STUDENT GUIDE TO UNIVERSITY LIFE

Assalamu Alikum Warahmatu Allah Wabarakatu

On behalf of me and all the staff of Majmaah University, I would like to welcome you in the e-portal of Majmaah University. It is well known to everyone Higher Education institutions are deemed as the beacon of knowledge & enlightenment for entering the arena of research and development. The existence of Higher Education institutions also reflects the extent to which the government is greatly concerned about the quality of education provided to its people.

Rector Dr.

Khalid bin Saad Al Muqrin

Rector of Majmaah university

The Custodian of the Tow Holy Mosques, King Abdullah Bin Abdul Aziz & His Crown Prince shall spare no efforts in overcoming any obstacle that may obstruct the educational process in the country .

We are full of hope that Majmaah University shall remain an edifice of knowledge that will generate well knowledgeable students who are capable to contribute with substance & value in the development of their country in all aspects of life.

The achievements of Majmaah University are all attributed to the efforts being exerted by those sincere people who have dedicated their time to make this university a well-respected one.

The directive of the Custodian of the Tow Holy Mosques, King Abdullah Bin Abdul Aziz to establish the University of Majmaah, which will serve a vast number of students in the region, is also an obvious and concrete initiative from the government in supporting education.

Wish you the best of luck

Contents

Date and Establishment University

Majmaah University slogan is comprised of three integrated parts that are based on golden ground. The golden color in the slogan represents the desert of the Kingdom of Saudi Arabia where the Islamic daua'a has started.

Earth

The sign of earth in the slogan represents the tendency of the University to be an international renowned institution.

Book Pages

The book pages to the left side represent the knowledge that the University intends to disseminate in the region. It also represents the future vision of the University to be a source of knowledge for all students.

Leafs of Palm

The three leafs of palm to the right side represent the three phases of the Saudi country.

The selection of palm's leaf is due to its importance as a crucial source for the nutrition and economy of people in this region. The gradation of the dark green color to the light green color refers to the knowledge that the University intends to disseminate in the region.

Date and Establishment University:

The establishment of Majmaah Univesrity, which is deemed as a newly established one, came as a result of the decree of the Custodian of the Two Holy Mosques King Abdullah Bin Abdul Aziz Al-Saud and the Prime Minister and Chairman of Higher Education on Ramadan 3rd, 1430 - 24th of August, 2009 to establish Majmaah University along with three other universities in Dammam city, Kharj province and Shaqr'a province.

Mjamaah University is established to serve a wide area including Majmmah, Zulfi, Remah, Ghat and Hawtat Sudair. It will also help in achieving the Ministry of Higher Education's objective in expanding the university education across the country. Therefore, Majmaah University will meet the growing number of high school graduates in the region which will reduce the pressure on universities in big cities. Another significant reason for the establishment of Mjmaah University is the value it will add to the people of the region in various aspects including social, cultural and awareness service. Inevitably, this shall help in upgrading the level of performance appraisal of government sectors via providing advanced courses and consultations. With regard to scientific research, the University will provide programs of high quality that will be in compatible with the University strategic objectives.

The royal decree no: 194/A on Zul Hejjah 30th, 1430 – 17th of October, 2009 to appoint Dr. Khalid Sa'ad Al-Mugren as the Rector of Majmaah University with higher rank accelerated the development process at the University. Dr. Al-Mugren focused on developing the existence colleges as well as building new ones in order to increase the number of majors that will meet the market demands. The concern of Dr. Al-Mugren is to make Majmaah University a beacon of knowledge and enlightenment that is capable of offering education of high quality.

Vision:

To ensure that Majmaah University is a conducive academic environment of high quality capable of providing graduates with promising future to contribute in achieving the sustainable development objectives.

Message:

Majmaah University provides educational and research services via an academic system that is capable of competing with an eye on the market demands and the society partnership.

Majmaah University Strategic Goals and Objectives:

The first strategic goal:

Providing an academic service to a high degree of quality and accreditation, according to the requirements of national and international, for the development of university student's competitiveness in the labor market, and building community partnership

Objectives:

(1) Developing students' skills and abilities and preparing them for the labor market (English Language and Computer).

(2) Upgrading students research skills and enhancing their participation in national and international forums.

(3) Improving programs and services of guidance and counseling in all university colleges.

(4) Updating all the programs of student activities at the university, and increasing student participation in all activities.

(5) Improving quality of acceptance opportunities for all students qualified for university.

(6) Developing care programs for students with special needs in all university colleges.

