: listening, speaking, reading and writing, and advanced capability of analyzing properly the issues pertaining to various aspects of Chinese culture.

Competences

The course prepares students for a wide range of careers in the international arena, especially in the China and East Asia-related areas, as well as for the graduate programs that concentrate on special fields in Chinese culture.

Program Learning Outcomes

- Engage in conversation on various topics in Chinese.
- Communicate effectively in various Chinese social and cultural contexts.
- Analyze various aspects of the Chinese culture, history, literature, philosophy and politics.
- Interpret and contextualize various aspects of Chinese literature and culture.
- Apply acquired linguistic and cultural knowledge in decision-making and problem-solving in real life China related contexts.

Degree Requirements for Chinese Language and Culture

The BA in Chinese Language and Culture degree is a four-year degree program. In their first and to some extent their second year, students focus on completion of the University's General Education Program (42 US / 84 ECTS credits), with specialized courses in Chinese gradually introduced. In the third- and fourth-year students focus increasingly on Chinese topics. To earn a bachelor's degree, students must satisfactorily complete at least 120 US / 240 ECTS credits, complete the General Education Program, fulfill all the requirements for the BA in Chinese Language and Culture degree, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the University Catalog. If a degree is not completed within a period of six years all coursework in the major will be reevaluated for its current relevance.

CHINESE LANGUAGE AND CULTURE (BA) DEGREE REQUIREMENTS

	US/ECT S	Number of Courses	US CR	ECTS CR
I. University General Education Requirements		13	41-42	82-84
<i>For Details, See Section University General Education Requirements</i>				
II. Chinese Language Courses	US/ECT S	8	34	68
CHI 101 Beginning Chinese I	5/10			
CHI 102 Beginning Chinese II	5/10			
CHI 201 Intermediate Chinese I	5/10			
CHI 202 Intermediate Chinese II	5/10			
CHI 301 Advanced Chinese I	4/8			
CHI 302 Advanced Chinese II	4/8			
CHI 410 Study in Chinese Language I: Literature	3/6			
CHI 420 Study in Chinese Language II: Social Science	3/6			
III. Chinese Language and Culture Major Courses	US/ECT S	9	27	54
CHI 305 Chinese Linguistics	3/6			
CHI 310 History of Ancient China	3/6			
CHI 320 History of Modern China	3/6			
CHI 350 Pre-Modern Chinese Literature	3/6			
CHI 360 Buddhism in China	3/6			
CHI 450 Contemporary Chinese Literature	3/6			
CHI 460 Philosophy of Ancient China	3/6			
CHI 470 Culture, Society, and Politics in China	3/6			
<i>Select One (1) from the following Language Courses:</i>				
CHI 370 Chinese for Professionals I: Business	3/6			
CHI 380 Chinese for Professionals II: Health and Medicine	3/6			
IV. Chinese Electives (Choose two from the following)	US/ECT S	2	6	12
CHI 330 Chinese Popular Culture	3/6			
CHI 340 Chinese Culture through Film	3/6			
CHI 461 Philosophy in Medieval China	3/6			
CHI 462 Modern Chinese Intellectual History	3/6			
CHI 463 The View of History in Ancient World	3/6			
V. Free Electives (or 1-3 CHI Electives above)	US/ECT S	4	12	24
Free Elective	3/6			
Free Elective or CHI Elective	3/6			
Free Elective or CHI Elective	3/6			
Free Elective or CHI Elective	3/6			
CHINESE LANGUAGE AND CULTURE TOTALS		36	120	240

US CR = US. Carnegie Credits

ECTS CR = European Credit Transfer Credits

SAMPLE FOUR-YEAR SCHEDULE

Bachelor of Arts in Chinese Language and Culture

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
CHI 101	Beginning Chinese I	5	10	CHI 102	Beginning Chinese II	5	10
ENG 101	English Composition I	3	6	BIO 101	Unity of Life and Lab	4	8
HIS 101	History of the Mediterranean	3	6	ENG 102	English Composition II	3	6
MAT 101	Introduction to Data Analysis, Probability, and Statistics	3	6	REL 101	Religious Worlds in Comparative Perspective	3	6
TOTAL		14	28	TOTAL		15	30
L				L			

Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
CHI 201	Intermediate Chinese I	5	10	CHI 202	Intermediate Chinese II	5	10
CHI 310	History of Ancient China	3	6	COM 101	Introduction to Multicultural Communication	3	6
PHI 101	Introduction to Philosophy	3	6	PHI 102	Applied Ethics	3	6
PHY 101	Introduction to the Physical Universe and Lab	4	8	PSY 101	Introduction to Psychology	3	6
TOTAL		15	30	TOTAL		14	28
L				L			

Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
CHI 301	Advanced Chinese I	4	8	CHI 302	Advanced Chinese II	4	8
CHI 320	History of Modern China	3	6	CHI 350	Pre-Modern Chinese Literature	3	6
CHI 360	Buddhism in China	3	6	CHI 450	Contemporary Chinese Literature	3	6
SOC 101	Introduction to Sociology	3	6	CHI 460	Philosophy in Ancient China	3	6
	Free Elective	3	6		Free Elective	3	6
TOTAL		16	32	TOTAL		16	32
L				L			

Fourth Year, Semester 1				Fourth Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ATH 101	Arts of the Mediterranean	3	6	CHI	Chinese for Professionals I: CHI 370 or CHI 380	3	6
CHI 305	Chinese Linguistics	3	6	CHI 420	Study in Chinese Language II: Social Science	3	6
CHI 410	Study in Chinese Language I: Literature	3	6		Chinese Elective or Free Elective	3	6
CHI 470	Culture, Society and Politics in China	3	6		Chinese Elective or Free Elective	3	6
	Chinese Elective or Free Elective	3	6		Free Elective	3	6
TOTAL		15	30	TOTAL		15	30
L				L			

TOTAL CREDIT HOURS: 120 US / 240 ECTS

US CR = U.S. Carnegie Credits

ECTS CR = European Credit Transfer Credits

GRAPHIC DESIGN AND ANIMATION

Bachelor of Arts (BA)

Introduction

The Graphic Design and Animation BA program is intended for students who have an interest in practical applications of the visual arts. The graphic design and animation fields provide an opportunity for them to express their creativity and originality through solving visual problems. Students with strong skills and interests in visual design, drawing, painting, the use of color, technical skills, and creative concepts are excellent candidates for this course.

Program Mission

The mission of the BA in Graphic Design and Animation is to prepare students for careers in advertising, animation, game art, book design, web design, information design, motion graphics, poster design, typography, multimedia, print, visual design, and interactive media. Graduates of the program will have the knowledge and skills required to succeed in any area of graphic design and animation.

Program Objectives

The BA in Graphic Design and Animation is a professionally oriented degree that provides students with a strong foundation in visual art and design for a broad range of media, including print, interactive media, film, and television. The program offers the student a chance to create an interdisciplinary program of study that will enrich the knowledge and skills the graduate takes into the constantly evolving industry. During the senior year Thesis Stage, students are able to explore their specific areas of interest in-depth in a self-directed project.

Knowledge

- Knowledge of media production, communication, and dissemination techniques and methods.
- Knowledge of design techniques, tools, and principles involved in production of precision technical plans, drawings, and models.
- Knowledge of the theory and techniques required to compose, produce, and perform works of visual arts.
- Knowledge of electronic equipment and computer hardware and software, including applications.

Skills

- Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Managing one's own time and the time of others.
- Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Understanding the implications of new information for both current and future problem solving and decision-making.
- Demonstrate the principles of graphic design communication, showcasing the creative and technical abilities that produce successful graphic design projects in a variety of media.
- Demonstrate a solid foundation in design and traditional studio art and will be able to use these skills in order to communicate effectively through visual means.
- Understand and utilize a broad range of digital design and animation tools.
- Acquire animation skills necessary for careers in motion graphics, game development, 3d and 2D animated films, television or effects animation.
- Utilize self-management skills to work autonomously on self-directed creative projects.
- Implement the use of pre-visualization, storyboarding, and essential pre-production techniques to develop complex concepts.
- Apply creative problem-solving skills to a variety of abstract problems.
- Produce a professional design and animation portfolio and reel.

Competences

- Create unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
- Create visual media using computer hardware and software.
- Create designs, concepts, and sample layouts, based on knowledge of layout principles and esthetic design concepts.
- Create graphics and layouts for product illustrations, company logos, and websites.
- Create complex graphics and animation, using independent judgment, creativity, and computer equipment.
- Create objects or characters that appear lifelike by manipulating light, color, texture, shadow, and transparency, or manipulating static images to give the illusion of motion.
- Be responsible to apply story development, directing, cinematography, and editing to animation to create storyboards that show the flow of the animation and map out key scenes and characters.
- Be responsible to develop briefings, brochures, multimedia presentations, web pages, promotional products, technical illustrations, and computer artwork for use in products, technical manuals, literature, newsletters and slide shows.
- Collaborate in design and production of multimedia campaigns, handling budgeting and scheduling, and assisting with such responsibilities as production coordination, background design and progress tracking.

LEARNING OUTCOMES

- Apply the theories and techniques to create works of graphic design and visual arts for multiple purposes.
- Demonstrate the principles of graphic design communication, showcasing the creative and technical abilities that produce successful graphic design projects in a variety of media.
- Demonstrate a solid foundation in design and traditional studio art and use these skills to communicate effectively through visual means.
- Understand and utilize a broad range of digital design and animation tools.
- Acquire animation skills for motion graphics, game development, 3d and 2D.
- Implement the use of previsualization, story-boarding, and essential preproduction techniques to develop complex concepts.
- Create complex graphics and animation, using independent judgment, creativity, and computer equipment.

Degree Requirements for Graphic Design and Animation

The BA in Graphic Design and Animation bachelor's is a four-year degree program targeted towards students with an interest in practical applications of the visual arts. In their first and to some extent their second years, students will focus on completion of the University's General Education Program (41 US / 82 ECTS credits), with specialized courses in graphic design and animation gradually introduced. Into the third- and fourth-year students will focus increasingly on technical topics that develop the student's understanding and skills related to graphic design and animation. To earn a bachelor's degree, students must satisfactorily complete at least 120 US / 240 ECTS credits, fulfill all the requirements for the BA in Graphic Design and Animation, and achieve a CGPA of 2.00 or higher.

The degree is designed to be completed in four years, assuming students make satisfactory progress toward the degree and do not interrupt their study. Students who withdraw or take a leave of absence from the Degree Requirements program must meet requirements for returning that are outlined in the American University of Malta's Catalog. Students are required to meet specific standards to progress, as well as the maximum time allowed to complete the program, which are also detailed in the *University Catalog*. If a degree is not completed within a period of six years all coursework in the major will be reevaluated for its current relevance.

GRAPHIC DESIGN AND ANIMATION (BA) DEGREE REQUIREMENTS

	Number of Courses	US CR	ECTS CR
I. University General Education Requirements	13	41-42	82-84

For Details, See Section University General Education Requirements

II. Graphic Design Core Courses		US/ECTS	17	61	122
ATH 201	World Art History	3/6			
GRD 101	Introduction to Visual Design	3/6			
GRD 111	Drawing and Visualization	3/6			
GRD 201	Figure Drawing and Anatomy	3/6			
GRD 211	Digital Art Tools	3/6			
GRD 301	Time, Image, Sound	3/6			
GRD 311	Painting and Color	3/6			
GRD 321	3D Design and Modeling	4/8			
GRD 331	Animation I: Motion and Methods	4/8			
GRD 341	3D Character Animation	4/8			
GRD 351	Animation II: Production	4/8			
GRD 361	Graphic Design I: Topography	4/8			
GRD 371	Storyboarding and Narrative	4/8			
GRD 411	Graphic Design II: Visual Problem Solving	4/8			
GRD 421	Motion Graphics	4/8			
GRD 431	Visual Design for Games	4/8			
GRD 441	Graphic Design III: Web Design	4/8			

III. Animation Major Courses		US/ECTS	3	12	24
GRD 451	Interdisciplinary Game Project	4/8			
GRD 461	Thesis Project I	4/8			
GRD 462	Thesis Project II	4/8			

IV. Free Electives		US/ECTS	2	6	12
	Free Elective	3/6			
	Free Elective	3/6			

TOTAL			35	120	240
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US CR = U.S. Carnegie Credits *ECTS CR = European Credit Transfer Credits*

SAMPLE FOUR-YEAR SCHEDULE

Bachelor of Arts in Graphic Design and Animation

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
ENG 101	English Composition I	3	6	BIO 101	Unity of Life and Lab	4	8
HIS 101	History of the Mediterranean	3	6	ENG 102	English Composition II	3	6
MAT 101	Introduction to Data Analysis, Probability, and Statistics	3	6	REL 101	Religious Worlds in Comparative Perspective	3	6
GRD 101	Introduction to Visual Design	3	6	GRD 111	Drawing and Visualization	3	6
	Free Elective	3	6				
	TOTAL	15	30			13	26

Second Year, Semester				Second Year, Semester			
Cours	Titl	US CR	ECTS		Titl	US CR	ECTS
ATH 101	Arts of the Mediterranean	3			World Art History	3	6
COM 101	Communication in a Multicultural	3	6	GRD 211	Digital Art Tools	3	6
GRD 201	Figure Drawing and Anatomy	3	6	PHI 101	Introduction to Philosophy	3	6
PHY 101	Introduction to the Physical Universe		8	SOC 101	Introduction to Sociology	3	6
PSY 101	Introduction to Psychology	3	6		Free Elective	3	6
	TOTAL	16	32			15	30

Third Year, Semester 1				Third Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
GRD 301	Time, Image, Sound	3	6	GRD 341	3D Character Animation	4	8
GRD 311	Painting and Color	3	6	GRD 351	Animation II: Production	4	8
GRD 321	Design and Modeling	4	8	GRD 361	Graphic Design I: Typography	4	8
GRD 331	Animation I: Motion and Methods	4	8	GRD 371	Story Boarding and Narrative	4	8
PHI 102	Applied Ethics	3	6				
	TOTAL	17	34			16	32

Fourth Year, Semester				Fourth Year, Semester			
Cours	Titl	US CR	ECTS CR		Titl	US CR	ECTS
GRD 411	Graphic Design II: Visual Problem Solving	4	8	GRD 441	Graphic Design III: Web Design	4	8
GRD 421	Motion Graphics	4	8	GRD 451	Interdisciplinary Game Project	4	8
GRD 431	Visual Design for Games	4	8	GRD 462	These Project II		
GRD 461	Thesis Project I	4	8				
	TOTAL	16					



GRADUATE

GRADUATE STUDIES

Degree Offerings

AUM offers three graduate programs: the MBA, the Master of Science in Engineering Management and the Master of Science in Cyber Security.

Graduate Admissions:

Applicants for the AUM graduate programs need to submit the following:

- Official AUM application: to be submitted online.
- Scanned copies of qualifications and transcripts in the original language, as well as certified English translations, if necessary. If admitted to AUM, all original documents must be presented to the Admissions Office in order to be permitted to officially enroll.
- Proof of English Proficiency
 - The English language proficiency requirement may be waived if you are a native speaker of English and you have completed your secondary education in an English medium institution in a country where English is the official language.
 - AUM reserves the right to request English test results from any applicant.

Examining Boards recognized by AUM and minimum scores required:

	IELTS	TOEFL	PTE	iTEP Plus	Academic	iTEP Institutional	–	EAP
Graduate	6.5	79	55	4.0		4.9		

*Note that all score reports will only be valid if issued within 2 years from the date of matriculation at AUM.

All applicants to any graduate program of study (MQF 7) at the American University of Malta must satisfy the following entry requirements:

- A baccalaureate degree (comparable to EQF level 6) with a minimum of 180 ECTS or equivalent.
- An average GPA of 2.2

Any other qualifications that in your home country would be equivalent to a full degree program will be assessed independently by AUM for comparability.

Conditional admission is offered to all applicants who are still waiting for their degree results. These results must be submitted by the student to the Admissions Office within 1 week of receipt.

Additional Requirements: Please note that specific degree program may have additional requirements to those indicated above.

Conditional admission is offered to all applicants who meet all requirements except English proficiency. Conditional admits must enroll as full-time students in the AUM English for

Academic Purposes (EAP) program. Should the student achieve the necessary test results to join one of AUM's graduate programs after one 8-week EAP session, and should AUM not be offering any late start graduate programs, then the student would be given the option to either stay in EAP or join one of the late start undergraduate programs

Transfer Credit: Graduate students applying for transfer to AUM must have a minimum average GPA of 2.2.

Only courses with a "B" or better will be transferred into AUM. Such credits should have been earned not more than five years prior to the transfer. Transfer credits will be noted on the transcript with a grade of "TR."

A maximum of nine (9) graduate credits from a graduate school at an accredited university may be transferred to the MBA program at AUM. Transfer credit will not normally be accepted for research or thesis/dissertation work.

Grades earned in transferred courses do not count in the student's cumulative GPA (CGPA), though transferred credits count toward the cumulative earned hours and may apply towards meeting graduation requirements.

An enrolled student is eligible to apply to take courses at another college/university during the summer with the intention of transferring credits to AUM provided the following conditions are met:

- Contact/credit hours for the course at the host university must be equivalent to or greater than the contact/credit hours required for its equivalent course at AUM, if equivalency is sought.
- The language of instruction of the course(s) taken at the host university must be English (except for language courses conducted in other languages), unless otherwise approved by AUM.

Students should verify in writing with the Registrar prior to enrolling in any courses at another college or university to ensure the course/credits will transfer back to AUM.

Graduate Academic Policies

Each student is responsible for knowing and following AUM's rules, regulations, requirements, and academic policies. Both the graduate information in the University Catalog and the institutional website are repositories of policy statements. Corrections, changes, or interpretations may be communicated by other means, including electronically. Any student in doubt about an academic matter should consult the Registrar's Office or their assigned faculty advisor. Students are subject to the university's stated policies regarding patents and copyrights.

Academic Advising

Each full-time faculty at AUM is assigned a group of students as advisees. These assignments, and any subsequent changes, are made by the Provost. Graduate students are typically advised by faculty teaching in their graduate program.

During student orientation, all students will meet with their academic advisor to discuss their program study and to map out a tentative program of study. Thereafter students should meet with their advisor prior to course selection for the next semester. In this meeting, faculty should discuss academic progress with their advisee and make any necessary changes to the study plan.

Students who are not in good academic standing are advised of the support services, including tutoring, that are available to them and the steps they need to take to return to good standing.

Students on probation are required to meet with their academic advisor on a regular basis to assess their progress and to report their use of AUM's resources for academic support. Students violating AUM's attendance policy or, at the discretion of the faculty member are deemed to be doing poorly at mid-term are also required to meet with their advisors. If students have concerns, comments, or recommendations about their educational experiences at AUM, they should contact the Provost.

Appeal of Academic-Related Issues

If a student wishes to discuss an issue pertaining to a course, faculty members or other academic-related issues, the student may direct his or her concern to the involved faculty member. If a satisfactory resolution of the situation is not reached, the student may appeal to the Provost, who has the final authority to decide the merit of the appeal.

If the faculty member is no longer associated with the University, the Provost will appoint a faculty surrogate, who will assume the authority of the faculty member. If the matter is not resolved at this point, the Provost will hear the case and make a decision that is not subject to further appeal. Academic appeals requests must be submitted not later than the end of the first day of orientation week of the following semester.

Student Attendance

Students' grades are affected by non-compliance with the attendance expectations articulated on the syllabus. Course faculty members are responsible for reminding students of the importance of regular attendance at learning or teaching sessions, and for accurately recording student attendance. Prior to a foreseen absence, a student must notify their faculty member (in person, by phone or by e-mail) if they must be absent for scheduled class sessions. The faculty member may then excuse these absences from the normal class attendance policy or may include the absence as part of the permitted number of absences during the course.