(7) Enhancing internal efficiency (students Success ratio) in all university colleges.

(8) Increasing job opportunities for university students in private sectors and community institutions.

(9) Increasing college's participation in local community activities.

(10) Strengthening the partnership with community institutions in training university students and graduates.

The second strategic goal:

Raising the efficiency of the institutional performance and developing infrastructure and technological environment of the university in order to achieve its mission and goals

Objectives:

(1) Developing infrastructure, buildings and university facilities.

(2) Establishing an integrated network of information systems and e-learning.

3) Developing administrative organization and procedures in colleges and deanships

(4) Improving the system of rewards and incentives in colleges and deanships.

(5) Developing criteria for the selection of academic and administrative leaders.

(6) Enhancing quality of academic programs and access to local and global accreditation

(7) Developing educational courses and programs in the light of the quality standards in all colleges of the University during the plan period.

(8) Improving teaching, learning and evaluation methodologies for the staff members of all colleges.

(9) Application of e-learning and distance learning programs in five colleges through the Deanship of e-learning.

The third strategic goal:

Developing human and intellectual capacity of the University to achieve high levels of future quality and excellence in the areas of education, scientific research, and community service

Objectives:

(1) Improving the rates of staff member to: student.

(2) Increasing the proportion of faculty holding doctorates.

(3) Saudization (increasing the ratio of Saudi academic staff members to other nationalities.

(4) Developing the skills of staff members and administrators in the areas of professional knowledge.

(5) Developing the capacity of staff members and administrators in the areas of technology and its modern educational and administrative applications.

(6) Increasing the participation of staff members in the local and international conferences.

(7) Supporting external scholarship programs, grants, training courses and scientific communication.

(8) Achieving 80% of the total administrative staff to be Saudis.

(9) Improving the access rates of technicians in laboratories to the proportion (1: 1).

(10) Improving administrative staff performance, increasing their qualifications and developing their skills.

(11) Supporting research centers and colleges with qualified experts and cadres.

(12) Encouraging researchers to publish their research at the local, regional and international level.

(13) Increasing research agreements with local and foreign universities.

(14) Linking scientific research to the needs and problems of the local and national community.

The fourth strategic goal:

Expansion of economic development for the University to meet the requirements of the sustainable development of the local environment

Objectives:

(1) Developing financial resources for colleges and deanships in the approved budget.

(2) Increasing the number of parallel education programs in colleges.

(3) Establishing post graduate programs during the plan period.

(4) Investment of university facilities and buildings.

(5) Developing financial plans and budgets.

(6) Improving the rates of expenditure in the light of setting priorities.

(7) Developing regulations, legislation and specific mechanisms for receiving the financial resources or done ships for colleges and deanships and make them available to everyone.

(8) Stimulating business and community organizations in addition to the private sector to participate in the programs of the university.

College Of Sciences Al-Zulfi

Date and Establishment Colloege of Science:

College of Science, Al-Zulfi at Al majmaah University was established by a royal decree on 18th of Sha'ban 1426 AH, in Al qaseem. The college includes four departments: The Department of Computer Science, the Department of Mathematics, the Department of Physics and Information, and The department of Medical Laboratories. New students are accepted in the preparatory year program of laboratory Medicine department, computer Science department, Mathematics department and Physics department

The first year is considered a preparatory year for students who want to specialize in the laboratory medicine, or computer science and information departments. The first year aims to prepare the students to receive the academic education highly, the skills of English Language, and train the students on the thinking and learning skills.

The second year is considered a preparatory year for students who want to specialize in the of Physics or Mathematics departments. The program aims to prepare the students to receive the academic education highly, train the students on teaching methodologies and acquire the skills of thinking and learning.

Vision:

(1) To reach scientific and research leadership in the college specialties, serving community and qualification of students in accordance to professional requirements of modern science.

(2) To achieve leadership and excellence in building soceity of education knowledge and applied sciences through the academic and scientific programs, which enable it to be reference in providing an overall professional advice to the Saudi commuinty in accordance with standard quality standards accreditation recognized locally and globally.

(3) Driving the wheel of development and achievement of excellence, quality, educationally, professionally and academically in light of information and knowledge economy society.

Message:

Scientific excellence through plans and programs enable students to acquire the knowledge and skills needed to compete in the labor market.

Objectives:

(1) Providing an outstanding education in an integrated learning environment to contribute in preparation and training of human resources qualified academically, culturally and professionally to carry out their tasks in different specialties of the college community service.

(2) Development of scientific research, writing and translation in various specialties of the college.