Graduate students benefit from the lectures and activities prepared by their faculty members and discussions with their fellow students; thus, class attendance is required. Students are expected to attend all the classes, or other scheduled sessions for the courses in which they are registered, including make-up classes.

If a student is sick and cannot attend class for 3 or more consecutive classes, they must provide a medical certificate attesting to their illness. Faculty may apply penalties in cases of unexcused absences. Regular and ongoing absences or prolonged absences for illness or

otherwise may result in the student being dropped from the class and may receive an “F” (Fail) or “U” (Unsatisfactory) grade. Such absences should be reported to the Registrar and Provost. For students on a visa, unexcused absences exceeding a certain amount, will be reported to Identity Malta and may result in the loss of the visa.

Student Communication

Students are required to maintain current contact information with the Registrar’s Office and Student Affairs’ Office including permanent and local addresses, telephone numbers, student number, and legal name (as written in their passport). Each student must also maintain the university e-mail account assigned at the time of admission. Students are responsible for official communications directed to AUM e-mail accounts. Addresses should be updated over the Internet using the AUM website or through the Registrar’s Office on the appropriate form. Name and other official identification changes require official documentation and must be processed according to the requirements of the student’s nationality.

Following instructions on the AUM website, each student must also establish their university email account assigned at the time of admission. The university assigned student email account is AUM’s official means of communication with all students. Students are responsible for all official information sent to their university assigned email account. Students are responsible for checking their AUM e-mail account and for responding to official communications via their AUM email account. If a student chooses to forward messages to another account, the student remains responsible for all information, including attachments.

Communication related to student academic matters (academic status, registration, courses schedule) will be conducted through the Registrar’s Office on the appropriate form. Communication related to student academic life, other than academic status, registration, courses, or similar educational issues, will be conducted through Student Affairs’ Office. Kindly note that all students are required to provide AUM with their current address in Malta, cell number, personal email address and contact details of a nominated family member or friend who should be contacted in an emergency.

Course Credit

Each course has a credit value. A credit represents the in-class instruction and out-of-class study per week during the fifteen (15) week semester. Normally one (1) US credit (two (2) ECTS credits) represents 50 minutes of class instruction per week per semester, in addition to 2 hours of work outside of class.

Course Prerequisites and Corequisites

Course prerequisites or corequisites state requirements for student entry into courses, and they reflect necessary preparation for attempting a course. It is the student’s responsibility to be aware of these requirements as stated in the University Catalog, and to have taken prerequisites recently enough to be of value. The faculty member of the course may drop students who have enrolled in a course for which they have not met the prerequisites.

Course Numbering and Course Schedules

Each course offered by the university has a designated course prefix (or code) and number. The course prefix represents the discipline or field of study, and the number indicates the level of the course content.

The following course levels and uniform course numbers are defined at AUM to ensure consistency throughout the university curriculum.

000-099 Preparatory Courses that do not carry credit.

100-299 Lower-level undergraduate courses.

300-499 Upper-level undergraduate courses.

500-699 Graduate-level courses.

Degree Offerings

AUM currently offers and 3 master's programs:

- Business Administration Master of Business Administration (MBA)
- Cyber Security Master of Science (MS)
- Engineering Management Master of Science (MS)

The graduation requirements will be determined by the University Catalog that is effective when the student joins a degree program.

Final Semester Grades

All grades except incomplete "I" are final when submitted by the instructor of record at the end of each semester. No final grade except incomplete "I" may be revised by re-examination. No change of grade may be made on the basis of reassessment of the quality of a student's work.

A grade can be changed only in cases of computational or recording error, or pursuant to a successful appeal of grade. All changes of final grades must be initiated by the instructor of record, approved, and recorded by the last day of classes of the next regular semester (spring for fall grades and fall for spring and summer grades). In cases where the instructor is no longer affiliated with the university, the grade change is initiated by the Provost. All grade changes must be submitted utilizing the Grade Change Request form. It is the responsibility of the Registrar to monitor compliance with this policy.

There are only two reasons for which a student may form a basis for appeal of a final grade. The first is that a technical error was made in computing or entering the grade or that an assignment was given that was unclear. The second reason for an appeal is based on the student's opinion that a grade was assigned arbitrarily or capriciously, (e.g., the instructor assigned a grade without any apparent system or evaluation or was based on other factors outside of course performance).

A student who believes that their grade was reported based on a technical error should first present their concerns to the instructor. If the student is not satisfied with the outcome of that discussion or believe that the basis of their grade is due to an arbitrary or capricious

grading practice, they may file a grade appeal. Student grade appeals must be made within two weeks of the start of the following semester: this does not include summer, (i.e., grade appeals based on spring work must be made within the first two weeks of the fall semester). A student must make their grade appeal directly to the Provost with supporting evidence that addresses one of the aforementioned criteria for the basis of the appeal.

Once a grade appeal is received by the Office of the Provost, the process of investigation and any necessary remedy is initiated. The process will adhere to the following (note that the timelines may vary due to circumstances such as the end of the semester, summer break etc.):

- a. A hearing committee is formed by the Office of the Provost within one week of the receipt of the report. The committee comprises 2 faculty members, 1 administrator and 1 student. If any of the committee members has a real or perceived conflict of interest, they may be excused from the process. The Provost will determine whether an excuse is warranted.
- b. The Committee determines the Chair since the committee cannot be chaired by the student.
- c. The hearing committee is presented with the evidence and sets a hearing date and informs the student, faculty member in whose course the grading appeal is directed and anyone else from the university community that the committee deems relevant to the deliberations. The hearing date is usually set within one week of the committee's first meeting.
- d. The student and other members of the AUM community who are called to present to the hearing committee are questioned by the hearing committee. The student may bring a friend from within the AUM community who cannot participate in the hearings but can advise the student during the hearing. The administrator on the committee must approve the student's choice of friend in advance of the meeting.
- e. Within one week of the hearing the hearing committee submits a report to the Provost on the case. In addition to the report, the committee also submits a recommended resolution.
- f. Within one week of receiving the report, the Provost contacts the student and the faculty member regarding their findings of the hearing committee and the outcome.
- g. The student may appeal the decision directly to the Provost in writing within one week of receiving the recommendation. This appeal must include a statement that provides either new evidence to support their case or present any errors that were made during this process. If neither of these items are presented, an appeal will not be entertained.

In select cases, a student may request the Provost to delay imposing academic suspension because of a pending grade appeal that could change the student's status. Such approved delay allows the student to register. If the grade appeal is successful, the Registrar corrects the official transcript, and the student continues in classes. With an unsuccessful grade appeal, AUM requires the student to stop attending all classes immediately. No record of registration for the academic period appears on a transcript, and the student receives the appropriate refund as of the decision date.

Students may print a grade report for their own records to issue to a third party. Students may also order official transcripts through the Registrar's Office.

Intellectual Property (Student Work)

Intellectual property (IP) is property (an idea, invention, or process) that derives from the work of the mind or intellect. IP is also an application, right, or registration of an idea, invention, or prose. Copyrightable works, including publications and patentable works developed in connection with course work by students who are not AUM employees, are deemed to be intellectual property that belongs to the student. However, AUM may claim copyright ownership of a work or ownership of a patentable invention when extraordinary use of university facilities, personnel, or resources is made in the development of the materials or invention. Students are subject to the university's stated policies regarding patents and copyrights.

Student Leave of Absence

Occasionally, students must leave the university for a semester or two because of circumstances beyond their control. Others find they simply need a break from studying. In such circumstances, taking a leave of absence might be construed as a wise course of action. Students who have an approved leave of absence for a semester or a year may register for the semester in which they plan to return without applying for readmission. Unless there are extenuating circumstances such as illness, a leave of absence is not normally given to a student who leaves the university during a semester.

A leave of absence maintains the student's status for up to two semesters. Students who wish to take a leave of absence must do so through the Office of the Provost. All requests for a leave of absence require the completion of the Leave of Absence Form, and the Provost's approval. If the Leave of Absence request is approved, and the student has cleared all financial obligations, the effective date of the leave of absence is noted on the student's permanent academic record. The effective date is the date used for calculating billing or refunds. No grades for the current semester other than a "W" for the current semester are recorded.

Repeating Courses

Normally, graduate courses cannot be repeated. With the approval of the Provost a graduate student may be allowed to repeat a course in which a grade of "C+" or "C" is received. A graduate student who receives an "F" in a graduate course will not be allowed to continue in the program without the approval of the Provost. Unless limited by guidelines from outside accrediting agencies, no graduate course may be taken more than twice.

The original grade and the most recent grade will appear on the transcript, but only the most recent grade will be calculated into the GPA. A grade in an AUM course will not be excluded from the accumulative GPA based on the subsequent taking of an equivalent course at a transfer institution.

Under no circumstances may scholarships be applied to tuition for repeated courses.

Note: Normally, graduate students who receive an "F" in a graduate course will not be allowed to continue in the program.

Student Academic Load

A full-time load for graduate students is 9 SCH/18 ECTS per semester. Graduate students with a GPA of 3.5 or above may register for 12 SCH/24 ECTS in the subsequent semester. Graduate students on academic probation may register for less than full-time study. Graduate students registering for thesis credits must register through the Registrar's Office. Only students in good academic standing may register for thesis/final project credits.

Time Limit on Duration of Study and Course Year Limit

All degree requirements must be completed within five years of admission to AUM as a graduate student, inclusive of any leave.

In addition, credits more than eight years old (courses transferred to AUM) at the time of graduation may not be counted toward the fulfillment of a graduate degree program.

University Withdrawal

Official withdrawal removes students from any academic program and cancels student status at AUM. In order to return to the university, students need to apply for readmission through the Admission Office. Students who wish to withdraw must complete a Withdrawal form available at the Registrar's Office and get clearance from all university departments. If the withdrawal process is completed satisfactorily and all financial obligations to the university are cleared, the effective date of withdrawal is noted on the student's permanent academic record. The effective date is the date used for calculating billing or refunds. No grades other than a "W" for the current semester are recorded.

ACADEMIC PROGRESS

Academic Dismissal

A graduate student on probation who does not achieve good academic standing by the end of the regular semester following the term in which the cumulative GPA fell below will be dismissed from the university.

Normally, graduate students who receive an "F" in a graduate course will not be allowed to continue in the university.

Students who have been dismissed as a result of failing to meet the requirements for good standing or who receive an "F" in a graduate course may petition for reinstatement.

Petitions will be reviewed by the Chair of the relevant department or the Provost, who will provide a written recommendation and forward the petition to the Provost.

Decisions regarding continuation in the program will be made by the Provost.

Students who have been academically dismissed, readmitted and subsequently dismissed will normally not be readmitted.

Academic Probation

At the end of each semester, the Registrar's Office will identify cases of non-compliance with the academic standards. If a graduate student's cumulative GPA is below 3.00, the student is placed on academic probation. During probation status, the following conditions apply:

- A graduate student on probation may not register for more than six credit hours in a semester
- A graduate student on probation may not register for thesis or final project credit hours until a cumulative GPA of 3.00 is achieved.
- Probation will be removed at the end of any semester in which the student attains a CGPA of 3.00.

Satisfactory Progress

To make satisfactory progress toward degree completion, a student must attain a cumulative GPA of 3.0 (B) or better.

GRADING INFORMATION

Grades and Determination of Grade Point Average

The following grading system has been adopted by AUM:

Graduate Grading System		
Grade	GPA Points	Percentage Scores
A	4.0	90-100
B+	3.5	85-89
B	3.0	80-84
C+	2.5	75-79
C	2.0	70-74
F	0	0-69
XF	0	0

Grades for courses taken at AUM appear on both the official and unofficial transcript. Courses not designated as repeatable for credit (i.e. topics courses) are not included in the GPA calculation. If a course is repeated, only the second grade earned of the course is calculated into the cumulative GPA. Credit for nonrepeatable courses is given only once.

A thesis/final project grade will be awarded after completion and public defense of the thesis/final project. If the thesis/final project work continues into a second semester, an "IP" grade will be assigned, and the student must register again for the thesis/final project course. Students who do not complete the thesis/final project after registering for full credits must register for the full thesis/final project credits the subsequent semester.

The "IP" designation will be used until completion and successful defense of the thesis/final project. All students must be registered in the semester in which they defend their thesis/final project.

Grades recorded as a result of sanctions and/or academic misconduct are included in the cumulative GPA.

Grade point totals are computed by assigning four points for each credit of A, three points for each credit of B, two points for each credit of C, and zero points for each credit of F. The plus sign increases the points assigned the letter grade by 0.5 per credit for graduate courses, and the minus sign decreases the points assigned the letter grade by 0.5 per credit. The grade point average is calculated by dividing total points by total credits of A, B, C, and F. Grades of I, T, W and the grades of S and U are disregarded in the computation of the grade point average.

GRADUATION

Academic Standing Requirement

A student must be in good academic standing to be eligible for graduation.

Degree Requirements

AUM confers degrees in mid-January and mid-June. The exact dates are published as part of the academic calendar.

To obtain a master's degree from AUM, students must complete at least three semesters in residence at AUM. All master's degree requirements must be completed within five years from the time of initial enrollment into the program, inclusive of any leave. In addition, credits more than eight years old (courses transferred to AUM) at the time of graduation may not be counted toward the fulfillment of a graduate degree program.

Final Research Thesis

Master's theses document research conducted by AUM graduate students under the guidance and supervision of AUM faculty members. They are the culmination of the students' programs of study and are expected to reflect appropriate scholarly depth and rigor. Theses and final projects are defended publicly.

The Provost establishes and oversees the regulations and requirements for theses at AUM. It is AUM policy to maintain master's theses in the AUM Archives and also to make theses available to other students and scholars. The AUM Library is responsible for the archiving and binding of the master's thesis.

Graduation Requirements

The graduation requirements for any individual student are normally determined by the University Catalog that was effective when the student began matriculated studies in the degree program. Every individual student is personally responsible for meeting all graduation requirements as detailed in his or her University Catalog year.

If a required course within the graduate program changes its number of credits, then the number of credits required by the program for graduation may, at the discretion of the school, change by the same amount provided the minimum total number of credits for graduation is 55 (109 ECTS credits) and the CGPA is at least 3.00. In case of substantial changes in course offerings, equivalent graduation requirements are determined by the Provost. *Important: Course information, content and prerequisites may be subject to change as a result of the university's commitment to a process of continual improvement in academic programs. Students must comply with the most up-to-date course requirements.*

Grading of Research Thesis

A thesis grade will be awarded after completion and public defense of the thesis. If the thesis work continues into a second semester, an "IP" grade will be assigned, and the student must register again for the thesis course. The "IP" designation will be used until completion and successful defense of the thesis.

Upon attending core courses and passing them successfully (CGPA 3.0), Graduate students are allowed to submit their thesis plan to the Registrar, Chair of Graduate Department (as appropriate) and Provost.

Under the supervision of Provost, during the semester prior the one dedicated to research thesis, the Chair of Graduate Department (as appropriate) and the Registrar will prepare the Thesis Registration Form. The thesis topics will be approved by the Provost.

Student may choose the faculty for thesis supervision, and the faculty has to accept to supervise the thesis. In case the student is not choosing his/her supervisor, or the faculty chosen did not give his/her acceptance, then the supervisors will be assigned by the Provost for each student.

The faculty member in charge to supervise the thesis research will act as advisor for the thesis and he, she enables the students to make a research on a chosen topic and prepare a thesis report on the study conducted and its main results. Thesis should stem from students' original work that involves field study, laboratory work, or laboratory research. Emphasis will be given on the methods of data collection and analysis, conclusions and recommendations on the basis of the findings of the study, and proper presentation of the research in a desired format. The thesis topic should be related to contemporary business and management practices.

Names on Degrees

The names of AUM students will be spelled in English exactly as they appear on their passports or identity cards when printed on degrees. If a name on a passport or an identity card does

not appear in English, then the spelling of the name will be printed according to the personal preference of the student.

Petition to Graduate

By the end of the fifth week of classes in their final semester, students who expect to complete degree requirements must confirm their intention to graduate through the Registrar by completing a Degree Completion Application form. Concurrent degree seeking students must submit a separate application for each degree sought.

All grade changes, removals of incompletes, final submission of a required thesis to the Library and transfer work necessary for completion of degree requirements must be on file in the Registrar's Office by the last day of classes for that semester. Academic records are sealed thirty days after the conferral of a degree; no changes to the record will be made following that date.

Conferral of degrees is granted only when students apply to graduate, i.e. students will not receive retroactive degrees. Students who fail to complete all degree requirements by the end of the term for which they apply to graduate need not reapply for graduation. Their previous application will be automatically moved to the following semester.

REGISTRATION

Course Selection and Registration

Courses are offered at the discretion of the Provost. AUM does not offer every course every semester. AUM offers courses at a frequency that enables students to make satisfactory progress toward their degrees. Students must ensure that they pay particular attention to the frequency with which upper-level courses are offered in order to ensure that they take advantage of course offerings that are not regularly part of the schedule.

The Registrar's Office publishes courses offered in the subsequent semester during the 8th week of the current semester. The information included in the schedule of classes includes the course numbers, course titles, meeting days and times, meeting location, faculty members, enrollment counts, prerequisites, and registration restrictions.

Students may select courses in consultation with their faculty/academic advisor and then register online via the MyAUM portal. Course pre-requisites and co-requisites reflect necessary preparation and conditions for attempting a course.

It is the student's responsibility to be aware of these requirements as stated in the University Catalog; and they must have taken required pre-requisites recently enough to be of value. The faculty member may drop students who have enrolled in a course for which they have not met the pre-requisites or are not enrolled in a co-requisite. Conversely, the faculty member may decide to waive any pre- or co-requisites for students that they believe warrant such an accommodation. Students must present the faculty member's waiver in writing to the Registrar, otherwise they will not be permitted to register for the course.

Registration Criteria

The normal graduate student load is 9 credit hours.

However,

- A student with a cumulative GPA of 3.5 or above is entitled to register for 12 credit hours the following semester.
- A student with a cumulative GPA of less than 3.0 is entitled to register for 6 credit hours the following semester.
- Only 3 credit hours are allowed during a summer term.

Registration for Thesis/Final Project Credit

Graduate students registering for thesis credits must register through the Registrar's Office. Only students in good academic standing may register for thesis/final project credits.

Thesis/Final Project Time Extensions

Students who do not complete the thesis/final project after registering for full credits must register for the full thesis/ final project credits the subsequent semester.

All students must be registered in the semester in which they defend their thesis.

In case there is a Summer semester, and faculty members are willing to supervise student's thesis, then students may register for their thesis research during the Summer semester, under the condition that this semester is the one prior his/her research project graduation (the semester in which the student will defend his/her thesis). This policy will allow the students to start writing their thesis in advance and hence their graduation can be achieved successfully by the end of the third semester.

Note: *A student must complete all degree requirements within five years from the time of initial enrollment into the program.*

Schedule of Classes

The list of courses offered is available around mid-semester at the Registrar's Office for the following semester's classes.

Summer Courses Outside AUM

Requirements

An enrolled student is eligible to apply to take courses at another college/university during the summer with the intention of transferring credits to AUM provided the following conditions are met:

- The student must be in good academic standing at AUM.
- The summer courses at the host university must not be taken as attempts to repeat AUM courses in which "F" grades were previously earned.