(3) Building a genuine partnership with the community.

(4) Continuous improvement of the college academic and administrative organization.

(5) Providing advancement to students' activities and training to acquire the necessary knowledge and skills.

Values:

(1) Quality and Excellence.

(2) Teamwork.

(3) Development and Continuing Education.

(4) Community Service.

Academic Guidance

Academic Guidance:

The academic guidance service is essential in assisting students in achieving the goals of the university. The university encourages students to use utilize their talents to grow academically, psychologically, socially and morally. It also aims at preparing the students in accordance with their academic aspirations, potentials and societal values.

The academic guidance is a key activity within the university to discover students' inclinations and potentials. It also determines students' goals and helps them plan their future in accordance with their talents.

Accordingly, the students will grasp the skills necessary for their prospective future careers. There is no doubt; the philosophy of the academic guidance emerges from its objectives. Firstly, academic guidance aims to present the university's academic programs, rules and regulations inside the campus and the social and sportive atmosphere to the students.

Secondly, it explores the academic aspirations of the students and their potentials and provides them with the opportunity to benefit from the experience of the faculty staff members.

Thirdly, it helps the students solve problems in a methodical and logical manner. Lastly, it provides the students with the information and skills necessary to achieve their prospective career goals and helps to enhance the talents they possess.

The academic guidance looks forward to positive changes in the student's attitude toward the cultural, social and vocational values of his society.

It also helps the student to discover his needs and enable him to make his own decisions in relation to choosing the suitable field of study.

Students will be capable of overcoming the difficulties facing them during their studies

The good relationship resulting from continuous interaction between the students and their academic guides helps them to adapt and benefit from the environment of the university in a methodical, social, vocational, sportive and ethical manner.

This relationship increases the loyalty of the students to their awareness institutions.

The institutions of higher education mostly rely on the experience of their staff members in guiding the students in academic issues such as: choosing the suitable field, providing the students with suggestions and advice that will improve their academic performance.

In addition, the institutions of higher education helps the students in choosing the suitable courses, informing students about the changes in the requirements and the academic regulations as well as assisting the students in solving their academic and administrative problems. Finally, they explore the students' potentials and skills to enhance individual creativity.

Plan of the Academic Guidance in Semester:

Characteristics of the Plan

Firsty: The Nature of the Plan

It is a range of activities and events taken by the Academic Counsellor in the first semester in the college building. The activities include initiating the students to their study and scio-cultral programmes in the college, identifying different types of problem cases and carrying out follow-ups at suitable intervals till the end of the semester. The role of an Academic Counsellor is to activate these activities in coordination with the Academic Guidance Unit and all the concerned parties in order to integrate the students in their academic environment.

Secondly: The Objectives Of the plan

The objectives of the plan are based on the following:

(1) Disseminate and promote the culture of the Academic Guidance of the students and provide the service to those who are in need but not asked for.

(2) Discover and support the unsurpassed students.

(3) Help students to find direct solutions concerning the academic problems that they face.

(4) Provide an opportunity for students to take direct and indirect advantages from the experiences of the faculty staff outside the classrooms.

(5) Planning therapeutic activities to meet the poor compatibility and achievement of some students.

(6) Provide necessary counseling and guidance to modify the undisciplined behavior of the students.

(7) Help students to integrate into and adapt to the academic and educational environment of the college.

(8) Motivate outstanding students academically and practically.

(9) Take advantage of the talents of students that have been discovered and help them to do their best through the guidance to the activities of the Student Affairs.

Thirdly: Awareness of the Plan

The Office of Guidance and Counselling in the College takes a series of actions to inform the plan as the following:

(1) Prepare the directory of the Academic Guidance and Counselling and distribute it to the fresh students at the beginning of the academic semester.

(2) Display the plan on College Notice Boards for comments, certification and approval of it.

(3) Distribute the fresh students to the faculty staff and keep the Alumni with their own counsellors at the beginning of the academic semester.

(4) Post the plan on the College Web Site for wider circulation and availability.

Fourthly: Functions of the Academic Counsellor for the Purposes of Applying the Plan

1- Prepare the student's file - the Academic Counsellor prepares a special file for each student of the students who have been assigned to him. The file contains the following:

- The Student Information Form.

- List of the academic specialty courses that lead to the student's graduation.

- The Registration Form if possible.

- Latest position of the student's academic status.

- Other administrative documents ... etc.

2- General Guidance for the Student

Guide the student to the one who can respond to his inquiries.