- The host university must provide learning experiences similar to those offered by AUM.
- Contact/credit hours for the course at the host university must be equivalent to or greater than the contact/credit hours required for its equivalent course at AUM, if equivalency is sought.
- The language of instruction of the course(s) taken at the host university must be English (except for language courses conducted in other languages), unless otherwise approved by AUM.
- The student must obtain approval from AUM prior to registering for the summer course(s).
- A degree program reserves the right not to allow for any particular course to be taken at another college/university.

Students should verify in writing with the Registrar prior to enrolling in any courses at another college or university to ensure the course/credits will transfer back to AUM.

Tuition and Fees for Graduate Students 2020-2021

Tuition and Fee Payment Deadlines		
Semester	Deadline	Payment Information
Fall Semester	24 Aug 2020	
Spring Semester	18 Jan 2021	Tuition and fees can be paid by wire transfer. Other forms of payment may be accepted on a case-by-case basis.
Tuition		
Programs	Amount (EUR)	
Graduate programs	10,000	Per semester
After scholarships are applied		
Non-EU (International students)	3500	Per semester
EU Students	500	Per semester
Maltese Nationals and Residents	2500	Per semester
Fees		
Fee Type	Amount (EUR)	
Activity Fee	100	Per semester, non-refundable
Transcript Fee	10	Per Official Transcript

Withdraw By	% Refund
End of First (1st) Week of Semester	100%
End of Second (2nd) Week of Semester	75%
End of Third (3rd) Week of Semester	50%
End of Fourth (4th) Week of Semester	25%
Beyond the end of the 4th Semester Week	No Refund

MASTER OF BUSINESS ADMINISTRATION

The Master of Business Administration (MBA) meets the highest international standards and provides graduate students with skills and information valuable for their professional success. The curriculum enables students to address significant current issues and allows them to engage with one another and their professors in stimulating discussions and challenging assignments. Their experienced faculty are from leading universities in North America, Europe, and elsewhere, and are dedicated to their students' success.

Program Learning Outcomes

1. Information literacy skills: Students will demonstrate a proficiency with technology and analytical techniques for decision-making.
2. Critical thinking skills: Students will demonstrate critical thinking skills and analyses.
3. Social/networking skills: Students will be able to communicate effectively with different stakeholders of an organization.
4. Managerial skills: Students will be able to effectively combine concepts, theories and principles across various functional areas of a business organization, to address managerial issues.
5. Professional communication skills: Students will demonstrate the ability to clearly and concisely communicate ideas both in oral and written forms.

MASTER OF BUSINESS ADMINISTRATION

			Number of Courses	US CR	ECTS CR
I. Introductory Modules			4	12	24
FIN 510	Financial Accounting	3/6			
FIN 520	Economics for Managers	3/6			
MAT 501	Business Statistics	3/6			
MGT 510	Business Law	3/6			
II. Core Modules			4	12	24
FIN 530	Managerial Accounting	3/6			
MGT 540	Operations Management	3/6			
MGT 550	Organizational Theory	3/6			
MGT 500	Writing and Presenting Academic Research	3/6			
III. Advanced Modules			4	12	24
MGT 520	Strategic Management	3/6			
MGT 530	Financial Management	3/6			
MGT 610	Research Methods for Business	3/6			
	Free Elective	3/6			
IV. Electives (<i>Choose one</i>)			4	9	18
MGT 560	Marketing Management	3/6			
FIN 540	Money and Banking	3/6			
PHI 501	Foundations of Ethics	3/6			
V. Research Project			1	12	24
MGT 620	Research Project	12/24			
MBA TOTALS			13	48	72

US CR = U.S. Carnegie Credits

ECTS CR = European Credit Transfer Credits

SAMPLE TWO-YEAR SCHEDULE

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
FIN 510	Financial Accounting	3	6	FIN 530	Managerial Accounting	3	6
FIN 520	Economics for Managers	3	6	MAT 501	Business Statistics	3	6
MGT 550	Organizational Theory	3	6	MGT 610	Research Methods for Business	3	6
MGT 560	Marketing Management	3	6	MGT 520	Strategic Management	3	6
TOTAL		12	24			12	24

Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
FIN 540	Money and Banking	3	6	MGT 620	Research Project	12	24
MGT 510	Business Law	3	6				
MGT 530	Financial Management	3	6				
MGT 540	Operation Management	3	6				
TOTAL		12	24			12	24

USCR = U.S. Carnegie Credits ECTS CR = European Credit Transfer Credits

TOTAL CREDIT HOURS: 48 US / 96 ECTS

Master of Science in Engineering Management

The MS in Engineering Management is designed for graduate engineers aspiring to advance into management careers within technological organizations. In a global economy, it is vital for companies to hire and develop new talent that can bridge communication gaps in many contexts. Students are trained to lead multi-disciplinary teams and translate customer needs into new engineering technologies. In a global context, our students are adept at finding common ground and fostering international ties to create new ideas and perspectives. Our students gain an understanding of project management, finance, technical sales & marketing, law for engineers, decision-making under uncertainty. Our program focuses on creating leaders who are able to adapt to dynamic business environments.

Program Learning Outcomes

1. Prepare professional proposals and reports
2. Competently deliver oral presentations to technical and lay audiences
3. Develop and use effective audio/visual aids
4. Write effective professional communications such as email and memorandums
5. Communicate within the engineering disciplines through plans and drawings
6. Understand the impact of engineering solutions in a global, economic, environmental, and societal context
7. Recognize the need to engage life-long learning
8. Be capable of developing a career plan including options for advanced education or specialized training to enhance career
9. Have the ability to autonomously initiate and engage in life-long learning

M.S. Engineering Management

			Number of Courses	US CR	ECTS CR
II. Engineering Management Core Courses			13	39	78
IEE 514	Law for Engineers and Scientists	3/6			
IEE 557	Project Management	3/6			
IEE 530	Engineering Statistics	3/6			
IEE 515	Technical Sales and Marketing	3/6			
IEE 522	Decision-Making Under Uncertainty	3/6			
IEE 506	Quality Engineering	3/6			
IEE 540	Survey of Optimization Methods	3/6			
IEE 554	Systems Engineering Process	3/6			
IEE 567	Financial Modeling for Innovation	3/6			
IEE 531	Simulation Modeling and Analysis	3/6			
IEE 565	Supply Chain Management	3/6			
IEE 564	Cost Estimation	3/6			
IEE 562	Production Systems Analysis	3/6			
III. Research Courses			2	6	12
IEE 598A	Master's Capstone I	3/6			
IEE 598B	Master's Capstone II	3/6			
ENGINEERING MANAGEMENT TOTALS			15	45	90

US CR = U.S. Carnegie Credits

ECTS CR = European Credit Transfer Credits

SAMPLE TWO-YEAR SCHEDULE

M.S. Engineering Management

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
IEE 514	Law for Engineers and Scientists	3	6	IEE 522	Decision-Making Under Uncertainty	3	6
IEE 557	Project Management	3	6	IEE 506	Quality Engineering	3	6
IEE 530	Engineering Statistics	3	6	IEE 540	Survey of Optimization Methods	3	6
IEE 515	Technical Sales and Marketing	3	6	IEE 554	Systems Engineering Process	3	6
	TOTAL	12	24			12	24

Second Year, Semester 1				Second Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
IEE 567	Financial Modeling for Innovation	3	6	IEE 564	Cost Estimation	3	6
IEE 531	Simulation Modeling and Analysis	3	6	IEE 562	Production Systems Analysis	3	6
IEE 565	Supply Chain Management	3	6	IEE 598B	Master's Capstone II	3	6
IEE 598A	Master's Capstone I	3	6				
	TOTAL	12	24			9	18

TOTAL CREDIT HOURS: 48 US / 96 ECTS

USCR = U.S. Carnegie Credits

ECTS CR = European Credit Transfer Credits

Cyber Security

Brief description of programme:

The MS in Cyber Security is designed for graduate engineers aspiring to advance into cyber security management careers within technological organizations. In a global economy, it is vital for companies to hire and develop new talent that can bridge communication gaps in many contexts. Our students are trained to understand computer and network technologies, and how to secure and protect their operations as well as the applications and data. In a global context, our students are adept at finding common ground and fostering international ties to create new ideas and perspectives. Our program focuses on creating leaders who are able to adapt to exploit emerging cyber technologies and have the knowledge and expertise to secure and manage their operations against cyber-attacks.

Modules in the master's programme:

Scientific Computation	Compulsory	6 ECTS	Lectures	Exams, Assignments, Projects
Fundamentals of Computer Systems and Network	Compulsory	6 ECTS	Lectures	Exams, Assignments, Projects
Computer Security	Compulsory	10 ECTS	Lectures	Exams, Assignments, Projects
Network Security	Compulsory	10 ECTS	Lectures	Exams, Assignments, Projects
Fundamentals of Machine Learning and Data Analytics	Compulsory	6 ECTS	Lectures	Exams, Assignments, Projects
Fundamentals of Cryptography	Compulsory	6 ECTS	Lectures	Exams, Assignments, Projects
Cyber Forensics and Incident Responses	Compulsory	10 ECTS	Lectures	Exams, Assignments, Projects
Ethical Hacking	Compulsory	10 ECTS	Lectures	Exams, Assignments, Projects
Software Security Testing	Compulsory	10 ECTS	Lectures	Exams, Assignments, Projects
Web Application Security	Elective	6 ECTS	Lectures	Exams, Assignments, Projects
Cloud Security	Elective	6 ECTS	Lectures	Exams, Assignments, Projects

Master's Project	Compulsory	10 ECTS	Workshop	Oral Presentation, written report, project

If students complete only a few modules they may be eligible for the following:

Postgraduate Certificate in Cyber Security (30 ECTS):

1. Computer Security (10ECTS)
2. Network Security (10ECTS)
3. Ethical Hacking (10ECTS)

Postgraduate Diploma in Cyber Security (60 ECTS):

1. Scientific Computation (6ECTS)
2. Fundamentals of Cyber Systems (6 ECTS)
3. Computer Security (10ECTS)
4. Network Security (10ECTS)
5. Fundamentals of Cryptography (6 ECTS)
6. Ethical Hacking (10ECTS)
7. Web Application Security (6 ECTS)
8. Cloud Security (6ECTS)

SAMPLE TWO YEAR

M.S. CYBER SECURITY

First Year, Semester 1				First Year, Semester 2			
Course	Title	US CR	ECTS CR	Course	Title	US CR	ECTS CR
	Scientific Computation	3	6		Computer Security	5	10
	Fundamentals of Computer Systems and Network	3	6		Fundamentals of Cryptography	3	6
	Network Security	5	10		Cyber Forensics and Incident Responses	5	10
	Fundamentals of Machine Learning and Data Analytics	3	6				
TOTAL		14	28	TOTAL		13	26
Second Year, Semester 1				Second Year, Semester 2			
	Ethical Hacking	5	10		Master's Project	5	10
	Software Security Testing	5	10				
	Web Application Security	3	6				
	Cloud Security	3	6				
TOTAL		16	32	TOTAL		5	10
TOTAL CREDIT HOURS 53 US/106 ECTS							
<i>US CR = U.S. Carnegie Credits ECTS CR = European Credit Transfer Credits</i>							

If students complete only a few modules they may be eligible for the following:

Postgraduate Certificate in Cyber Security (30 ECTS):

1. Computer Security (10ECTS)
2. Network Security (10ECTS)
3. Ethical Hacking (10ECTS)

Postgraduate Diploma in Cyber Security (60 ECTS):

1. Scientific Computation (6ECTS)
2. Fundamentals of Cyber Systems (6 ECTS)
3. Computer Security (10ECTS)
4. Network Security (10ECTS)
5. Fundamentals of Cryptography (6 ECTS)
6. Ethical Hacking (10ECTS)
7. Web Application Security (6 ECTS)
8. Cloud Security (6ECTS)

Course Information

Each course offered by the university has a designated course prefix (or code) and number. The course prefix represents the discipline or field of study, and the number indicates the level of the course content.

Course Level Number:

- 000-099 numbered courses are for developmental purposes and do not count toward a degree.
- 100-level number courses are typically available to first-year students and do not have a prerequisite.
- 200-level number courses are typically second year courses.
- 300-level number courses are intended for more advanced third-year students.
- 400-level courses are typically intended for fourth-year students.
- Courses numbered 500 and above are for graduate students only, except for 500-level courses, which may be taken by second-semester fourth- year students with permission of the faculty member and the Provost.

The course descriptions indicate each courses code, number, topics of study, prerequisites, number of credits assigned, lecture clock hours, and laboratory clock hours.

Numbers following the course title indicate semester credit hours, lecture clock hours per week and lab clock hours per week for both U.S. Carnegie Units/Credits (US) and European Credit Transfer System Credits (ECTS); e.g., 3 3 0 indicates three semester credit hours, three clock hours of lecture per week (sometimes referred to as seat time) and zero clock hours of lab per week.

Course Abbreviations

Course Title	Code
Accounting	ACC
Art / Art History	ATH
Biology, Bioinformatics, Biotechnology	BIO
Business	BUS
Chemistry	CHE
Chinese Language and Culture	CHI
Communication	COM
Computer Science	CSC
Electronics and Communications Engineering	ECE
Economics	ECO
English	ENG
English for Academic Purposes	EAP
Finance	FIN
Graphic Design	GRD
History	HIS
Management	MGT
Mathematics	MAT
Philosophy	PHI
Physics	PHY
Psychology	PSY
Religion	REL
Sociology	SOC

Example: ACC 101 (US 3 3 0 | ECTS 6 3 0)

3 US credits, 3 lecture clock hours, 0 laboratory clock hours | 6 ECTS credits, 3 lecture clock hours, 0 laboratory clock hours.

Example: BIO 101 (US 4 3 2 | ECTS 8 3 2)

4 US credits, 3 lecture clock hours, 2 laboratory clock hours | 8 ECTS credits, 3 lecture clock hours, 2 laboratory clock hours.

COURSE DESCRIPTIONS

ACCOUNTING

ACC 101 Principles of Accounting I (US 3 3 0 | ECTS 6 3 0)

Principles of Accounting I introduce financial accounting as the means of recording, storing, and summarizing economic events of the business enterprise to meet external reporting needs. Emphasis is placed on the preparation and analysis of financial statements and other financial reports to the public based on the accounting equation, accrual accounting concepts, and data gathering techniques. Topics include corporate accounting for current and long-term assets and current liabilities and the corporate income statement. *No Prerequisite*

ACC 102 Principles of Accounting II (US 3 3 0 | ECTS 6 3 0)

Principles of Accounting II introduces manufacturing accounting, cost allocation techniques, and the evaluation of management control systems. Students will examine manufacturing cost systems including job order costing, process costing, and activity-based costing. Tools for management control systems will be covered to enable the student to evaluate and compare various systems. The module also covers budgeting and variance analysis, job costing for the service sector, and cost analysis for decision-making. *Prerequisite: ACC 101 Principles of Accounting I*

ACC201 Intermediate Accounting I (US 3 3 0 | ECTS 6 3 0)

This course provides coverage of present value and assets, including Intermediate theory and preparation of financial statements, review of accounting concepts and theories that guide development of accounting models, methods, and problems in valuation and reporting the emphasis on current assets and liabilities, property, plant, equipment, and intangibles, and review of relevant authoritative literature. *Prerequisite: ACC 102 Principles of Accounting II*

ACC202 Intermediate Accounting II (US 3 3 0 | ECTS 6 3 0)

This is a continuation of ACC 201, and covers preparing and understanding financial statements and complex accounting principles and concepts, right-hand side of the balance sheet, detailed footnotes to the financial statements, and cash flow statements. The material covered in this module comprises a significant portion of the Uniform CPA exam. *Prerequisite: ACC 201 Intermediate Accounting I*

ACC 210 Managerial Accounting (US 3 3 0 | ECTS 6 3 0)

Managerial accounting provides information for stakeholders inside the firm (upper management, other departments). This course provides accounting tools to support managerial decision making. *Prerequisite: ACC 202 Intermediate Accounting II and FIN 210 Introduction to Finance*

ACC 301 Advanced Accounting
(US 3 3 0 | ECTS 6 3 0)

Advanced Accounting focuses on accounting for multicorporate entities and acquisitions, accounting for local governments, accounting for non-profit organizations, foreign operations, partnership accounting, and segment reporting. Selected spreadsheet applications will be introduced through homework assignments. *Prerequisite: ACC 202 Intermediate Accounting II and ACC 210 Managerial Accounting*

ART HISTORY

ATH 101 Introduction to the Arts of the Mediterranean
(US 3 3 0 | ECTS 6 3 0)

This class is designed to give students a broad historical survey of art history in Europe with the emphasis on the Mediterranean region. The students will learn about art historical developments during this period, relations between art and politics, and dynamics of patronage and cultural exchange. Students will also extend their knowledge and experience of the arts while developing their critical and reflective abilities. In this module students will interpret and analyze particular creative works, investigate the relations of form and meaning, and through critical activity come to experience art with greater openness, insight, and enjoyment. This class will not only focus on works of art as such, but will also incorporate analysis of social and cultural issues that shaped the production of works of art. *No prerequisite*

ATH 201 World Art History
(US 3 3 0 | ECTS 6 3 0)

Knowledge of a broad range of art and visual culture is a core knowledge area for the Graphic Design and Animation course. This module offers an introductory survey of world art created during ancient times through the present. Research will include techniques, styles, content within historical and social contexts in various media and cultures. Emphasis is given to the roots of contemporary visual culture. *No prerequisite*

BIOLOGY

BIO 101 Biology (Unity of Life) and lab
(US 4 3 2 | ECTS 8 3 2)

This module will demonstrate how life on earth conforms to the laws of physics (through the emergent properties of chemistry and energy), how organisms are built from cells, how those cells function, how the information that makes cells work is stored, and how those processes must inevitably result in the natural selection that drove the evolution of all life on earth, including ourselves. *No prerequisite*

BUSINESS

BUS 100 Business Technology and Society
(US 3 3 0 | ECTS 6 3 0)

This course introduces students to the historical and current relationships between business, technology, and society in different parts of the world. Through studying and discussing theories, research, trends, and developments, students critically analyze the complex and contradictory ways business, technology, and social systems interact. *No prerequisite*

CHEMISTRY

CHE 101 Introduction to Chemistry and Lab
(US 4 3 2 | ECTS 8 3 2)

Introduction to Chemistry exposes students to fundamental concepts in the field of chemistry. The module may be used by non-science majors to satisfy a natural science requirement within the general education program; students interested in majoring in one of the natural sciences may use this course to prepare for a traditional general chemistry sequence. *No prerequisite*

CHE 111 Introduction to General Chemistry and Lab
(US 4 3 2 | ECTS 8 3 2)

This course provides a fundamental understanding to chemical principles around us, engage prior knowledge and introduction of new chemical concepts resulting in the establishment of a sound basis for further units of study. The first part of the module includes aspects of matter, electronic structure, chemical bonding and the quantitative relationship between reactants and products. The remainder of the module includes mastery of topics in physical applications to chemical systems such as the study of heat and energy associated with a reaction, gas laws, liquids and solids. *No prerequisite*

CHE 112 General Chemistry II and Lab
(US 4 3 2 | ECTS 8 3 2)

This module strengthens the understanding of the basic chemical principles through a broad range of applications in the real world. Modules will be based on both theoretical and practical applications allowing in-depth knowledge that can be utilized in any chemical field. Students will be encouraged to develop problem-solving and critical thinking skills. The first part of the module includes aspects of thermodynamics, fundamental equilibrium concepts, acid- base equilibria and equilibria of other reaction classes. The second part of the module includes mastery of topics in electrochemistry, kinetics, metal / metalloid and nonmetal, transition metals and coordination chemistry, nuclear and organic chemistry. *Prerequisite: CHE 111*

CHINESE LANGUAGE AND CULTURE

CHI 101 Beginning Chinese I
(US 5 3 0 | ECTS 10 3 0)

This course is designed to develop students' ability to understand basic modern Chinese in both written and spoken form, to be able to converse effectively in Chinese with native speakers in various contexts, and to prepare students for more advanced Chinese-related studies or jobs in China. The course will work on all four basic skills in language learning: speaking, listening, reading and writing. *No prerequisite*

CHI 102 Beginning Chinese II
(US 5 3 0 | ECTS 10 3 0)

This course is designed to further develop students' ability to understand simple modern Chinese in both written and spoken form, and to be able to converse in Chinese with native speakers in various contexts using short sentences. The course will continue to train the four basic skills in language learning: speaking, listening, reading and writing. *Prerequisite: CHI 101 Beginning Chinese I*

CHI201 Intermediate Chinese I
(US 5 3 0 | ECTS 10 3 0)

Intermediate course with more emphasis on communication skills and structure. Reading and writing practice with- out phonetic aids; oral practice in and outside the class, paying special attention to idiomatic usage; introduction to cultural perspectives through readings and cultural activities. *Prerequisite: CHI 102 Beginning Chinese II*

CHI202 Intermediate Chinese II
(US 5 3 0 | ECTS 10 3 0)

Intermediate course with more emphasis on communication skills and structure. Reading and writing practice without phonetic aids; oral practice in and outside the class, paying special attention to idiomatic usage; introduction to cultural perspectives through readings and cultural activities. *Prerequisite: CHI 201 Intermediate Chinese I*

CHI 301 Advanced Chinese I
(US 4 3 0 | ECTS 8 3 0)

The course is designed for students who have completed two years of Chinese language training and are ready to progress from intermediate low to intermediate mid proficiency level. The course is designed to invite students to actively participate in the process of acquiring skills in intermediate/early advanced modern Chinese, from listening and speaking to reading and writing. The texts are selected to introduce current issues in China that encourage students to contribute their thoughts to the discussion. Issues in Chinese society can be easily extended to those in other Chinese speaking countries with certain variations, which also provides an opportunity for the students to explore the similarities and differences

in various Chinese speaking communities. The materials cover various topics for discussion. Students are expected to actively participate in the learning process. As language learning is generally a learner-oriented process, students will be expected to be fully prepared before class. Class time is for practice and communication in Chinese. *Prerequisite: CHI 202 Intermediate Chinese II*

CHI 302 Advanced Chinese II
(US 4 3 0 | ECTS 8 3 0)

This course is designed for students with at least five semesters of Chinese language training and are ready to progress from intermediate mid to intermediate high proficiency level. The focus of the course is for students to actively participate in meaningful conversations and complete well-formed essays. Students will learn various styles (genres) of written Chinese and be able to discuss various topics or express opinions by using more sophisticated sentence patterns, terms and phrases. The course will cover the following styles of writing: description, narration, summary, technical writing, opinion/expository, arguments/persuasion. *Prerequisite: CHI 301 Advanced Chinese I*

CHI 305 Chinese Linguistics
(US 3 3 0 | ECTS 6 3 0)

The course introduces students to various linguistic aspects of Chinese language. The course runs along two parallel lines: the introduction of the general linguistic theory and the introduction of Chinese language, mainly the modern standard variety – Mandarin, but also its regional varieties. The first line prepares the students with necessary analytical tools to approach and analyze language in general and the second line applies the theoretical approaches to Chinese. Specific topics include history and evolution of Chinese language, phonetics, phonology, morphology, syntax, semantics/pragmatics, writing system, classification of languages, dialects, language and culture, language acquisition, and the brain and language. The course is taught in English. *No prerequisite*

CHI 310 History of Ancient China
(US 3 3 0 | ECTS 6 3 0)

This module examines Chinese history from its origin until 17th century CE. Designed as a reading-intensive course, it emphasizes the interpretation and analysis of primary source texts in translation. All readings and discussions are in English. *Prerequisite CHI 340 Chinese Culture through Film*

CHI 320 History of Modern China
(US 3 3 0 | ECTS 6 3 0)

This module examines the Chinese history from 17th century until today. Designed as a reading-intensive course, it emphasizes the interpretation and analysis of primary source texts in translation. All readings and discussions are in English. *No prerequisite*

CHI 330 History of Popular China
(US 3 3 0 | ECTS 6 3 0)

This course, taught in English, provides a critical examination of modern Chinese popular culture and its global cultural significance in the contemporary world. From film to literature, from music to theatre, from religion to politics, this course probes modern Chinese popular culture as it has manifested itself, and traces its sociopolitical, aesthetic, and affective impact on the contemporary world. *Prerequisite: CHI 301*

CHI340 Chinese Culture through Film
(US 3 3 0 | ECTS 6 3 0)

This course examines Chinese cinema in juxtaposition with popular culture and other forms of media such as television, music, and journalism in a broad sociopolitical and historical context. While focusing specifically on film productions, cultural consumption, and media representations in the contemporary era of mainland China, we will place these discourses within a general framework of national tradition and identity and track their evolutions from the beginning of the twentieth century. Instruction in English. *No prerequisite*

CHI 350 Pre-Modern Chinese Literature
(US 3 3 0 | ECTS 6 3 0)

This module studies Chinese literature from the 8th century B.C.E. to the 19th century C.E., and examines major genres in Chinese literature, including poetry, prose, drama, fiction, and literary criticism. All readings and discussions are in English. *No prerequisite*

CHI 360 Buddhism
(US 3 3 0 | ECTS 6 3 0)

This module studies Buddhism in China since the 1st century C.E. It examines the formation of Chinese Buddhism and its overall influence on Chinese culture and society. All readings and discussions are in English. *No prerequisite*

CHI 370 Chinese for Professionals I: Business
(US 3 3 0 | ECTS 6 3 0)

This course offers advanced study of spoken and written Chinese, including vocabulary, concepts, and expressions, common to the Chinese-speaking business communities, with an emphasis on communicative competence in business settings and transactions. All readings and discussions are in Chinese. *Prerequisite: CHI 302 Advanced Chinese II*

CHI380 Chinese for Professionals II: Health & Medicine
(US 3 3 0 | ECTS 6 3 0)

This course, while continuing to build up a student's general language proficiency in Chinese, offers the study of medical concepts and terminology with an emphasis on communicative competence in health topics. It also pays attention to developing abilities in reading Chinese medical writings and translating simple paragraph-long medical texts. All readings and discussions are in Chinese. *Prerequisite: CHI 302 Advanced Chinese II*

CHI 410 Studies in Chinese Language I: Social Issues
(US 3 3 0 | ECTS 6 3 0)

The course provides advanced training aiming at developing linguistic fluency and communicative competence through a topic-based course design. While continuing to develop reading and writing skills, students will expand their speaking repertoire to include more linguistically and intellectually challenging topics, such as social issues and current events. All readings and discussions are in Chinese. *Prerequisite: CHI 302 Advanced Chinese II*

CHI 420 Studies in Chinese Language II: Literature
(US 3 3 0 | ECTS 6 3 0)

The course provides advanced training in the spoken and written language through a close reading of selected modern classics of Chinese literature. Students are expected to learn more sophisticated vocabulary, syntax, and styles of writing in Chinese and become familiar with different genres of literary works and the key literary figures associated with the New Culture Movement in the 20th Century China. More emphasis is given to building up the capacity to write effectively and eloquently. All readings and discussions are in Chinese. *Prerequisite: CHI 302 Advanced Chinese II*

CHI 450 Contemporary Chinese Literature
(US 3 3 0 | ECTS 6 3 0)

This course is an analysis of the changing literary and cultural patterns through the reading of the representative works of modern and contemporary Chinese writers. A review of the literary background and close analysis of the literary expression of earlier short stories will present a strong contrast to the changing aspects of the family, society, religion, philosophy and gender roles between the old and new China. This course will also cover literary practices in Taiwan. All works are read in English translations. *No prerequisite*

CHI 460 Philosophy in Ancient China
(US 3 3 0 | ECTS 6 3 0)

This module studies the history of Chinese philosophy from the 5th century BCE to the 2nd century CE. It examines Chinese philosophers' opinion on the questions of life and death, history and society, education and personal cultivation, etc. All readings and discussions are in English. *No prerequisite*

CHI 461 Philosophy in Medieval China
(US 3 3 0 | ECTS 6 3 0)

This module examines the history of Chinese philosophy from the 2nd century BCE to the 18th century CE. The emphasis is on the Han Confucianism, Neo-Daoism, the Buddhist influence on the formation of Neo-Confucianism, and the main ideas of Neo-Confucianism. All readings and discussions are in English. *No prerequisite*

CHI 462 Intellectual History of Modern China
(US 3 3 0 | ECTS 6 3 0)

This module studies the intellectual history of China from the 19th century to the present and examines the conflict of traditional and modern values in China and the influence of Western ideas on the formation of modern Chinese thought. All readings and discussions are in English. *No prerequisite*

CHI 463 The View of History in the Ancient World
(US 3 3 0 | ECTS 6 3 0)

This module of comparative studies examines the view of history in three major traditions: the Indo-Hellenic, the Chinese, and the Judeo-Christian, and the relationship of the Judeo-Christian view and the modern notion of “progress.” It explores also important topics in historical understanding: nature and freedom, fact and value, past and future, etc. All readings and discussions are in English. *No prerequisite*

CHI470 Culture, Society, and Politics in China
(US 3 3 0 | ECTS 6 3 0)

This course examines fundamental cultural values, patterns of social life, as well as governance and politics in modern China. Students, while becoming familiar with key theoretical concerns of cultural anthropology, gain an understanding of important aspects of contemporary Chinese society in the context of rapid social changes and globalization. Readings and Discussions are in English. *No prerequisite*

CIVIL ENGINEERING

CIE 210 Engineering Graphics
(US 2 0 2 | ECTS 4 0 2)

Students develop practical skills to contribute to a civil engineering firm. The course gives students a comprehensive introduction and understanding of AutoCAD Civil 3D software. Class will focus on AutoCAD software and touch on hand drafting methods. Comprehension of course curriculum will be measured by final project requirement. *No prerequisite*

CIE 214 Statics
(US 3 3 0 | ECTS 6 3 0)

This course is an engineering science course in which fundamental math and science knowledge is applied in more complex, but basic, engineering applications. It builds on basic math and physics to analyze static (non-accelerating) systems. Topics include equilibrium of a particle, equivalent and resultant force systems, equilibrium, geometric properties of areas and solids, trusses, frames and machines, shear force and bending moments, friction.
Prerequisites MAT 130 and PHY 240

CIE 215 Mechanics of Materials
(US 3 3 0 | ECTS 6 3 0)

A continuation of this course covers such topics as material behavior; relationship between external forces acting on elastic and inelastic bodies and the resulting behavior; stress and deformation of bars, beams, shafts, pressure vessels; stress and strain; combined stresses; columns. *Prerequisite CIE 214*

CIE 218 Mechanics of Fluids
(US 4 3 1 | ECTS 8 3 1)

A continuation of CIE 215. Here, fluids, primarily water, are considered. Topics include hydrostatics, continuity, irrotational flow, pressure distributions, weirs and gates, momentum and energy, surface drag, pipe friction, form drag, pipe fitting losses. *Prerequisite CIE 215*

CIE 251 Elementary Surveying
(US 3 3 0 | ECTS 6 3 0)

To provide necessary basic civil engineering skills and an understanding of data collection, the course provides a basic introduction to surveying as it pertains to the field of civil engineering. The focus is on the theory of measurements, vertical and horizontal control methods, topographic surveys, public land surveys, and construction surveys. *Prerequisite MAT 120.*

CIE 301 Engineering Communications
(US 3 3 0 | ECTS 6 3 0)

This course introduces students to communication skills for graduates to be successful engineers. Elements of written and oral communications for engineers including technical writing skills for proposal and report preparation, delivery techniques for oral presentations, and the effective use of audio/visual aids. *Prerequisite ENG 102 and Upper Division Standing*

CIE 303 Numerical Analysis for Civil Engineers
(US 3 3 0 | ECTS 6 3 0)

This course provides students supporting knowledge in solving problems using numerical techniques that are necessary in multiple engineering applications. Finding Roots of Nonlinear Equations, Solution Techniques for System of Linear Equations, Curve Fitting – Polynomial and Spline Interpolation, Least Squares Fit, Numerical Differentiation and Integration, Solution of Ordinary Differential Equations - Initial and Boundary Value Problems; Use of MATLAB codes in Numerical Analysis for solving Civil Engineering Problems. *Prerequisites MAT 105 and MAT 250*

CIE 310 Probability and Statistics in Civil Engineering
(US 3 3 0 | ECTS 6 3 0)

This course provides students supporting knowledge to recognize and assess the uncertainties associated with civil engineering designs and to judge its impact in selecting an acceptable

design. Statistical decision theory and its application in civil engineering, identification and modeling of non-deterministic problems in civil engineering and the treatment thereof relative to engineering design and decision making, statistical reliability concepts.

Prerequisite MAT 120

CIE 323 Hydraulic Engineering and Design (US 4 4 0 | ECTS 8 4 0)

This course covers the hydraulics/water resources component of the breadth in civil engineering that is required of all civil engineering students. Open channel flow, natural streams and waterways, hydrologic analysis and design, pressure flow, analysis and design of pipe networks and pump systems. *Prerequisite CIE 218*

CIE 333 Elementary Structural Analysis (US 3 3 0 | ECTS 6 3 0)

This course builds on the engineering sciences of statics and mechanics of materials to provide third year students with skills to analyze complex structural systems. These skills and techniques are the basis of structural design. Analysis of Structures: beams, frames and trusses. Statically determinate structures; influence lines; deflections by the virtual work method. Statically indeterminate structures using the superposition method. *Prerequisite CIE 215*

CIE 334 Structural Design in Steel (US 3 3 0 | ECTS 6 3 0)

This course provides a design-based experience in the structural subspecialty of civil engineering. Design of steel members, connections and simple structures, introduction to load and resistance factor design concept, including tension members, laterally supported and unsupported beams, columns, bolted and welded connections. *Prerequisite CIE 333*

CIE 335 Structural Design in Concrete (US 3 3 0 | ECTS 6 3 0)

This course provides a design-based experience in the structural concrete subspecialty of civil engineering. Analysis and design of reinforced concrete members subjected to flexure, shear and axial loads; deflection of beams; bond and development of reinforcement. *Prerequisite CIE 333*

CIE 343 Soil Mechanics (US 4 3 1 | ECTS 8 3 1)

This course provides a fundamental understanding and application of soil properties, their behavior and connection to civil engineering design and covers a component in the breadth in civil engineering that is required of all civil engineers. The fundamental physical and mechanical properties of soils and how to use them in the design of simple foundation and

earth retaining systems. Certain fundamental principles of solid mechanics and fluid mechanics will be used to describe the mechanical behavior of soils. *Prerequisite CIE 215*

CIE 363 Transportation Engineering and Pavement Design
(US 4 4 0 | ECTS 8 4 0)

Basis for planning, design, and operation of transportation facilities. Driver and vehicle description, performance characteristics, highway geometric and pavement design principles; traffic analysis and transportation planning. *Prerequisite Upper Division Standing*

CIE 381 Construction Engineering Management
(US 3 3 0 | ECTS 6 3 0)

This course covers a component in the breadth in civil engineering that is required of all civil engineers. It provides an opportunity to develop an enhanced understanding of construction industry and practices in preparation to contribute to construction firms, project management consultants, and owners and to improve project delivery by understanding linkages between design and construction. *Prerequisite Upper Division Standing*

CIE 389 Materials Testing Lab
(US 1 0 2 | ECTS 2 0 2)

This course provides a hands-on laboratory experience to better comprehend the theoretical and practical materials concepts. Selected testing of steel, concrete, wood, and bituminous materials according to standard test procedures. *Prerequisite CIE 215*

CIE 408A Issues in Civil Engineering Practice
(US 3 3 0 | ECTS 6 3 0)

This course bridges the gap between academic engineering study and practice through understanding the business and ethical issues that face engineers. Introduction to nontechnical issues impacting the practice of design professionals in the private and public sectors including types of organizations; income, expenses, and profit; quality-based selection for obtaining and performing work; contracts; dispute resolution methods; professional ethics. *Prerequisite: at least 2 of CIE 323, CIE 334 or CIE 335, CIE 343, CIE381; Corequisite: CIE301*

CIE 408B Civil Engineering Senior Capstone Design
(US 3 3 0 | ECTS 6 3 0)

A culminating experience for majors involving a substantive project that demonstrates a synthesis of learning accumulated in the major, including broadly comprehensive knowledge of the discipline and its methodologies. *Prerequisite: CIE 301, CIE 408A, and at least 4 of CIE 323, CIE 334 or CIE 335, CIE 343, CIE 363, and CIE381*

CIE 427 Computer Applications in Hydraulics
(US 3 3 0 | ECTS 6 3 0)

This course is intended to introduce students to water resources engineering design. This is accomplished by learning the principles behind and applying several widely used computer

programs. The models are used extensively to perform sensitivity analysis and to design several real-world systems. Computer modeling of surface water hydrology, flood plain hydraulics and water distribution systems. Theoretical basis. Application and design studies. *Prerequisite CIE 323*

CIE 440 Foundation Engineering (US 3 3 0 | ECTS 6 3 0)

This course provides a design-based experience in the geotechnical subspecialty of civil engineering. Settlement and bearing capacity of shallow and deep foundations; beam on elastic foundation; design of footings and pile foundations; foundations on metastable soils; the use of computer codes for foundation problems. *Prerequisite CIE 343*

CIE 442 Ground Improvement (US 3 3 0 | ECTS 6 3 0)

This course expands a student's knowledge in the field of geotechnical engineering with detailed knowledge in techniques for enhancing ground conditions. Different ground improvement techniques including those without addition of materials and those that add materials or use reinforcing elements. Students develop a range of generic skills including written communication skills, problem solving skills and analysis and critical evaluation skills. *Prerequisite CIE 343*

CIE 463 Traffic Flow and Capacity Analysis (US 3 3 0 | ECTS 6 3 0)

This course provides a design-based experience in the transportation subspecialty of civil engineering. Methods for the efficient and safe operation of transport facilities through analysis of capacity, safety, speed, parking, and volume data. *Prerequisite CIE 363*

CIE 482 Construction Project Planning, Scheduling and Control (US 3 3 0 | ECTS 6 3 0)

This course expands a student's knowledge in the field of construction engineering management with detailed knowledge in project management. Develop an enhanced understanding of construction project planning, scheduling, execution, and control in preparation to contribute to construction firms, project management consultants, and owners. Topics include network scheduling, critical path method, resource allocation, cost control, software applications to scheduling, and contract documents. *Prerequisite CIE 381*

COMMUNICATIONS

COM 101 Introduction to Multicultural Communication (US 3 3 0 | ECTS 6 3 0)

This course develops international understanding, cultural intelligence, inclusivity, and sensitivity by developing critical and analytical skills that teach different ways of being and behaving in diverse settings. It will also enhance the intercultural appreciation required to live and work successfully in an increasingly multicultural, multi-ethnic, and global world. *No Prerequisite*

COMPUTER SCIENCE

CSC 101 Introduction to Computers and Technology
(US 3 3 0 | ECTS 6 3 0)

This course introduces students to computer concepts in hardware, software, networking and computer security, database management concepts (table, record, queries, primary, foreign keys, etc. in a relational database), basic programming concepts such as variable, function, objects etc. using Java, basic web programming (HTML, CSS, etc.), and office suite (Word, Excel, PowerPoint), which are very important for all students in terms of how computing processes take place. The course provides students an understanding of computing environments and how computing processes take place. Students will also obtain the ability to use some basic tools and set ups for computer programming. *No Prerequisite*

CSC 201 Introduction to C
(US 3 3 0 | ECTS 6 3 0)

This course introduces students to fundamental C Programming language concepts. The course also introduces a general programming approach valid for any programming language. The main concepts taught are Fundamentals of programming, Compilation of a C program, Variables, Data Types in C, Arithmetic Expressions, Loop, If Statements, Arrays, Functions, Structures, Strings, I/O operations. *No prerequisite*

CSC 210 Introduction to C++
(US 3 3 0 | ECTS 6 3 0)

This is an introductory course in computer programming covering basic data types, variables, flow of control, functions, parameter passing, pointers and pass by reference, arrays, C strings and the C string library, basic input/output and structures. Examples in this course will concentrate on basic procedural algorithms for manipulating data. *Co-requisite: MAT 230 Discrete Mathematics analysis*

CSC 220 Data Structures
(US 3 3 0 | ECTS 6 3 0)

This course covers the design, implementation, application and analysis of algorithms on a variety of data structures, including lists, stacks, queues, trees, heaps, hash tables and graphs. Implementation is done in C++. *Prerequisite: CSC 210 Introduction to C++*

CSC 240 Computer Systems
(US 4 4 0 | ECTS 8 4 0)

This is a course on computer systems topics, that focuses on machine-level programming and architecture and their relevance for application programming. The course covers information representations, assembly language, C programming, debuggers, and processor architecture.