Timetable: The Counsellor makes sure that students know the time and place of lectures, notices and suggests of discrepancies, if any, the student's timetable.

The absence of the student: Monitoring the students' absence is one of the tasks of the course professor, and the Academic Counsellor has to follow-up the cases referred to him by the Office of Guidance and Counselling according to the plan.

3- Performance Evaluation

The Academic Counselor has to monitor the students' quarterly and Cumulative Grade Point Average (GPA), so that whose Cumulative Grade Point Average (CGPA) is under the Academic Warning can be guided to raise his Cumulative Graduate Point Average (CGPA) to come out from that Warning status.The Academic Counsellor has to explain to the student that the Academic Warning is not a kind of punishment or disciplinary action, but it enables the student to continue with reduced burden of study to help him improve his performance. These students have to finish the specialty within an acceptable and reasonable level which is more important than the rapid completion of the program with low performance, and which may expose them to be dismissed if they fail to do so.

4- Discover and support the unsurpassed students

The Counselor reviews the quarterly results of the tests and the end of the semester to identify the failure students (who have obtained less than 60%).

Do personal interview with all these students to get acquainted with their problems, from their point of view, and write a report about that. In case of identifying the reason of their incapability, the issue is submitted to the Office of Guidance and Counselling for support and follow-up to resolve the problem until the student's achievement performance improve can raise their scores.

The Counselor writes, in a file, the names of these students, the nature of the problem and the extent of the student's achievement.

The Office of Guidance and Counselor works on following-up the unsuccessful students according to the relevant department.

5- Take care of the outstanding students

The Academic Counselor, in cooperation with the Office of the Counselling Guidance and the Management of the College, works on designation and implementation of a program to take care of the outstanding students which aim to:

- Upgrade the capacity of the students, culturally and intellectually and thereby help them develop their talents.
- Create a spirit of fair competition among the students.

Fifthly: Activities and Events in the Plan

It is expected that the plan covers the following activities and events:

- Arrange periodic meetings with the students to communicate with them on a personal level to discuss the problems and issues they face.

- Establish Electronic communication with students whenever possible to discuss all the difficulties they face in their studies.

- Involve students in seminars and workshops organized by the College "or other Colleges whenever possible" to facilitate the personal and social interaction and thus help them integrate in the academic environment of the College life.

- Involve students in various activities in the College.

Sixthly: The Implementation Timetable for the Plan

It is suggested that the execution of the plan is done by the Office of Academic Guidance and Counseling in the College according to the following form:

week	Tasks,Activites
(1)	Preparation of the plan and prepare the students
(2)	Arrange meeting with students to welcome them, introducing one student to another and clarify the special tasks of the Academic Counsellor
(3)	-Arrange meeting with the faculty staff to coordinate with them in the performance of tasks. -Receive a list of the students of each academic counsellor as it exists on the portal and their Academic situations. -Drawing up a list of the students and their cases, however, be as they are, weak of outstanding and inform the faculty staff
(4)	-Inventory of creative activities for students and their orientation to start joining the various activities in the college. -Get a list of the students who did not attend 75% of lectures from the faculty staff, contact them or their families to inform them about their embarrassing situation, and determine the reasons to provide assistance if possible.
(8)	-Psychological preparation and solving the problems related to the first quarterly test. -Get a list of the students who did not attend 50% of lectures from the faculty staff, contact them or their families to inform them about their embarrassing situation, and determine the reasons to provide assistance if possible.
(10)	Meeting with all faculty staff to determine the conditions of the failure students and what was ignored and the effect to the following program with them to improve their results (after the first quarterly test), as will as the outstanding student s and what was done for them of motivate more to the light of the

	results of the first test of certain cases that need a speciel care.
(12)	Get a list of the students who did not attend 25% of lectures from the faculty staff, contact them or their families to inform them about their embarrassing situation, and determine the reasons to provide assistance if possible.
(13)	Identify the students that suffer from problems related to the tests and suggest the ways to overcome them.
(14)	-Get a report from the stuent counsellors about the development in the cases of the unsuccessful students after the second quarterly test or the evaluation from the faculty staff for those who have not had this test. -Prepare the program "Hour of guidance "where each Academic Counsellor hosts all the students of the Academic Guidance.
(15)	-Follow-up the faculty staff in carrying out the program "Hour of guidance "and meet the students to prepare them for the semester final tests. -Given a lecture on "Test anxiety and How to Deal with it" as part of preparing the students for the tests to be administered at the end of the semester by a specialist psychological, if possible. The alternative in the head of the office of Guidance and Counselling in the college theater. -Organize the opinion poll of the students to get to know their impressions on the activities of the Academic Guidance in general.