Prerequisites: MAT 230 Discrete Mathematics; CSC 220 Data Structures

CSC 250 Computer Science Theory (US 3 3 0 | ECTS 6 3 0)

In this course students design and analyze algorithms to solve problems involving data structures. The course covers design, implementation, application, and analysis of algorithms on a variety of data structures. Algorithmic analysis includes computation of running times and asymptotic analysis. *Prerequisites: MAT 230 Discrete Mathematics and CSC 220 Data Structures*

CSC 320 Applied 3D Geometry (US 3 3 0 | ECTS 6 3 0)

This course reviews mathematical foundation and techniques needed for the development of 3D graphics and game systems. This class will provide the foundation in linear algebra and 3D geometry required for implementing common tasks in 3D graphics and game systems. Topics include vectors, matrices, transforms, coordinate changes, projections, and intersection. *Prerequisite: CSC 220 Data Structures*

CSC 330 Optimized C++ (US 4 4 0 | ECTS 8 4 0)

This game programming class will focus on developing software to efficiently use the fixed CPU power and resources in today's console and mobile devices. This course will use real world game examples that demonstrate performance and optimization issues that software architects face in software development. These problems include performance enhancements through extended matrix instruction set, dynamic memory usages, performance related to increasing run-time systems to very large scale, C++ language enhancements and extensions, algorithms, streaming and profiling. *Prerequisites: CSC 210 Introduction to C++ and CSC 240 Computer Systems*

CSC 340 Introduction to Game Design (US 3 3 0 | ECTS 6 3 0)

This course provides students a practical foundation in game design with a focus on concept development, design decomposition, and prototyping. Using game design theory, analysis, physical prototyping, playtesting, and iteration students learn how to translate game ideas, themes, and metaphors into gameplay, game pitches, and design documents. Students will analyze and recognize play that exists in important games, stories, and other media. *No Prerequisite*

CSC 350 Computer Graphics
(US 4 4 0 | ECTS 8 4 0)

This course covers such topics as basic real-time computer graphics architecture, coordinate systems, three-dimensional representations and transformations, visible-surface algorithms, illumination using Gouraud and Phong shading, antialiasing, and texture mapping.

Prerequisites: CSC 210 Introduction to C++ and CSC 320 Applied 3D Geometry

CSC 360 Game Design Patterns
(US 4 4 0 | ECTS 8 4 0)

In this course students will develop skills in game design and development through the creation of a 2D digital game designed from a set of client-based restrictions. Emphasis will be placed on teamwork and development pipelines for the design and creation of assets and systems. Students will use a combination of prototyping, storyboarding, user stories, character breakdowns, system breakdowns, and flowcharts in the design portion of the game. We will be using Gamemaker Studio as the engine to develop and implement the game. The goals of all design done in this course will focus around designing for the needs of a client; solving problems identified by the client; and providing transparency via reports and milestone deliverables. *Prerequisite: CSC 330 Optimized C++ and CSC 340 Introduction to Game Design*

CSC 370 Game Networking
(US 4 4 0 | ECTS 8 4 0)

Multiplayer games are made possible by the advances in networking technology, increases in processor speed, and data storage. Today, the majority of successful game titles are equipped with a multiplayer capability. This technical course discusses the fundamental aspects of multiplayer game development, such as design techniques, architectures, client- and server-side implementation, and data- bases. *Prerequisites: CSC 210 Introduction to C++ and CSC 360 Game Design Patterns*

CSC 380 Level Design
(US 3 3 0 | ECTS 6 3 0)

Level design is the art of creating believable environments, stages, and missions for video games. This course explores topics including architecture, flow, pacing, and puzzles. Using a 3D level editor, students will investigate technical design issues including the construction, texturing, lighting, and scripting of modern game levels. The roles, duties and challenges of the level designer will also be discussed. *Prerequisites: CSC 220 Data Structures and CSC 340 Introduction to Game Design*

CSC 410 Game Modification
(US 4 4 0 | ECTS 8 4 0)

In this course, students will develop skills in game design and development through the construction of a “mod” of an existing game. Emphasis will be placed on the game development life cycle from concept through release, on productivity in a team environment, and on effective project management practices. *Prerequisites: CSC 210 Introduction to C++ and CSC 340 Introduction to Game Design*

CSC 420 3D Design and Modeling (US 4 4 0 | ECTS 8 4 0)

This class builds on topics covered in earlier courses with a focus on creating believable worlds for videogames. This course emphasizes designing large exterior environments, advanced mission scripting, and integrated storytelling. Using a 3D level editor and formal level design process, students create fun, polished, memorable virtual worlds. *Prerequisite: CSC 380 Level Design*

CSC 430 Game Engine I Development (US 4 4 0 | ECTS 8 4 0)

Students will develop a basic 3D game engine. The focus will be on the implementation challenges and interdependencies between systems such as asset management, rendering, simple collisions, input/output, alarms, etc. Emphasis will be placed on developing the skills needed for robust, efficient, and portable implementation. *Prerequisites: CSC 220 Data Structures and CSC 360 Game Design Patterns*

CSC 440 Game Artificial Intelligence (US 3 3 0 | ECTS 6 3 0)

Artificial Intelligence (AI) is one of the essential components of a computer game. The course introduces basic concepts of AI. Emphasis will be placed on applications of AI in various genres of computer games. In the implementation component of this course students will be exposed to the existing AI game engines (middleware), which contain implemented AI algorithms that are ready to be applied into game code. These algorithms include decision trees, pathfinding, neural networks, and script-driven game object behaviors. *Prerequisites: CSC 220 Data Structures and CSC 360 Game Design Patterns*

CSC 450 Game Engine II Development (US 4 3 0 | ECTS 8 3 0)

This class is a continuation of CSC 430. Students develop more complex systems for their 3D game engines: improved collision systems, terrain generation, and particle systems. Other advanced engine services are discussed, and students are expected to research and implement one such system: sounds management, lighting system, tiered/broad phase collision system, advanced camera manipulation, etc. *Prerequisites: CSC 350 Computer Graphics and CSC 430 Game Engine I Development*

CSC 460 Game Physics (US 4 3 0 | ECTS 8 3 0)

The course concentrates on Newton's Laws of Motion, kinematics, and kinetics. This theory will be applied to problems that a game programmer must understand, e.g., collisions between objects, projectiles and their trajectories, and real-time simulation of motion. Special objects such as cars, aircraft, and ships will be discussed. Students will apply and implement laws of physics. *Prerequisites: CSC 320 Applied 3D Geometry and CSC 360 Game Design Patterns*

CSC 470 Global Software Development
(US 3 3 0 | ECTS 6 3 0)

Students learn to manage the main issues related to globally distributed software development, including intercultural issues within globally distributed teams, management of geographic, time related, cultural, economic and management issues, and to exercise interculturally based leadership and conflict resolutions with direct and indirect reporting. *Prerequisite: CSC 220 Data Structures*

CSC 480 Game Development Project
(US 4 4 0 | ECTS 8 4 0)

Students work in teams to design and develop a video game that demonstrates their mastery of game design and development. Additionally, students will reflect on ethical decision making and professional ethics in the game industry. *Prerequisites: CSC 410 Game Modification or CSC 420 3D Design and Marketing*

ECONOMICS

ECO 101 Microeconomics
(US 3 3 0 | ECTS 6 3 0)

This course introduces microeconomic concepts such as supply and demand analysis, theories of the firm and individual behavior, competition and monopoly, and welfare economics. The purpose of microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. *No Prerequisite*

ECO 103 Macroeconomics
(US 3 3 0 | ECTS 6 3 0)

This course provides an overview of macroeconomics. Topics include the determination of output, national income, economic growth, unemployment, inflation, the business cycle, fiscal policy and monetary policy, international trade interest rates, and inflation. This module will allow students to examine the impact of individual and collective economic activity on the economy. Emphasis will be placed on basic macroeconomic principles which provide the foundation for the process of making economic decisions to enhance a society. *Prerequisite: ECO 101 Microeconomics*

ECO 310 European Economic History
(US 3 3 0 | ECTS 6 3 0)

The course covers major factors and institutions to have influenced the economic development of European nations, and the impact of these nations on U.S. and other nations' development is also discussed. *No Prerequisites*

ELECTRONICS AND COMMUNICATIONS ENGINEERING

ECE 201 Logic and Computing Devices and Lab
(US 3 3 2 | ECTS 6 3 2)

Introduction to designing, building, simulating, and testing digital logic circuits.
Prerequisites: MAT 120 Calculus I and PHY 111 Physics with Calculus I

ECE 202 Electric Circuits I and Lab
(US 4 3 2 | ECTS 8 3 2)

Study of DC resistive circuits, Kirchhoff's Laws, nodal and mesh analysis, power sources, Thevenin's and Norton's theorems, RC, RL, RCL circuit solutions with initial conditions using homogenous or non-homogenous ordinary differential equations with constant coefficients. Introduction to sinusoidal steady state solutions. *Prerequisites: MAT 120 Calculus I and PHY 111 Physics with Calculus I*

ECE 262 Electric Circuits II and Lab
(US 4 3 2 | ECTS 8 3 2)

Continuation of the study of electric circuits, including sinusoidal steady-state analysis, magnetically coupled circuits, power calculations for sinusoidal steady-state circuits, balanced three-phase circuits, Laplace transforms, transient analysis of circuits using the Laplace transform, two-port parameters, and ideal op amps. *Prerequisites: ECE 202 Electric Circuits and Lab, MAT 130 Calculus II, and PHY 112 Physics with Calculus II and Lab. Prerequisite or Corequisite: MAT 250 Differential Equations*

ECE 272 Computer Organization and Lab
(US 4 3 2 | ECTS 8 3 2)

This course discusses the evolution, structure, components, and operation of a modern computer. *Prerequisites: ECE 201 Logic and Computing Devices and Lab and CSC 201 Introduction to C*

ECE 317 Random Signal Analysis
(US 3 3 2 | ECTS 6 3 2)

Introduction to engineering problems of a probabilistic nature. Systems transformations, statistical averages, simulation, and estimation of system parameters. *Prerequisite or Corequisite: ECE 330 Signals, Systems, and Transforms*

ECE 320 Electronics I and Lab

(US 4 3 2 | ECTS 8 3 2)

Introduction to electronic materials and devices; principles of design; design of DC and AC circuits using diodes, bipolar junction transistors, field-effect transistors and use of transistors in digital circuits. *Prerequisites: ECE 262 Electric Circuits II and Lab, MAT 250 Differential Equations, and PHY 112 Physics with Calculus II and Lab*

ECE 321 Electronics II and Lab
(US 4 3 2 | ECTS 8 3 2)

Analysis and design of discrete amplifier circuits at low and high frequencies; operational amplifiers, frequency response, feedback, stability, and applications of analog integrated circuits. *Prerequisite: ECE 320 Electronics I and Lab*

ECE 330 Signals, Systems, and Transforms and Lab
(US 4 3 2 | ECTS 8 3 2)

Study of systems models, analysis of signals, Fourier series and transforms, sampling and Z transforms, discrete Fourier transforms. *Prerequisites: ECE 262 Electric Circuits II and Lab and MAT 250 Differential Equations*

ECE 371 Microprocessor Interfacing and Lab
(US 4 3 2 | ECTS 8 3 2)

This course discusses the structure, programming, and interfacing of microcontrollers. *Prerequisites: ECE 262 Electric Circuits II and Lab and ECE 272 Computer Organization and Lab. Prerequisite or Corequisite: ECE 320 Electronics I and Lab*

ECE 382 Electromagnetics
(US 3 3 0 | ECTS 6 3 0)

Topics from electrostatics, magnetostatics, Maxwell's equations, electromagnetic wave propagation, transmission lines, waveguides, and antennas. *Prerequisites: MAT 250 Differential Equations, ECE 262 Electric Circuits II and Lab, and PHY 112 Physics with Calculus II and Lab*

ECE 404 Semiconductor Devices
(US 3 3 0 | ECTS 6 3 0)

Study of the principles of operation, external characteristics, modeling, and applications of some of the more important semiconductor devices. *Prerequisite: ECE 320 Electronics I and Lab*

ECE 409 Introductions to Linear Control Systems
(US 3 3 0 | ECTS 6 3 0)

Introduction to classical linear control systems. Topics include continuous descriptions of systems, time and frequency domain response, stability, system specifications, and design. *Prerequisite: ECE 317 Random Signal Analysis*

ECE 427 Communications Systems
(US 3 3 0 | ECTS 6 3 0)

Study of communications system design and analysis. Topics include signals and spectra, baseband signaling and detection in noise, digital and analog modulation and demodulation techniques, and communications link budget analyses. *Prerequisites: ECE 330 Signals, Systems, and Transforms and ECE 317 Random Signal Analysis*

ECE 430 Digital Communications
(US 3 3 0 | ECTS 6 3 0)

Introduction to modern digital communication systems, emphasizing modulation and detection, considering the effects of noise. *Prerequisite: ECE 427 Communications Systems*

ECE 438 Computer Communications
(US 3 3 0 | ECTS 6 3 0)

Digital data transmission techniques, modems and communications channels, communications software and protocols, packet switching, wide-area network architecture, internetworking, end-to-end protocols, congestion control. *Prerequisites: Senior standing in Electronics and Communications Engineering*

ECE 467 Introduction to Digital Signal Processing
(US 3 3 0 | ECTS 6 3 0)

Introduction to analysis, design, and applications of digital signal processing systems; design of digital filters; applications of the z-transform and the Discrete Fourier Transform to analyze discrete-time signals and systems. *Prerequisite: ECE 330 Signals, Systems and Transforms*

ECE 495 Integrated System Design I
(US 2 3 0 | ECTS 4 3 0)

Considers engineering design of systems in a continuous process of project definition, planning, execution, and evaluation. This process includes consideration of both technical and non-technical factors in design. Strong emphasis is placed on the development of effective technical communications skills, particularly oral communications competency. *Prerequisites: ECE 320 Electronics I and Lab, ECE 330 Signals, Systems, and Transforms and Lab, ECE 382 Electromagnetics, and ECE 409 Introduction to Linear Control Systems*

ECE 496 Integrated System Design II
(US 2 3 0 | ECTS 4 3 0)

Integrated Systems Design II is a team-based, project-oriented course where teams of 4-5 students work on a semester-long design project. *Prerequisites: ECE 321 Electronics II and Lab, ECE 371 Microprocessor Interfacing and Lab, ECE 382 Electromagnetics, ECE 409 Introduction to Linear Control Systems, and ECE 495 Integrated System Design I*

ENGLISH

ENG 101 English Composition I
(US 3 3 0 | ECTS 6 3 0)

This course provides students with opportunities to develop productive writing processes, to be able to identify and use claims and evidence effectively, and to work on understanding and employing conventions of particular genres. *No prerequisite*

ENG 102 English Composition II
(US 3 3 0 | ECTS 6 3 0)

This course focuses on those foundational aspects of rhetorical practice specific to argumentation, such as invention and arrangement strategies; approaches to addressing audiences that range from the committed to resistant; and writing competencies specific to institutional settings, such as summary, synthesis, and analysis.

Prerequisite: English 101

ENG 120 American Literature: 1865 to the Present
(US 3 3 0 | ECTS 6 3 0)

This course surveys American literature from 1865 to the present, moving from Whitman and Twain to Stein and Saunders, through the examination of specific texts by major authors, against the social, historical, and philosophical background of the period. Texts are drawn from a variety of literary genres, including poems, short stories, manifestoes and essays. Major literary movements to be covered include Realism, Naturalism, Modernism, and Postmodernism. *No prerequisite.*

ENGLISH FOR ACADEMIC PURPOSES

EAP 094 English for Academic Purposes: Pre-Intermediate Level (MQF Level 3)
(US 4 12 0 | ECTS 8 12 0)

This 8-week / 20 hour per week course begins the process of helping student develop Academic English for the purpose of entrance into AUM by using a communicative approach in all four skills: reading, writing, listening, and speaking. For students with test scores at the Elementary Level.

EAP 096 English for Academic Purposes: Intermediate Level (MQF Level 4)
(US 4 12 0 | ECTS 8 12 0)

This 8-week / 20 hour per week course focuses on Academic English for the purpose of entrance into AUM by using a communicative approach in all four skills: reading, writing, listening, and speaking. For students with test scores at the Pre-Intermediate Level.

EAP 098 English for Academic Purposes: High-Intermediate Level (MQF Level 5)
(US 4 12 0 | ECTS 8 12 0)

This 8-week / 20 hour per week course focuses on Academic English for the purpose of entrance into AUM by using a communicative approach in all four skills: reading, writing, listening, and speaking. For students with test scores at the Intermediate Level.

ENGINEERING

ENR 102A&B Introduction to Engineering Lecture Series (US 3 3 0 | ECTS 6 3 0)

This course provides first year students an understanding for the engineering disciplines and design process. It motivates the need for math, science and engineering science as prerequisites to specialized engineering design. Students will attend a series of 50-minute lectures. Lecture topics will include contemporary technical challenges in engineering, engineering ethics and engineering teamwork. Students will complete a Career Plan, which involves preparation of a resume and development of an academic plan. *No prerequisite*

ENR 211 Dynamics (US 1 1 0 | ECTS 2 1 0)

This course provides the breadth of engineering sciences needed by civil engineers in the area of dynamics. The course will be readings with recitation sections for problem solving in a collaborative learning environment. Dynamics of particles and rigid bodies as applied to mechanical systems, introduction to mechanical vibrations. *Prerequisites: CIE 214 and MAT 250*

ENR 212 Engineering Economics (US 1 1 0 | ECTS 2 1 0)

Engineering Economics covers methods and modern techniques of engineering economic analysis for decision making, cost estimation, cash flow evaluation, taxes and depreciation, percent value, annual equivalent, internal rate of return, cost/benefit analysis, sensitivity analysis. The course is web based and has a complete set of materials including pre-requisite review material, course content, quiz problems, and exercise problems. *Prerequisite: MAT 130*

FINANCE

FIN 201 Introduction to Finance (US 3 3 0 | ECTS 6 3 0)

As a first module in finance this course will introduce both the basic theory of finance and basic tools and models needed to study finance. Topics include the terminology of finance, time value of money, risk and return, and the valuation of assets including bonds, stocks and corporate projects. Also, studies will be the governance and financing of the firm and the distribution of profits to shareholders. *Prerequisites: ACC102 Principles of Accounting II, ECO 103 Macroeconomic and MGT 101 Principles of Management*

FIN 250 Corporate Finance

(US 3 3 0 | ECTS 6 3 0)

This course is intended for students who have an interest in deepening their understanding of the corporate finance decision making process. Some review of the introductory finance module is done but the topics, such as risk and return and valuation of assets are greatly expanded. In addition, topics such as bankruptcy are introduced to illustrate the meeting of theory and practice. The objective is to expand on the basic finance principles from the introduction to finance course. This course will not only expand and deepen those principles but apply these principles to topics such as financing and valuation. In addition, this course will delve deeper into the theory behind the principles of finance for a greater student understanding of financial concepts. *Prerequisite: FIN 201 Introduction to Finance*

FIN 301 Money and Markets
(US 3 3 0 | ECTS 6 3 0)

This course covers a broad range of topics including both the theory of how prices and rates are set in the market as well as the institutional framework for the worlds' financial systems. Topics covered include interest rates, the concept of money, exchange rates, monetary policy, banking structures and function, central banks, determinants of the money supply, fiscal policy and monetary policy, and inter- national economies. *No Prerequisite.*

FIN 305 Investments and Portfolio Management
(US 3 3 0 | ECTS 6 3 0)

This is an introduction to the theory and the practice of investing with an emphasis on a range of significant concepts. Both the theory of investing as well as the operational aspects of investing and portfolio management will be studied. The concepts covered are essential to anyone involved in the financial industry and the module is a key building block in the study of finance. *Prerequisite: FIN 201 Introduction to Finance*

FIN 310 Taxation
(US 3 3 0 | ECTS 6 3 0)

The course on taxation focuses on the U.S. tax system and covers such topics as US federal income tax treatment of individual taxpayers, inclusions, exclusions, deductions, credits, rates of taxation, special tax computations, and the tax aspects of property transactions, federal income tax treatment of corporations and partnerships, and introduction to tax research. *Prerequisite: ACC 201 Intermediate Accounting I*

FIN 350 Auditing
(US 3 3 0 | ECTS 6 3 0)

Auditing provides a conceptual introduction to the nature and value of assurance services, the organization of the accounting profession, Generally Accepted Auditing Standards (GAAS), professional ethics, legal responsibilities, financial audits by external auditors, planning and acceptance, internal control, evidence, and reporting, implementation and application of

generally accepted auditing standards to transaction cycles and classes of transactions, and sampling techniques used in tests of controls and tests of details. *Prerequisite: ACC 210 Managerial Accounting and ACC 301 Advanced Accounting*

FIN 360 International Finance
(US 3 3 0 | ECTS 6 3 0)

This course provides a conceptual foundation for understanding global financial issues, and a practical understanding of financing sources for international commerce as well as interpreting the recent wave of international financial crises affecting the global capital markets. *Prerequisite: FIN250 Corporate Finance*

FIN 370 Taxes, Law and Regulation
(US 3 3 0 | ECTS 6 3 0)

This course examines the organization of the corporation, with an emphasis on taxation and the corporation's legal responsibilities. The course focuses on the principles of corporate tax laws, the essentials of securities regulations, the legal aspects of director and insider responsibilities, and the workings of copyright and patent laws.

FIN 380 Financial Statement Analysis
(US 3 3 0 | ECTS 6 3 0)

Students will gain competencies to conduct financial analysis of a corporation, knowledge about how financial metrics are mapped into stock prices, infer the future performance of firms from current data, compare and contrast different valuation models, identify drivers of value, and find intrinsic values. *Prerequisite: FIN 250 Corporate Finance*

FIN 410 Markets, Institutions, and Derivatives
(US 3 3 0 | ECTS 6 3 0)

Students will understand the workings of financial markets, insight into the working of the global financial system, and recognize pricing variables for derivatives. Knowledge ascertained from this course will be the structure of the primary and secondary markets, primary intermediaries in the financial markets, types of finance derivatives and their functions, and the pricing aspects of the financial derivatives. *Prerequisite: FIN 250 Corporate Finance and FIN 301 Money and Markets*

FIN 420 Research and Decision Making
(US 3 3 0 | ECTS 6 3 0)

Effectively performing research on accounting and financial reporting issues, reaching appropriate conclusions and documenting one's conclusions are critical to being successful in the accounting and auditing professions. This course guides advanced accounting students

through the research process. *Prerequisite: Senior Accounting Majors Only. Prerequisite: ACC 210 Managerial Accounting and ACC 301 Advanced Accounting*

FIN 430 Finance: Theory and Applications
(US 3 3 0 | ECTS 6 3 0)

This is a capstone course. It is intended to review some of the key concepts in finance and see how those apply to business situations. For this reason, the course is designed around case studies which will cover a variety of finance topics. It is required that in addition to the business core this course should only be taken after a minimum of three finance courses have been successfully completed. The topics may vary in a particular section but may include hedging, finance in emerging markets, mergers and acquisitions, bankruptcy, and IPOs. Most cases will require research into the nature of the problem as well as a proposed solution for the problem. In addition to the finance content of the cases, students will be expected to effectively communicate their solutions with written cases and oral presentations that reflect their individual research. *Prerequisite: FIN 360 International Finance; FIN 380 Financial Statement Analysis and FIN 410 Markets, Institutions and Derivatives*

FIN 510 Financial Accounting
(US 3 3 0 | ECTS 6 3 0)

Financial accounting provides information used for decisions about the firm made by external stakeholders, such as banks and financial markets. This course provides an overview of financial accounting theory and applications. Topics include balance sheets, financial statement analysis, income statements, revenue recognition, cash flows, inventory, GAAP, and IFRS. *Prerequisite: Graduate Standing*

FIN 520 Economics for Managers
(US 3 3 0 | ECTS 6 3 0)

This course introduces economic topics relevant to managers. Both microeconomic topics (such as supply and demand, elasticities, cost analysis and market structure) and macroeconomic topics (such as the measurement of economic activity, business cycles and money supply) are covered. *Prerequisite: Graduate Standing*

FIN 530 Managerial Accounting
(US 3 3 0 | ECTS 6 3 0)

Managerial accounting provides information for stakeholders inside the firm (upper management, other departments). This course provides accounting tools to support managerial decision making. *Prerequisite: FIN 510 Financial Accounting*

FIN 540 Money and Banking
(US 3 3 0 | ECTS 6 3 0)

This module provides an overview of the roles of money, interest rates, and monetary policy in the global economy. The functions of financial markets and financial institutions are

explained. Managers must understand these topics to function effectively. *Prerequisite: Graduate Standing*

GRAPHIC DESIGN

GRD 101 Introduction to Visual Design
(US 3 3 0 | ECTS 6 3 0)

This course is an introduction to two-dimensional design. Explores the development of perceptual ability through the analysis of two-dimensional concepts of line, shape, value, color, space and organization. Topics covered include elements of design, the color wheel, and color properties. Class is project based with homework assigned each class period. Class will be taught in a studio. *No Prerequisite*

GRD 111 Drawing and Visualization
(US 3 3 0 | ECTS 6 3 0)

This is an introduction to composition, line and rendering in black and white drawing media. Students will study the basic techniques for descriptive and expressive use of drawing media. Drawing and visualization are core knowledge areas for the Graphic Design and Animation course. Class will be taught in a studio. *No Prerequisite*

GRD 201 Figure Drawing and Anatomy
(US 3 3 0 | ECTS 6 3 0)

This course focuses on the study of the human figure through an exploration of anatomy, combined with various drawing processes. This is an introduction to basic human anatomy needed to draw the figure, rendering the human figure in line and tone, and rendering believable three-dimensional volumes in two-dimensional media. Class is project based, with homework assigned each class period. *Prerequisite: GRD 111 Drawing and Visualization*

GRD 211 Digital Art Tools
(US 3 3 0 | ECTS 6 3 0)

Digital Art Tools teaches students how to utilize the basic tools of the graphic design and animation field, which focuses on building basic skills in the most common digital imaging tools. It will cover pixel-based imaging (Photoshop); vector-based imaging (Illustrator); use of Photoshop and Illustrator as ideational tools for exploring visual problems, possibilities and solutions; use of Photoshop and Illustrator to create digital images for output; and integration of Photoshop and Illustrator with traditional analog media and tools. *No Prerequisite*

GRD 301 Time, Image, Sound
(US 3 3 0 | ECTS 6 3 0)

Time, Image, Sound is an introduction to the creation and editing of cinema/video, including images and sound. It introduces the fundamentals of time-based media, camera and lens technology, composition for digital screens, lighting, directing, sound recording, and non-linear editing. Utilizing digital technology, students will produce several video projects with

an emphasis on visual storytelling, information communication, and personal expression. *No Prerequisite*

GRD 311 Painting and Color
(US 3 3 0 | ECTS 6 3 0)

Paint and Color is an introduction to the application of color using paint. Students will investigate practical and theoretical dimensions of color through mixing and applying paint, explorations into the use of color, basic organizational and technical concepts of painting, preparation and proper use of materials, basic concepts related to color's associations in emotional contexts, commercial uses, and cultural roles. Class is project based. *No Prerequisite*

GRD 321 3D Design and Modeling
(US 4 4 0 | ECTS 8 4 0)

This is an introduction to 3D design and 3D modeling, areas of knowledge that are necessary for computer animation. Students will be exposed to the use of computer modeling to explore the principles of 3-dimensional design; projects involving object; animal, and architectural modeling; aesthetic concepts of spatial proportion; scale, angle; position; silhouette; negative space; rhythm; balance; light/shadow; and texture. This class is project based with homework assigned each class period. *No Prerequisite*

GRD 331 Animation I: Motion and Methods
(US 4 4 0 | ECTS 8 4 0)

This is an introduction to the art and practice of animation. It is a studio-based class, which will emphasize learning through process, experimentation and creation. Students will explore the limitless possibilities of animated motion in the context of cinema, computer games and the Inter- net. All genres and styles are within the scope of this class, including Anime, cartoons, computer game art, experimental art and special effects. In addition to how, we will also explore and discuss why, and the role and potential of animation in our society, and its place in other cultures as well. *No Prerequisite*

GRD 341 3D Character Animation
(US 4 4 0 | ECTS 8 4 0)

3D Character Animation is an introduction to 3D animation that will emphasize traditional animation principles as they apply to 3D animation. Topics will include principles of animation, storyboarding, transformation and deformation of 3D objects, rigging, camera and light animation, and using the computer as a tool to create animation for cinema and game applications, as well as an instrument of experimentation. *Prerequisite: GRD 321 3D Design and Modeling*

GRD 351 Animation II: Production
(US 4 4 0 | ECTS 8 4 0)

Animation II is a more advanced study of animation, which will concentrate on facilitating the student's production of animated projects and will cover idea generation, experimentation, problem solving, planning and time management, application of the process of critical analysis to one's work, with the choice of animation technique, content and form left to the individual. Students will learn the importance of bringing projects to completion. Students should be prepared to spend a large amount of time outside of class finishing the assignments and final project. *Prerequisite: GRD 331 Animation I: Motion and Methods*

GRD 361 Graphic Design I: Typography
(US 4 4 0 | ECTS 8 4 0)

Graphic Design I is an in-depth introduction to typography introducing function, history, and art of typography in visual and verbal communication for print and digital screens; technical and formal aspects of letterforms; production of effective and evocative communication. Finished projects are pragmatic and expressionist, emphasizing the relationship between form and content. *Prerequisite: GRD 101 Introduction to Visual Design*

GRD 371 Storyboarding and Narrative
(US 4 4 0 | ECTS 8 4 0)

This class will focus primarily on storyboarding and the aesthetic and practical uses of research, treatments, drawings, and found images as tools in the production of animations, films and game cinematics. Students will complete a series of assignments that will utilize different methods of finding inspiration to make a cohesive, narrative work. Various methods used in both commercial and independent productions will be presented as examples, and pre-production work from both live action and animated films will be viewed throughout the quarter. Students will create several storyboards for short films, write treatments, and research design options. *Prerequisite: GRD 331 Animation I: Motion and Methods*

GRD 411 Graphic Design II: Visual Problem Solving
(US 4 4 0 | ECTS 8 4 0)

Graphic Design II is an advanced exploration of graphic design exploring formal structures, research methods, the role of analysis and conceptual thinking in visual problem solving, the world of graphic design in a social, business, and historical context. Students will combine text, images, and graphic elements within research-driven design projects to create meaningful solutions for print and digital screens. *Prerequisite: GRD 361 Graphic Design I: Typography*

GRD 421 Motion Graphics
(US 4 4 0 | ECTS 8 4 0)

Motion Graphics is an introductory class teaching effective communication using motion graphics; motion graphics in film titles; motion graphics in broadcast; motion graphics in commercial design; motion graphics in interactive media; motion graphics in game development, combination of music, visuals and typography; basic theories of kinetic composition and aesthetics; history of the field, including the work of pioneers such as Norman McLaren, Saul Bass and Len Lye. *Prerequisites: GRD 331 Animation I: Motion and Methods and GRD 351 Animation II: Production*

GRD 431 Visual Design for Games
(US 4 4 0 | ECTS 8 4 0)

The stages of development in the visual direction of a video game will be identified and detailed, and students will participate in the creation of the visual art direction of a product, giving special attention to the design of 3D models and animation. Visual Design for Games topics include creating visual direction, concepting, art bibles, art production, and post-production strategies. Students will create proposals, create concepts, iteratively create artwork, and analyze competitive products. *Prerequisites: GRD 101 Introduction to Visual Design and GRD 201 Figure Drawing and Anatomy*

GRD 441 Graphic Design III: Web Design
(US 4 4 0 | ECTS 8 4 0)

Graphic Design III is a web design-focused class covering basic concepts and techniques in the design; development and implementation of websites; the use of current industry standard design applications such as Photoshop, Flash, and Illustrator; hand-coding in HTML and CSS for introductory web design; visual design fundamentals; composition; typography for the web; web color; digital imaging; Informational navigation; structure; front-end design; implementation. *Prerequisite: GRD 411 Graphic Design II: Visual Problem Solving*

GRD 451 Interdisciplinary Game Project
(US 4 1 0 | ECTS 8 1 0)

This course recreates the environment of an interdisciplinary game studio, one of the main employment opportunities for graduates of this course. Students work in teams to design and develop a video game that demonstrates their mastery of game design and development. Students will be guided through a full production cycle of game development from brainstorming a game concept to playtesting and polishing a complete, short game. The primary purpose of this module is for students to gain experience working intensely as a team or “game studio.” Students will learn how to work successfully with people that have diverse skill sets, backgrounds, and interests. *Prerequisite: GRD 321 3D Design and Modeling and/or CSC 410 Game Modification*

GRD 461 Thesis Project I
(US 4 1 0 | ECTS 8 1 0)

This class gives the student an opportunity to apply the knowledge and skills obtained as a major in this course and prepare for their chosen field. This production-based course is the first of a two-course sequence that provides the student with a Graphic Design and Animation cap-stone experience. Students will employ the knowledge they have learned and the skills they have acquired in all their GDA courses to date to produce a significant project in the medium of their choice. These courses connect the student’s work through three components: class lectures and discussions, independent analysis and reflection, and the creation of a significant project. The module sequence is designed to be taken in two consecutive semesters. *Prerequisite: Senior Standing, GRD 331 Animation I: Motion and Methods, and GRD 361 Graphic Design I: Typography*

GRD 462 Thesis Project II

(US 4 1 0 | ECTS 8 1 0)

This class gives the student an opportunity to apply the knowledge and skills obtained as a major in this course and prepare for their chosen field. This production-based course is the second of a two-course sequence that provides the student with a Graphic Design and Animation capstone experience. Students will employ the knowledge they have learned and the skills they have acquired in all their GDA courses to date to produce a significant project in the medium of their choice. These courses connect the student's coursework through three components: class lectures and discussions, independent analysis and reflection, and the creation of a significant project. The course sequence is designed to be taken in two consecutive semesters. *Prerequisite: GRD 461 Thesis Project I*

HISTORY

HIS 101 History of the Mediterranean
(US 3 3 0 | ECTS 6 3 0)

This course provides an introductory survey to the vast scope of Mediterranean experience through roughly 5000 years of human history. Students are encouraged to examine the rationales behind those events that are selected for focus and discussion. The islands of Malta and Goo provide an excellent case study for exploring how some of these broad historical currents played out in a specific place at a specific time. Thus, at several points in the course, students explore how big topics such as the Roman Empire developed in the local environment and examine how such big topics impacted the daily life of ordinary people. *No prerequisite*

HIS 120 History of Malta
(US 3 3 0 | ECTS 6 3 0)

The Maltese archipelago is a group of islands (Malta, Goo, and Comino) sixty miles south of Sicily. Except for Malta's deep and well-sheltered harbor, the islands are poor in natural resources, yet their history is incredibly rich. Lying at the very heart of the Mediterranean, a sea which has witnessed extensive intercultural exchange and cross-fertilization throughout its millennial existence, the islands have consistently attracted attention from all latitudes of the basin. Whether as a temporary stopover for seafarers or as a long-term base for invaders and colonizers, Malta has been at the center of these interactions which, in turn, molded the islands' history. The aim of the course is to outline the main episodes of this history, always within the wider framework of Mediterranean civilization, from prehistoric to modern times, and to ultimately illustrate the road which gradually transformed Malta from a base, fief, or colony, into an independent state. *No Prerequisite*

HIS 120 History of Mediterranean
(US 3 3 0 | ECTS 6 3 0)

The Maltese archipelago is a group of islands (Malta, Gozo, and Comino) sixty miles south of Sicily. Except for Malta's deep and well-sheltered harbor, the islands are poor in natural resources, yet their history is incredibly rich. Lying at the very heart of the Mediterranean, a sea which has witnessed extensive intercultural exchange and cross-fertilization throughout its millennial existence, the islands have consistently attracted attention from all latitudes of the basin. Whether as a temporary stopover for seafarers or as a long-term base for invaders

and colonizers, Malta has been at the center of these interactions which, in turn, molded the islands' history. The aim of the course is to outline the main episodes of this history, always within the wider framework of Mediterranean civilization, from prehistoric to modern times, and to ultimately illustrate the road which gradually transformed Malta from a base, fief, or colony, into an independent state. *No Prerequisite*

INDUSTRIAL ENGINEERING

IEE 175 Computer Programming for Engineering Applications
(US 3 3 0 | ECTS 6 3 0)

This course teaches the Fundamentals of C, complexity and efficiency analysis, numerical precision and representations, intro to data structures, structured program design, application to solving engineering problems. *Prerequisite or Co-requisite MAT 120*

IEE 250 Introduction to Systems and Industrial Engineering
(US 3 3 0 | ECTS 6 3 0)

This course gives students background and a foundation in the design and operation of systems. *Prerequisite MAT 130*

IEE 265 Engineering Economics
(US 3 3 0 | ECTS 6 3 0)

This course introduces students to the fundamentals of economic analysis and the time value of money for engineers. Construction of financial models in Microsoft Excel including Income, Cash Flow, and Balance Sheet. Estimation of required capital and project acceptance criteria. *Prerequisite MAT 120*

IEE 270 Mathematical Foundations and Numerical Computation
(US 3 3 0 | ECTS 6 3 0)

This course will provide students with knowledge of the basics of data structures, transformations, computer methods, their implementation in MATLAB, and their applications in solving engineering problems. *Prerequisites IEE 175, MAT 130, and PHY 111*

IEE 277 Object-Oriented Modeling and Design
(US 3 3 0 | ECTS 6 3 0)

This course covers modeling and design of complex systems using all views of the Unified Modeling Language (UML). Most effort will be in the problem domain (defining the problem). Some effort will be in the solution domain (producing hardware or software). *Prerequisite IEE 175*

IEE 295 Systems and Industrial Engineering Second Year Colloquium
(US 1 1 0 | ECTS 2 1 0)

This colloquium is designed to help students understand what Systems and Industrial Engineers (SIE) do as professionals. Students will interact with speakers and explore various roles of SIE to solve real engineering problems. The course helps students select course options within the SIE programs and helps focus on possible SIE application areas.