Seventhly: The Evaluation Method of the Plan

The procedures of implementation and activation of the plan can be done in the following way:

- Distribute the evaluation form to students at the end of each semester to facilitate the adjustment process for any error and leave them free to express their views through closed and open questions without writing their names.

- Examine the files submitted to the Guidance Office at the end of each semester along with the reports of the meetings with the students to assess their commitment to the implementation of the plan.

Admissions and Registration

Vision:

Provide academic services to students and complete the admission and registration procedures based on modern techniques and usage of advanced electronic means.

Message:

Provide adequate academic information bout the university & scientific faculties and specializations, and to provide academic services to students, completion of Admission & Registration using modern technology means, developing and improving the work performance mechanism, simplify the procedures, clarify the rules & regulations and increase awareness of its applications.

The Deanship seeks to achieve the following goals:

(1) Work on finding a seat in the university for each student who fulfills the admission requirements.

(2) To attract the best high school graduate students to the university.

(3) Exert the efforts to educate the student by study and exams rules & regulations through different means within and outside the university.

(4) Documentation of students' academic records and work on constantly updating them electronically.

(5) Work on developing and adapting the technology available in the Deanship so that students can pursue academic affairs from anywhere at any time.

(6) Work on payment of students remunerations on due time and eliminating any obstacles in this regard.

(7) Work on documentation and expedite finalizing the student graduation procedures within the period specified in the University Calendar.

Services provided by the Deanship of Admission:

- The students are submitted electronically in accordance with the number of students admitted and the conditions are approved by the University Council.

- The Deanship distributes male and female students in various colleges on the basis of their academic aspirations and the number of admitted students in each college.

- It receives transfer applications outside of the university

- It processes certificate equalization and stores information.

- It participates in the examination process for admitting new students.

- It issues admission notifications and relevant letters.

- It receives visiting student delegations and provides them with information and newsletters.

- It visits schools and provides them with the necessary information about the admission and registration process.

- It stores and maintains students' grades and documents.

- It provides each department with scholarships for their students at the end of each semester.

- It restores the files of the students who suspend their study.

- It receives the applications of visiting students from outside the university.

- It receives the applications of withdrawal and executes them.

- It participates in the study plan.

- It follows up student progress in the study plan and documents his graduation.

- It submits students' problems and suggestions to the Permanent Committee of Student Problems

- It executes the decisions of the university council, college's councils, the permanent committee of student problems and the disciplinary board.

- It makes modifications concerning the student's name and identification card based on the university's policies and procedures.

- It issues the academic reference forms to be used outside the kingdom of Saudi Arabia.

- It coordinates the process of students' transfer from one college to another with a follow up of course equalization.

- It issues the grade reports and processes data entry

- It issues academic records and documents them.

- It issues student certificates and documents.

- It issues a graduate guide.

- It makes automatic registration.

- It issues student schedules.

- It issues student schedules and attendance sheets and sends them to the respective colleges.

- It receives and replies to inquiries from various colleges concerning registration.

- It issues result forms at the end of each semester.

- It processes the lists of graduates and those who have registration problems.

- It issues student identification cards.

- It deposits student allowances in their accounts at the end of each month and distributes the ATM cards through the respective colleges.

- It provides the Deanship responsible for the graduation ceremony with the necessary information they need.

Admission of prospective Students:

The University Council determines the number of students to be admitted for the upcoming academic year on the basis of the recommendations presented by the College Councils and the respective departments at the college.

Admission Conditions:

The Deanship of Admissions and Registration Affairs receives the applications for admission in accordance with the following conditions:

1) The applicant should have his/her high school certificate or an equivalent certificate from inside or outside Saudi Arabia and the university council determines qualifying certificates for admission at any of its departments

2) The applicant should have obtained the secondary school certificate, or its equivalent, in a period of less than five years prior to his/her application. However the University rector may waive this condition if the applicant has a persuasive explanation.

3) The applicant should have a certificate of good conduct.

4) The applicant should successfully pass any examinations or interviews deemed necessary by the University Council.

5) The applicant must be medically fit.

6) The applicant must obtain the approval of his/her employer, if he/she is an employee in any government or private institution.

7) The applicant must satisfy any other requirements specified by the University Council at the time of application.

8) BA holders may not be admitted to the university to obtain another BA degree and the university rector may waive this condition.

9) Applicants who are currently enrolled at another institution or the university itself may not be accepted.