Prerequisite IEE 250 or IEE 265

IEE 305 Introduction to Engineering Probability and Statistics
(US 3 3 0 | ECTS 6 3 0)

This course covers axioms of probability, discrete and continuous distributions, sampling distributions, as well as engineering applications of statistical estimation, hypothesis testing, and confidence intervals. *Prerequisite MAT 130*

IEE 321 Probabilistic Models in Operations Research
(US 3 3 0 | ECTS 6 3 0)

The goal of this course is to apply probability theory to model and analyze systems with time varying randomness. Such stochastic systems are commonly encountered in engineering, computer science, biology, finance and public policy. This course is an introduction to the systematic study of such probabilistic systems. *Prerequisite IEE 305*

IEE 330R Engineering Experimental Design
(US 3 3 0 | ECTS 6 3 0)

This class teaches the design and analysis of observational and factorial experiments employing numerical and graphical methods. Topics include control charts, probability plots, multiple regression analysis, confidence and prediction intervals and significance tests.

Prerequisite IEE 305

IEE 340 Linear Programming
(US 3 3 0 | ECTS 6 3 0)

This course covers linear programming models, solution techniques, sensitivity analysis and duality. *Prerequisite IEE 270*

IEE 367 Engineering Management
(US 3 3 0 | ECTS 6 3 0)

This class teaches students strategic, tactical and operational planning; innovation and technological cycles; the elements of entrepreneurship, and human relations topics for technical managers. *Prerequisite IEE 265*

IEE 370 Embedded Computer Systems
(US 4 3 1 | ECTS 8 3 1)

This course covers Boolean algebra, combinational and sequential logic circuits, finite state machines, simple computer architecture, assembly language programming, and real-time computer control. The computer is used as an example of systems engineering design; it is analyzed as a system, not as a collection of components. *Prerequisite PHY 240*

IEE 377 Software for Engineers
(US 3 3 0 | ECTS 6 3 0)

This course covers rapid prototyping of decision support systems using Visual Basic for Applications (VBA) and Excel. Use of VBA, Excel, and external packages to solve optimization problems, to perform simulations, and to perform forecasting. Rapid design and implementation of decision support systems for financial, supply chain, and facility location problems. *Prerequisite IEE 175*

IEE 383 Integrated Manufacturing Systems
(US 3 3 0 | ECTS 6 3 0)

This course introduces the integrated manufacturing enterprise and automation. Topics include computer-aided design, process planning, computer numerical control machining, machine vision, application of robots and automation. *Prerequisite: Upper Division Standing*

IEE 406 Quality Engineering
(US 3 3 0 | ECTS 6 3 0)

This class introduces quality, improvement and control methods with applications in design, development, manufacturing, delivery and service. Topics include modern quality management philosophies, engineering/statistical methods (including process control, control charts, process capability studies, loss functions, experimentation for improvement) and TQM topics (customer driven quality, teaming, Malcolm Baldrige and ISO 9000). *Prerequisite IEE 305*

IEE 410A Human Factors and Ergonomics in Design
(US 3 3 0 | ECTS 6 3 0)

This course considers human characteristics in the requirements for design of systems, organizations, facilities and products to enable human-centered design which considers human abilities, limitations and acceptance. *Prerequisite or Co-requisite IEE 305*

IEE 431 Simulation Modeling and analysis
(US 3 3 0 | ECTS 6 3 0)

This course develops the student's ability to model and analyze real systems using discrete event simulation. Through this course, the student understands the power and characteristics of discrete event simulation modeling. *Prerequisite IEE 305*

IEE 457 Engineering Project Management
(US 3 3 0 | ECTS 6 3 0)

This course covers the foundations, principles, methods and tools for effective design and management of projects in technology-based organizations. It focuses on the scope, time, cost, performance and quality concerns of engineering projects characterized by risk and uncertainty. Initiating, planning, executing, monitoring, controlling and closing processes are addressed. Project Management software is utilized. *Prerequisite: Upper Division Standing*

IEE 462 Production Systems Analysis
(US 3 3 0 | ECTS 6 3 0)

This class covers production systems, quantitative methods for forecasting, aggregate planning, inventory control, materials requirement planning, production scheduling, manpower planning and facility design. *Prerequisites IEE 305 and IEE 340*

IEE 464 Cost Estimation
(US 330 | ECTS 630)

Course focuses on principles of cost estimation and measurement systems with specific emphasis on parametric models. Approaches from the fields of hardware, software and systems engineering are applied to a variety of contexts (risk assessment, judgment and decision making, performance measurement, process improvement, adoption of new tools in organizations, etc.). Material is divided into five major sections: cost estimation fundamentals, parametric model development and calibration, advanced engineering economic principles, measurement systems, and policy issues. *Prerequisite: Upper Division Standing*

IEE 498A Cross disciplinary Design I
(US 3 3 0 | ECTS 6 3 0)

Students work in cross-disciplinary teams to solve industry sponsored real-world design problems using the design process. Teaming, design process, design concept, design proposal. *Prerequisite: Senior Status and IEE 305; Prerequisite or Co-requisite IEE 410A or 431*

IEE 498B Cross Disciplinary Design II
(US 3 3 0 | ECTS 6 3 0)

Students receive instruction on formal methods in the design process, project management, and communication skills. They are also guided in the implementation of their projects by professional mentors with many years of project management and design experience in various industries. *Prerequisite IEE 498A*

IEE 506 Quality Engineering
(US 3 3 0 | ECTS 6 3 0)

This class introduces quality, improvement and control methods with applications in design, development, manufacturing, delivery and service. Topics include modern quality management philosophies, engineering/statistical methods (including process control,

control charts, process capability studies, loss functions, experimentation for improvement) and TQM topics (customer driven quality, teaming, Malcolm Baldrige and ISO 9000).
Prerequisite: IEE 305 / Introduction to Engineering Probability and Statistics or equivalent

IEE 514 Law for Engineers and Scientists
(US 3 3 0 | ECTS 6 3 0)

Topics covered in this course include patents, trade secrets, trademarks, copyrights, product liability, contracts, employment relations and other legal matters important to engineers and scientists.

IEE 515 Technical Sales and Marketing
(US 3 3 0 | ECTS 6 3 0)

Principles of the engineering sales process in technology-oriented enterprises; selling strategy, needs analysis, proposals, technical communications, electronic media, time management and ethics; practical application of concepts through study of real-world examples.

IEE 522 Engineering Decision Making under Uncertainty
(US 3 3 0 | ECTS 6 3 0)

Application of principles of probability and statistics to the design and control of engineering systems in a random or uncertain environment. Emphasis is placed on Bayesian decision analysis. Graduate-level requirements include a semester research project. *Prerequisite: IEE 305 / Introduction to Engineering Probability and Statistics or equivalent*

IEE 530 Engineering Statistics
(US 3 3 0 | ECTS 6 3 0)

This class introduces statistical methodology of estimation, testing hypotheses, goodness-of-fit, nonparametric methods and decision theory as it relates to engineering practice. Significant emphasis on the underlying statistical modeling and assumptions. *Prerequisite: IEE 305 / Introduction to Engineering Probability and Statistics or equivalent*

IEE 531 Simulation Modeling and Analysis
(US 3 3 0 | ECTS 6 3 0)

This course is designed to develop student's ability to model and analyze real systems using discrete event simulation. Through this course, the student will understand the power and characteristics of discrete event simulation modeling. *Prerequisite: IEE 305 / Introduction to Engineering Probability and Statistics or equivalent*

IEE 540 Survey of Optimization Methods
(US 3 3 0 | ECTS 6 3 0)

This class introduces survey of methods including network flows, integer programming, nonlinear programming, and dynamic programming. Model development and solution

algorithms are covered. *Prerequisite: IEE 305 / Introduction to Engineering Probability and Statistics or equivalent; IEE 340 Linear Programming, or equivalent*

IEE 554A The Systems Engineering Process (US 3 3 0 | ECTS 6 3 0)

Process and tools for systems engineering of large-scale, complex systems: requirements, performance measures, concept exploration, multi-criteria tradeoff studies, life cycle models, system modeling, etc.

IEE 557 Engineering Project Management (US 3 3 0 | ECTS 6 3 0)

Foundations, principles, methods and tools for effective design and management of projects in technology-based organizations This course focuses on the scope, time, cost, performance and quality concerns of engineering projects characterized by risk and uncertainty. Initiating, planning, executing, monitoring, controlling and closing processes are addressed. Project Management software is utilized. *Prerequisite: IEE 305 / Introduction to Engineering Probability and Statistics equivalent*

IEE 562 Production Systems Analysis (US 3 3 0 | ECTS 6 3 0)

This class covers production systems, quantitative methods for forecasting, aggregate planning, inventory control, materials requirement planning, production scheduling, manpower planning and facility design. *Prerequisite: IEE 305 / Introduction to Engineering Probability and Statistics or equivalent; IEE 340 Linear Programming or equivalent, or consent of faculty member.*

IEE 564 Cost Estimation (US 3 3 0 | ECTS 6 3 0)

Course focuses on principles of cost estimation and measurement systems with specific emphasis on parametric models. Approaches from the fields of hardware, software and systems engineering are applied to a variety of contexts (risk assessment, judgment and decision making, performance measurement, process improvement, adoption of new tools in organizations, etc.). Material is divided into five major sections: cost estimation fundamentals, parametric model development and calibration, advanced engineering economic principles, measurement systems, and policy issues.

IEE 565 Supply Chain Management (US 3 3 0 | ECTS 6 3 0)

Fundamentals of Supply Chain Management including inventory/logistics planning and management, warehouse operations, procurement, sourcing, contracts and collaboration. *Prerequisite: IEE 305 / Introduction to Engineering Probability and Statistics or equivalent; IEE 340 Linear Programming, or equivalent, or consent of faculty member.*

IEE 567 Financial Modeling for Innovation

(US 3 3 0 | ECTS 6 3 0)

This a graduate level course in the economics of technology development for students interested in commercializing research discovery. Topics include Pro Forma financial statements, the time value of money, valuation approaches, and entrepreneurship.

IEE 598A Master's Capstone I

(US 3 3 0 | ECTS 6 3 0)

Students work in teams to solve problems that have practical significance and require application of graduate-level course material. Usually up to three students may work together on the project and produce a joint report. An oral presentation of the project to the faculty advisor is required.

IEE 598B Master's Capstone II

(US 3 3 0 | ECTS 6 3 0)

Students work in teams to solve problems that have practical significance and require application of graduate-level course material. Usually up to three students may work together on the project and produce a joint report. An oral presentation of the project to the faculty advisor is required.

MANAGEMENT

MGT 101 Principles of Management

(US 3 3 0 | ECTS 6 3 0)

This course is an introduction to the range of issues in management and covers such topics as management processes, values and attitudes, ethics and diversity, the global environment of management, strategic planning, organizational structures, motivation, leadership, teams, human resources, organizational control, organizational communications, and career management. *No Prerequisite*

MGT 102 Principles of Marketing

(US 3 3 0 | ECTS 6 3 0)

This course introduces basic marketing terminology and the relationships between and among these terms relevant to the creation and implementation of basic marketing strategy. The course content also focuses upon the controllable and uncontrollable variables which have bearing on the success or failure of marketing programs. The course also provides students with opportunities to demonstrate their ability to connect concepts discussed in the text and those same concepts appearing in academic and practitioner publications and popular business periodicals. *No Prerequisite*

MGT 301 Operations Management

(US 3 3 0 | ECTS 6 3 0)

Operations management focuses on the effective application of managerial techniques and concepts related to the delivery of services, manufacturing, and supply chain processes. Topics may include operations strategy, forecasting, project management, quality management, supply chain management, facility location and layout, productivity, inventory management, and scheduling. *Prerequisites: ACC 102 Principles of Accounting II and ECO 101 Microeconomics*

MGT 320 International Business
(US 3 3 0 | ECTS 6 3 0)

This course is designed to develop students' knowledge and the skills needed to face the challenges of globalization. It provides participants with the global perspective required to expand their intercultural communication competencies and conduct business internationally. The subjects scheduled are diversified in nature and scope. They cover many fields of knowledge, such as the multi-national company's environment, culture, strategy and organization and the role of managers in today's global business. The course topics and assignments are intended to enrich participants' professional and personal lives. *No Prerequisite*

MGT330 Principles of Sustainability
(US 3 3 0 | ECTS 6 3 0)

This course discusses and analyzes the concept of sustainability within a business and management setting. It will analyze the complex relationship between business and the environment, and it will explore the nature of business in today's global context where addressing environmental and social issues is becoming increasingly important. Furthermore, it aims to discuss how the talents of business might be used to solve world's environmental and social problems. Rather than focusing on a "doom and gloom" approach, the course aims to emphasize the solutions towards a sustainable economy. *No Prerequisite*

MGT340 Management Information Systems
(US 3 3 0 | ECTS 6 3 0)

This is an introductory course in MIS. It emphasizes the use of information technology to support business operations and management and includes the use of spreadsheets to analyze and represent data. Topics include strategic uses of IT, databases, data warehouse, decision support and artificial intelligence, e-commerce, systems development, IT infrastructure, network security, and social, ethical, and legal considerations. *No Prerequisite*

MGT 350 Consumer Behavior
(US 3 3 0 | ECTS 6 3 0)

Topics include an analysis of the environmental, social, and psychological factors that influence an individual's consumer decisions. Specific areas studies will be consumer motivation, attitudes, learning and decision processes, and lifestyles, reference groups, communication, and cultural influences. *Prerequisite: MGT 102 Principles of Marketing*

MGT 360 Organizational Behavior
(US 3 3 0 | ECTS 6 3 0)

This course focuses on the nature and consequences of human behavior in organizations. The prediction, explanation, and management of individual and group behavior in the organization depends on an understanding of the concepts of organizational behavior. Classroom experiences focus on both understanding and practicing these concepts. Topics cover both the individual level, e.g., perception, attitudes, motivation -- and the group level; e.g., leadership, group dynamics, communication, power and politics, and decision making. *Prerequisite: MGT 101 Principles of Management*

MGT 410 Entrepreneurship
(US 3 3 0 | ECTS 6 3 0)

This course will provide an overview of the opportunity recognition and evaluation process by examining how people, the industry, and the social environment interact to identify, create, and shape entrepreneurial opportunities. The focus of this course is on creativity and innovation within an entrepreneurial context. Students learn creative tools and applications to assist in designing new business ideas and ventures. *Prerequisite: MGT 101 Principles of Management*

MGT 420 Global HR Management
(US 3 3 0 | ECTS 6 3 0)

This course concerns concepts, theories, principles and techniques for effectively managing a workforce globally. The focus is on effective strategies relating to human resource strategy, staffing, development, performance management, remuneration management, legal/regulatory compliance, and employee/labor relations in geographically dispersed and culturally diverse organizations. The purpose of the course is to help students understand the issues related to effectively managing a workforce in a global organization and how human resource strategies and programs can enable the workforce to contribute to organizational success. *Prerequisite: MGT 101 Principles of Management*

MGT450 Principles of Marketing Research
(US 3 3 0 | ECTS 6 3 0)

This course focuses on how to match research design (exploration, surveys, observation and experiments) with an organization's marketing problems. One learns how to design questionnaires, collect, and analyze survey data, prepare and conduct focus groups, and design experiments. Some knowledge of statistics required. *Prerequisite: MGT 102 Principles of Marketing*

MGT 500 Writing and Presenting Academic Research
(US 3 3 0 | ECTS 6 3 0)

This course aims to develop knowledge and skills in designing and communicating research in a variety of fields, including, but not limited to, the humanities and the social sciences.

Designing research means proceeding from purposes to questions to decision about approach, then design frame, then data-gathering methods, then to analytical methods. Communicating research means mastering the basic form of all research projects: introduction; literature review; discussion of methods; presentation of findings; discussion of those findings; conclusion. Communicating research also involves knowing how to deliver work in written (reports, theses, dissertations), oral (conference presentations) and multimedia (PowerPoint; Prezi) formats.