Procedures for E-Admission:

1) The students must undergo the necessary tests held by the National Center for Measurement and Assessment.

2) The student must read the admission conditions through the university electronic gate or the deanship of admission and registration website **http://w1.ksm-admit.net/**

3) The students fill in the form with the necessary data and the desired courses of study through the e-admission website within the allotted period of time.

4) When the period of admissions is over, the students will be admitted on the basis of those who have met all the admission requisites and those who have not. Admission depends on the equivalent average and the desired college.

5) Passing the personal interview is a must in some colleges.

6) After the respective evaluation, admitted students are informed through e-mail and mobile messages (SMS). The students receive information about the colleges and fields of study where they were selected. Admitted students must visit their accounts through the university electronic gate to print the form of nomination and the application form.

Registration:

The students can automatically register the desired courses during every academic semester. The students may enter the academic system gate by using a user name and password to cancel courses, add courses, modify the schedule, confirm registration and print the schedule. The student must confirm his registration within the first week of the semester. The minimum load is (12) units and the maximum is (20) units.

The student who is not willing to study in the first semester or in any semester must apply for withdrawal, otherwise he will fail in the courses of that semester. If the student encounters any problems concerning his registration, he must go to his academic guide or to the Student Affairs office in the college.

Deanship of Library Affairs

Vision:

Upgrading the university libraries so to become a minaret for knowledge and science and a center for providing all kinds of information and its services, therefore, it'd be a source for learning, searching and innovation among an encouraging and motivating atmosphere.

Message:

Supporting learning and searching needs for the university society through providing information storages, academic curriculum sources and offering a wide variety of services, Also, it seeks providing the suitable atmosphere for reading and utilizing these services, creating programs, different culture activities, spreading of reading culture and enhancing our attitude towards the book.

Objectives:

- Providing information sources in all its different kinds required by libraries and units of the university.

- Technical treatment and organization of information sources within libraries affiliated to the university through using the best vocational methods which would contribute to make using of this sources accessible and more easier for beneficiaries.

- Continuous planning and offering information services in all libraries of the affiliated libraries in a way which would be suitable for the beneficiary requirements and the available facilities.

- Planning for investing the allocated budget for information sources and services and development of its resources.

- Establishing a digital library for the university and improving, optimizing its services on a continuous basis.

- Cooperation with other libraries and authorities of mutual concern in away achieve benefit to the university and its different units.

- Organization of fairs in the field of libraries and information and participation according to the pursued measures.

- Definition of the scientific production of the university members using proper means.

- Continuous planning and providing sufficient well qualified manpower in the field of libraries and information according to size and requirements of work and the offered services in the different libraries of university.

- Preparation of criteria, specifications and measures related to the university libraries and its services in away which ensures the high quality of its services offered through such libraries.

Central Library:

The Library of the Community College, which Tast in 1425 as a library subset of the libraries of colleges of the University of King Saud, the nucleus of the Central Library of the University of collected after independence, as this library is the central library when she moved finally to the Deanship of Library Affairs at the University collected in the month of Dhul in 1431, and provides library services to all employees of the university students, faculty and administrators as well as researchers and scholars from non-employees of the university, located in the Central Library building, the third round, the community college district in Khalidiya and an area of 400 square meters distributed over the library and the headquarters of the Deanship of Library Affairs

And includes the Central Library between its shores material equipment and software appropriate to serve the attendees the library, where there is the library furniture modern shelves of books and desks for reading and retreats Internet and retreats to read, and made available indexes through the Koha library management and provides gateways protection for books from unauthorized use.

- Sections of the Central Library

- Library Management

- Services beneficiaries

- The electronic catalog

- Hall of free viewing and reading

- Periodicals

- References and foreign books

Central Library Services

1. **Access the internal service**

    Data provided by the Central Library and branch libraries college access internal services by providing the right atmosphere to see, and also provide counseling and guidance service.

2. **Service printing and imaging**

    Data Service provides printing and imaging can be for students to print and imaging with regard to the educational process, according to the rules laid down by the Dean.

3. **Service guidance**

    Dean receives groups of students under the supervision of some faculty members to visit the library and give them information about how to use the library and the services provided by the Deanship of Library Affairs in the Dean's keenness on the definition of employees of the university its services

4. **Reference service and respond to questions and inquiries**

    Data provided many answers to questions and queries of the beneficiaries of the various employees of the university, relying on the reference sources such as dictionaries, encyclopedias, manuals and reports in both print and electronic

5. **Foreign Loan service**

    Data represented progress in the Central Library and branch libraries lending service employees of the university.

6. **Service access to daily newspapers and magazines**

    Dean provides a number of daily newspapers for consultation in the Library, and the newspapers, "Al-Riyadh" newspaper and the island"

7. **Search service in the digital library Arabia**

    Allow DDL from within the electronic services search service in the digital library Arabia Saudi Digital Library The Digital Library Arabia's largest gathering of e-books Academy in the Arab world, where currently has more than (114 000) e-book full-text in various scientific disciplines, and has more than 300 publishers worldwide such as Elsevier, Springer, Pearson, Wiley, Taylor & francis, Mcgrawhill and contain at books for publishers such as world-class academics: Yall University, Oxford University, Harvard University

Services:

- Access to the full text of electronic books from anywhere and at any time.
- Availability of free search (keywords - Full text - Title - Author - Subject - date of publication.
- Giving a range of advanced interactive services.
- Providing electronic reference service.
- Provide awareness information service.
- Provide uniform access to the digital library. **http://dla.mu.edu.sa/node/25**

8. **Search service in the electronic databases**

Dean offers through its gateway to the Internet thirty-one (31) global electronic database covering all disciplines at the University of Objectivity, and can access these rules through the portal at the following link: **http://dla.mu.edu.sa/node/36**

9. **Automated search service in the electronic catalog for the University Libraries**

Central Library offers research services in the electronic catalog Consolidated University Libraries collected, and provide training and guidance on the use of the electronic catalog and take advantage of it, and a link to the index on the Internet is: **http://dla.mu.edu.sa/node/22**

10. **Search service in the Internet**

Central Library offers research services to the beneficiaries in the Internet is regulated, in order to obtain information and sources that may not exist within the sources of information the university libraries.

Library the College of Science:

Library Departments:

- Library Administration
- Beneficiary Services
- Electronic Index

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Library's Possessions:

Library possess a range of various information sources estimated with a number of 280 titles and 845 copies and volumes in all physical sciences.

Library Systems:

Management of the library and its indexes will be through its coding system which is considered to be among the modern systems used in the library management.

Library Services:

- Internal reading service
- Automatic Search in the library indexes.
- Reference Services
- Photography
- Continuous Updating
- Internet Service

Contact Information:

E-mail: Dla@mu.edu.sa

Student Affairs

About the party:

The Deanship of Student Affairs is considered the first and most important service center for the university male & female students. The deanship is providing its services through the Student Activities, Student Fund and full supervision & follow-up of these services so that the students can live in campus environment that suits their aspirations helping them to progress and succeed in their university.

Mission:

Provide unique services that become incentive for male & female students to develop their life skills and polish their practical experiences.

Clarify the role played by the Deanship to serve the university students, define the plans & programs designed to raise the level of those services in the method that suits the university level.

Vision:

Graduate students who have life skills who contribute to serve themselves, their community and their homeland.

Objectives:

- Qualify generations that serve his religion and his country.
- Develop male & female students' skills and polish these skills with useful knowledge.
- Care for male & female students in all life aspects.
- Provide male & female students with financial support and activities in general.
- Caring for students and promote their potentials to become active pillars for their community.

Student Activities:

Student activities are considered the corner stone of Students' Affairs. The Deanship provides all the necessary the required for students through activities which contribute to fill his spare time as that will return at them with a great benefit. They help find a friendly atmosphere among students, and thus have a trusty and dependent generation through the skills and capabilities it gained. The goals of students' activities and their controls are:

The objectives:

- The ability to think scientifically in an organized framework of the ethics of our religion.
- To enrich the cognitive aspects of the university students, motivate them to search and explore, and to strengthen the spirit of fair competition among them.
- To develop university student's Personality through diversification of sources of activity in light of the Islamic faith (Akidah).
- Development of belief in shared common goals.
- To instill values in normal hearts of students such as cooperation, honesty, solidarity and perseverance on the hard work.
- Ability to take responsibility and leadership.
- To respect the work and general regulations.
- To develop a belief in the need for dialogue and taking the opinion of students in the activities programs and their events.
- Leisure time investment that will return with valuable benefits.
- To discover students' potentials and talents as well as to develop their skills and refined them.
- To establish normal social relationships providing happiness for the individual and society.
- Developing a sense of national belonging and sincerity.

Controls:

- Diversity and inclusion.
- Impartiality and objectivity among students.
- Early pre-announcement about the activity.
- The student participating in the activity is merely required to be registered in the current semester of the activity.
- A student is demanded to meet the requirements for each activity.