MGT 510 Business Law
(US 330 | ECTS 630)

Managers must be familiar with law as it affects the formation and operation of businesses. This module provides an overview of business law for business students. The module is designed to familiarize students with basic legal issues important to starting and operating a business and to recognize when they need professional legal assistance. *Prerequisite: Graduate Standing*

MGT 520 Strategic Management
(US 340 | ECTS 640)

This course provides a framework for developing, implementing, and evaluating business strategy. As a capstone course for the MBA, all functional areas of business are integrated. *Prerequisite: Must have completed 24 credits (48 ECTS credits) in the MBA*

MGT 530 Financial Management
(US 340 | ECTS 640)

This course presents concepts and techniques to analyze and implement investment decisions by firms. The course focuses on the effect of time and uncertainty on decision-making. In the process, the course develops a framework for corporate financial decision-making, thus providing a solid foundation in the principles and practice of financial management. Topics include basic discounting techniques, stock and bond valuation, capital budgeting under certainty and uncertainty, asset pricing models, and efficient markets. *Prerequisites: FIN 520 Economics for Managers; FIN 510 Financial Accounting*

MGT540 Operations Management
(US 340 | ECTS 640)

This module provides an overview of operations management and supply chain management as sources of competitive advantage. *Prerequisite: Graduate Standing*

MGT 550 Organizational Theory
(US 330 | ECTS 630)

Unless a business is a sole proprietorship, it requires organization of individuals to accomplish its mission. This course provides an overview of issues in organizational design, effectiveness, and change. *Prerequisite: Graduate Standing and MGT 520 Strategic Management*

MGT 560 Marketing Management
(US 3 3 0 | ECTS 6 3 0)

This module provides an overview of the role of marketing in the organization and its relationship with other functional areas of business. *Prerequisite: Graduate Standing*

MGT 610 Business Research Methods
(US 4 4 0 | ECTS 8 4 0)

This course provides an overview of research methods for business. Students will finish this module with a proposal for their major research project. *Prerequisite: MAT 501 Business Statistics*

MGT 620 Research Project
(US 12 00 | ECTS 24 00)

It is fundamental for an effective manager to be directly familiar with the methodologies, issues, and techniques of contemporary research in the field. This course allows students to implement an independent research project from start to finish. *Prerequisite: Completion of all other MBA requirements and minimum 3.0 CGPA.*

MATHEMATICS

MAT 101 Introduction to Data Analysis, Probability, and Statistics
(US 3 3 0 | ECTS 6 3 0)

This course is a first module in probability and statistics intended for non-science/non-engineering majors. No prior knowledge of calculus, probability or statistics is assumed. The goal of this module is to build statistical thinking, which is defined as the intuitive understanding of statistical concepts together with the ability to apply them to real-life situations. No prerequisite

MAT 105 Introduction to MATLAB I
(US 1 0 1 | ECTS 2 0 1)

This course introduces students to the MATLAB programming environment, arrays, creating and running script files, 2D plotting features, functions, programming elements, polynomials, curve fitting, and interpolation necessary for experimentation with math and engineering principles. *Prerequisite (MAT 220) Multivariable Calculus*

MAT 110 Pre-Calculus
(US 330 | ECTS 630)

This course introduces the mathematical concepts needed for the study of calculus, especially functions. It emphasizes mathematical theory, as well as the utility of mathematics in engineering and science. The goal of the course is a thorough understanding of the mathematics, plus the ability to apply precalculus topics in a variety of situations. *No prerequisite*

MAT 120 Calculus I
(US 430 | ECTS 830)

This course introduces the calculus of a single variable. It emphasizes mathematical theory, as well as the utility of calculus in engineering and science. The goal of the course is a thorough understanding of the mathematics, plus the ability to apply calculus in a variety of situations. *No prerequisite*

MAT 130 Calculus II
(US 430 | ECTS 830)

This course continues the theory and practice of the calculus of one variable to model phenomena in engineering and science. It covers integration, applications of definite integrals, techniques of integration, infinite sequences and series, and calculus with parametric equations and polar coordinates. *Prerequisite: MAT 120 Calculus I*

MAT 201 Business Statistics
(US 330 | ECTS 630)

This is a second course in statistics, that focuses on the necessary tools and techniques for the diverse areas of business study such as finance, marketing, and economics. The module covers hypothesis testing, linear regression, multivariate analysis, and non-parametric methods. Emphasis is on the application of the statistical methods and examples. *Prerequisite MAT 101 or MAT 120*

MAT 205 Introduction to MATLAB II
(US 101 | ECTS 201)

Provides students with an understanding of two-dimensional arrays, manipulation of arrays, plots with special graphics, 3D plots, inline functions, solving a nonlinear equation with one variable, finding the maximum or minimum of a function utilizing MATLAB. *Prerequisite MAT 105*

MAT 220 Multivariable Calculus
(US 430 | ECTS 830)

This course explores limits, continuity, derivatives, and integrals in contexts where several variables are used. Topics include vector operations, vector functions, functions of several variables, partial derivatives, multiple integrals, and vector calculus. The goal of the course is

a thorough understanding of the mathematics, plus the ability to apply calculus in a variety of situations in engineering and science. *Prerequisite: MAT 130 Calculus II*

MAT230 Discrete Mathematics
(US 3 3 0 | ECTS 6 3 0)

Topics include propositional and predicate logic, combinatorics, mathematical induction, mathematical induction to prove the correctness of algorithms, running time of algorithms and asymptotic notation, mathematical recursion and recursive algorithms, graph theory and algorithms on graphs and trees, network models, automata theory, and basic computational geometry. *Prerequisite: MAT 101 Introduction to Data analysis, Probability and Statistics*

MAT250 Differential Equations
(US 3 3 0 | ECTS 6 3 0)

This course introduces the study of ordinary differential equations and their application to real-world problems. Topics include first- and second-order differential equations, systems of differential equations, matrix methods, Laplace transforms, and numerical methods. Applications include population modeling, falling body problems with air resistance, and mass-spring systems. *Pre-requisite: MAT 130 Calculus II*

MAT 260 Linear Algebra
(US330|ECTS630)

Students will develop conceptual and computational skills essential for deeper understanding of mathematics and computer science by working with linear spaces, transformations, and matrices used to represent them. In addition, the course will focus on logical reasoning and constructing proofs. *Prerequisite: MAT 130 Calculus II*

MAT 501 Business Statistics (MBA)
(US 3 3 0 | ECTS 6 3 0)

Managers must be able to use statistical techniques and understand statistical results to make evidence-based decisions. The purpose of this module is to provide a solid foundation in statistics for business. *Only for Graduate Standing*

MECHANICAL ENGINEERING

MEE 207 Elements of Electrical Engineering
(US 3 3 0 | ECTS 6 3 0)

The material in this course provides an understanding of the technology in many contemporary electrical and computer systems and provides the necessary confidence when purchasing, designing or troubleshooting these or subsequent devices. *Prerequisite PHY 240*

MEE 230 Introduction to Thermodynamics

(US 330 | ECTS 630)

Introductory course in classical macroscopic engineering thermodynamics. The course covers the basic laws of thermodynamics, including conservation of mass and energy in reversible and irreversible processes. The thermodynamics of substances will be studied through the equations of state. Examples of engineering applications will be used throughout the course.

Prerequisite PHY 111

MEE 250 Dynamics
(US 330 | ECTS 630)

Dynamics of particles and rigid bodies as applied to mechanical systems; introduction to mechanical vibrations. *Prerequisite CIE 214; Prerequisite or Co-requisite MAT 250*

MEE 300 Instrumentation Laboratory
(US 314 | ECTS 614)

Lectures and lab on basic principles of laboratory practice and instrumentation; statistical measurement theory including probability distributions, finite statistics, uncertainty analysis regression analysis dynamics of measurement systems; transducers and signal conditioning circuits. *Prerequisites or Co-requisites MEE 331, MEE 230, MEE 207, and Upper Division Standing*

MEE 301 Engineering Analysis
(US 330 | ECTS 630)

Vector analysis, complex variables, Fourier series, matrices, boundary value problems and applications to current engineering problems. *Prerequisite MAT 250*

MEE 302 Numerical Methods
(US 330 | ECTS 630)

Introduction to linear algebra; solution of engineering problems based upon an integrated approach combining numerical analysis and the use of computers. *Prerequisites MAT 205, MAT 250, and MEE 250; Prerequisite or Co-requisite MEE 301*

MEE 313 Aerospace/Mechanical Engineering Design Laboratory
(US 102 | ECTS 202)

Practical aspects of designing for manufacture and assembly. Emphasis on machining techniques. *Prerequisite Upper Division Standing*

MEE 324A Mechanical Behavior of Engineering Materials
(US 330 | ECTS 630)

Introduction to engineering mechanics of solid materials; concepts of stress and strain at a point; states of plane stress and plane strain, stress-strain constitutive relations; stress equilibrium; material/structural responses to applied loading/deflection; analysis of statically determinate and indeterminate engineering components, e.g., trusses, rods, beams, frames, thin-walled pressure vessels; failure theories; introduction to structural stability. *Prerequisite: CIE 214*

MEE 324B Engineering Component Design
(US 3 3 0 | ECTS 6 3 0)

Application of failure analysis methods to the design of specific machine components such as slender/thin-walled pressure vessels, beams, shafts, gear sets, bearings. *Prerequisite MEE 324A*

MEE 324L Mechanics of Materials Laboratory
(US 1 0 2 | ECTS 2 0 2)

Characterization of engineering materials for stress-strain relations, deformation, strength and fracture. The course integrates hands-on experience with instruments, specimens, recording and interpretation of data, and formal engineering report writing. *Prerequisite or Co-requisite MEE 324A or MEE 331R*

MEE 331 Introduction to Fluid Mechanics
(US 3 3 0 | ECTS 6 3 0)

Fundamentals of fluid mechanics covering properties of fluids, fluid statics, dynamics of incompressible viscous and inviscid flows, control volume formulations of continuity, momentum and energy equations, dimensional analysis, viscous pipe flow, boundary layers and drag. *Prerequisites MEE 230, MEE 250, MAT 250*

MEE 331R Fundamentals of Materials for Engineers
(US 3 3 0 | ECTS 6 3 0)

Scientific principles that underlie and relate the behavior and properties of materials to their engineering applications. *Prerequisites CHE 111 and PHY 111*

MEE 352 Dynamics of Machines
(US 3 3 0 | ECTS 6 3 0)

Analysis of motions and forces in machines, design exercises. 1.5ES, 1.5ED. *Prerequisite MEE 250*

MEE 400 Senior Mechanical Engineering Laboratory
(US 2 0 4 | ECTS 4 0 4)

This laboratory course involves experimental investigations to characterize a gas-cooled reactor, a wind tunnel tester, and an internal combustion engine. This is a writing emphasis course. The investigations are documented in technical memos and reported in oral presentations. *Prerequisites MEE 300 and Senior Standing*

MEE 432 Heat Transfer
(US 330 | ECTS 630)

Study of conduction, convection and radiation heat transfer, with applications to engineering problems. *Prerequisites MEE 230, MEE 331*

MEE 442 HVAC System Design
(US 330 | ECTS 630)

Analysis and design of air conditioning systems for commercial and industrial buildings, including equipment and component selection. Energy-efficient concepts are emphasized. *Prerequisites MEE 230, MEE 331*

MEE 445 Renewable Energy Systems and Analysis
(US 330 | ECTS 630)

Solar radiation intensity and location; basic concepts of solar thermal and photovoltaic processes; solar collectors; economic system design for electrical power and water heating, active and passive building heating and cooling, industrial processes. Wind energy fundamentals. Aerodynamic theory and economics of wind turbines. *Prerequisites MEE 230, MEE 331*

MEE 452 Planar Multibody Dynamics with Applications
(US 330 | ECTS 630)

Kinematic and dynamic analysis of mechanical systems in planar motion, numerical methods and use of computer programs in analysis. *Prerequisites MEE 250, MEE 302, MEE 352*

MEE 455 Control System Design
(US 330 | ECTS 630)

Mathematical modeling of dynamical systems, hardware and software issues; computer stimulations; classical control method including transient response, steady-state errors, bode diagrams, root locus and design of closed loop control systems; introduction to state feedback design and digital control. *Prerequisites MEE 250, MEE 301*

MEE 460 Mechanical Vibrations
(US 330 | ECTS 630)

Free and forced vibrations of simple mechanical systems; effects of damping; introduction to multi-degree-of-freedom systems. *Prerequisites MEE 250, MAT 250*

MEE 462 Composite Materials
(US 330 | ECTS 630)

Classification and characteristics of composite materials; mechanical behavior of composite materials, micro and macro-mechanical behavior of laminae; mechanical behavior of laminates; mechanical behavior of short fiber composites. *Prerequisites MEE 302, MEE 324A, MEE 324B*

MEE 495 S ME Senior Colloquium
(US 1 1 0 | ECTS 2 1 0)

Course provides transition between the academic experience and the world of work. Lectures on interviewing, resume writing, becoming a registered PE, financial planning, and engineering ethics are presented. Recent graduates are invited to share their experiences.
Prerequisite Senior Standing

MEE 498A Cross Disciplinary Design I
(US 3 3 0 | ECTS 6 3 0)

Students work in cross-disciplinary teams to solve industry sponsored real-world design problems using the design process. Teaming, design process, design concept, design proposal. *Prerequisite MEE 324B*

MEE 498B Cross Disciplinary Design II
(US 3 3 0 | ECTS 6 3 0)

Students work in cross-disciplinary teams to solve industry sponsored real-world design problems using the design process. Teaming, design process, design concept, design proposal. ENGR 498A and ENGR 498B must be taken in consecutive semesters. This course is to prepare engineering seniors with a variety of backgrounds for professional practice by giving them the opportunity to work on real-life open-ended design problems with time and budgetary constraints. Students receive instruction on formal methods in the design process, project management, and communication skills. (*Prerequisite MEE 498A*)

PHILOSOPHY

PHI 101 Introduction to Philosophy
(US 3 3 0 | ECTS 6 3 0)

This course provides students with both a broad background in the history of philosophy and the tools necessary to continue the study of philosophy either independently or in upper-level courses. Students will be introduced to many of the major thinkers, movements, ideas, and methods of Western Philosophy from its inception in Ancient Greece and Asia Minor to the present. *No prerequisite*

PHI 102 Introduction to Applied Ethics
(US 3 3 0 | ECTS 6 3 0)

This course introduces students to the principles and practice of ethical reasoning through the critical analysis of specific ethical problems. The problems include but are not limited to environmental ethics, global justice, bioethics, violence and war, and personal morality. Students will become familiar with the complexities of such problems and engage in critical reading and writing to develop the skills of ethical reasoning. *No prerequisite*

PHI 220 Business Ethics
(US 330 | ECTS 630)

This course offers an examination of various ethical and moral issues arising in contemporary business and its activities which affect our society and the world. *Prerequisite: PHI 102 Applied Ethics*

PHI 501 Foundations of Ethics
US 330 | ECTS 630)

This course offers a generic but deep understanding of the philosophical foundations of ethical theories and their impact on culture generally and on political theories. The course thus offers a deeper insight into any theoretical approach to ethics that the student would have come in contact with (directly or indirectly) during her undergraduate studies, whether these be Business Ethics, Applied Ethics, Environmental Ethics, Research Ethics, and more

PHYSICS

PHY 101 Introduction to the Physical Universe and Lab
(US 432 | ECTS 832)

Physics focuses on the fundamental questions about the nature of the universe. This introduction to the physical universe explores its basic principles. The first theme is an exploration of the scientific process--that is, the process by which we know what we know. The second theme is the significance of 20th and 21st century physics, and the way modern physics was radically transformed from the classical physics of Newton and Maxwell. The third theme is energy, and how it ties together phenomena as large as galaxy clusters to phenomena as small as an atom. The final theme is the role that science in general and physics specifically play in society. *No prerequisite*

PHY 111 Physics with Calculus I and Lab
(US 432 | ECTS 832)

This course emphasizes quantitative and conceptual understanding of the fundamental principles of the physics background to understand the world in motion around you. Furthermore, students can use that background to study and understand momentum, energy, oscillations, fluid mechanics, and more. Topics include basic concepts of vectors, laws of motion, Newton's laws and their applications, rotational motion, conservation principles, oscillations, and fluids mechanics. *No prerequisite*

PHY 112 Physics with Calculus II and Lab
(US 332 | ECTS 632)

The course has two main objectives: Provides the student with a clear and logical presentation of the basic concepts and principles of electromagnetism and to strengthen an understanding of the concepts and principles through a broad range of interesting applications to the real world. To meet these objectives, we have placed emphasis on sound physical arguments and problem-solving methodology. At the same time, this course attempts to motivate the students through practical examples that demonstrate the role of physics in other disciplines including engineering. The material in this course covers fundamental topics in electromagnetism: electrostatics, electric fields, electric potential and capacitance, direct current and magnetic fields. The students will learn the basic concepts of physics and its application. This course is specified for engineering and science students. *Prerequisite: PHY 111 Physics with Calculus I*

PHY 240 Introductory Electricity and Magnetism (US 4 3 1 | ECTS 8 3 1)

This course is a fundamental math/science course that provides students the foundation needed in terms of math and understanding of physical concepts to solve quantitative engineering problems. Topics include Coulomb's and Gauss' Law, electric fields and potentials, electrical and magnetic properties of matter, Ampere's and Faraday's laws, elementary DC and AC circuits, Maxwell's equations. *Prerequisite PHY 111*

PSYCHOLOGY

PSY 101 Introduction to Psychology (US 3 3 0 | ECTS 6 3 0)

An educated, socially aware individual needs a working knowledge of the scientific method and a solid understanding of the impact of society and culture on individuals and their behavior. This Introduction to Psychology serves precisely this dual role in students' general education. First and foremost, it demonstrates methods of modern science as applied to understanding human thought and behavior. Second, it explores the impact of society and culture on individuals. *No prerequisite*

RELIGION

REL 101 Religious Worlds in Comparative Perspective (US 3 3 0 | ECTS 6 3 0)

This course introduces students to the foundational ideas and institutions of the world's three major monotheisms: Judaism, Christianity, and Islam. It surveys their histories from their points of origin until the present time, and it explores the range of interactions between these traditions in a variety of forums and settings. The course concludes by analyzing the contrasting impacts and influences of the three monotheisms on the Mediterranean region and within Malta itself. *No prerequisite*

SOCIOLOGY

SOC 101 Introduction to Sociology
(US 3 3 0 | ECTS 6 3 0)

This course introduces students to a sociological way of thinking about the institutions and groups to which they belong. Students are introduced to both classic and contemporary social theories and to key concepts about their social worlds that enable them to see links between personal experience and public issues. Students are provided a solid grounding in the basic concerns of sociology and are encouraged to develop their own sociological imaginations through a variety of assessments. *No prerequisite*

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- Kokorelis, Christos – Assistant Professor of Physics; Ph.D. in Theoretical Particle Physics, University of Sussex; B.Sc. in Physics, University of Ioannina

- Modarress, Batoul – Associate Professor of Management; Ph.D. Operations Management, University of Nebraska-Lincoln; MS Industrial Systems Engineering, University of Nebraska-Lincoln; BS Industrial Management, International University
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- Schwartz, John P. – Associate Professor of English; Ph.D. in English, University of Texas at Austin; M.A. in English, University of Texas at Austin; B.A. in English, University of Houston
- Bouhjar, Khalid – Assistant Professor of Mathematics; Ph.D. in Mathematics, Vrije University Amsterdam; M.S. in Mathematics, Vrije University Amsterdam
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- Grech, Ivan – Assistant Professor of History; Ph.D. in History, University of Malta; M.A. in History, University of Malta; B.A. in History, University of Malta
- Islam, Baharul – Assistant Professor of Game Development and Computer Science; Ph.D. Image Processing and Computer Vision, Multimedia University; M.Sc. Digital Media Technology, Nanyang Technological University; B.Sc. Computer Science and Engineering, Rajdhani University of technology and Engineering
- Stroud, Matthew - Assistant Professor in Graphic Design and Animation; M.A. 3D Computer Animation, Bournemouth University; B.A. Graphic Design and Interactive Media, Malta College of Arts, Science and Technology
- Timiyo, Jessica – Assistant Professor of Business; Ph.D. in Education, University of Rhodesfield; M.S. in Business and Management, Liverpool Hope University; M.S. in Marketing, Delta State University; B.S. In Business Administration, River State University of Science and Technology
- Vella, Manuel - Assistant Professor of Philosophy; Ph.D. Philosophy, University of Malta; M.A. Philosophy, University of Malta; B.A. Philosophy, University of Malta

Adjuncts

- Cini, Melchior - Adjunct Assistant Professor in Biology; Ph.D. Synthetic Chemistry/Cardiac Pharmacology, University of Nottingham; M.S. Chemistry, University of Nottingham; B.S. Chemistry and Biology, University of Malta

- Guevska, Daniela – Adjunct Assistant Professor of Art; MFA Painting, University of Sofia
- Pace, Cliff – Adjunct Instructor of Business; MBA Henley Management College; BA (Hons) Business Management, University of Malta; B. Commerce, University of Malta; Associate of the Chartered Institute of Bankers (ACIB)

Emeritus

- Ryder, John – Professor of Philosophy Emeritus; Ph.D. in Philosophy, Stony Brook University, State University of New York; M.A. in Philosophical Perspectives, Stony Brook University, State University of New York; B.A. in Philosophy, State University of New York College at Cortland

Staff

- Abela, Audrey – Quality Assurance Manager and Adjunct Psychology faculty member; ABD Psychology, University of Malta; MA Diplomatic Studies, University of Malta; MBA, University of Malta; Bachelor of Psychology, University of Malta
- Barhoum, Hisham – IT Director; BSc, Electronic and Communication Engineer, Baghdad University
- Chandler, Jeff – Director of English for Academic Purposes; MA Teaching English to Speakers of Other Languages, Azusa Pacific University; BA Theology, Ambassador College
- Havlin, Tracy – University Librarian; Master of Library and Information Studies, University of British Columbia; BA (Hons), Women's Studies, University of Victoria
- Moroglu, Akin – University Registrar; BEng (Hons), Software Engineering, Bahcesehir University
- Odeh, Mustafa – Director of Finance and Administration; Bachelor of Economics and Administrative Science in Accounting, Zarqa University
- Yildiz, Ilker – Director of Marketing and Admissions; Master of International Relations, Political Sociology, Beykent University; BA International Relations, Istanbul Okan University.