- The composition of arbitral committees specialized in all competitive activity.

- Prizes are awarded for the first three runners in each activity.

Student activities:

Cultural Activities:

These activities develop the student culture and expand his mental perceptions in particular and his general knowledge broadly. These activities represent a wide range that that is demanded by the students such as:
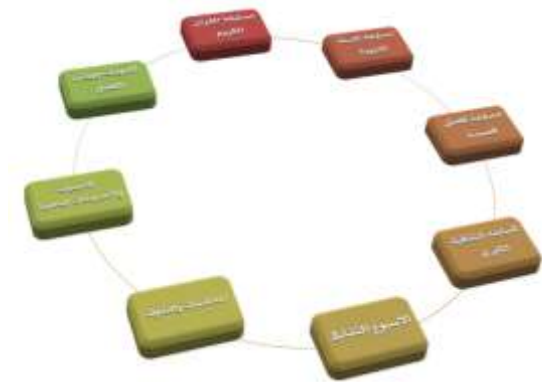
Social Activities:

These are programs that contribute in correlating students and planting friendly atmospheres among them through internal, external and international activities.Some of these programs and social activities are as follows:

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Artistic Activities:

Are all art work produced by the student such as:

Scientific Activities: (Male & Female students)

Represent any student activity directly related to research or practical work in the humanitarian or scientific disciplines such as researches, innovations, exhibitions and others. Some of the programs provided by, supervised by or participated in by the Deanship are as follows:

Sports Activities: (Male Students)

They are all related sports activities within or outside the university corridors. Some of the deanship sports activities are:

Scouts Activities: (Male Students)

These are service activities that provide services to the community in terms of organization and follow-up. Scouts group is called (tribal scouts) in the universities. Majmaah University seeks that its scouts group starts from where others have ended in all areas of student activities, especially the tribal scouts to join the development convoy of the Scout Movement in Saudi universities. The start would be in all stages either in leadership preparation and qualify them in a suitable way or through participations at all internal and external levels and Hajj public service camps. The university shall. The university will receive much attention from those officials responsible for development of scouts and provide all requirements to develop them till they become able to serve their religion and their homeland. The internal scout plan will be submitted in summer of each academic year and registration will take place with the beginning of each academic year. Qualification studies for scouts students will start during the academic year. The university is keen on foreign participation that add to the students more experience and training.

Theatrical Activities: (Male Students)

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These activities are associated directly to theater. All of these activities aim to produce an integrated theater staff to serve the university in its concerts and theatrical aims to polish students' talents in return for the desired benefit.

Special needs center:

It is a service center that cares for the affairs of the special needs people through the following services:

Smoking prevention program:

It is an integrated program aimed at eradicating this deadly lesion and seeks to

make Majmaah University, the University without smoking, then protect the community youth from falling into the gliding of smoking and its various disadvantages.

This program includes extensive awareness campaigns, codified rules and regulations. The Deanship of Student Affairs pays great importance to this program that the university is keen on producing such program in the proper way that suits the university and the event that this program has been prepared for. The following are some of the activities that the Deanship is intending to perform to eliminate this scourge:

Students' Fund:

Objectives:

- Supporting student activities.
- Providing subsidies and grants (Chapter II).

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- Providing excellent students' services like canteens and bookshops.

- Providing incentive awards to outstanding students.

Students' Fund:

- Subsidies and grants.

- Students' Activities.

- Investment services.

Subsidies:

 a student is supported with a financial amount of five hundred riyals in the form of subsidy and once during the school year in accordance with the following rules:

1. The student is required to be enrolled in the current academic semester.

2. A student's cumulative GPA Should not be less than 3 out of 5.

3. Applicant must be of good behavior and conduct.

Grants:

The student can submit a request for a grant not more than one thousand Saudi Riyals, and which will be reimbursed from the reward by 25% per month, according to the controls mentioned in item of subsidies.

Peration of students:

It is a program offered by the Students' Fund for male and female university students and which aims to train the male/female student / at work skills and deal with others. It is also focused on training students on communication skills and communication in the field of students' activities, in the central library, or anywhere the college finds it appropriate, and this is done for a paid wage of SR 10 per hour, according to the following rules:

1. The student is required to be enrolled in the current academic semester.

2. A student's cumulative GPA Should not be less than 3 out of 5.

3. Working hours should not be less than 12 hours per week.

The most important college facilities:

1 - The college cafeteria

2 - College restaurant

3- The college library and Internet services lounge in the college library

4 - Medical Clinic

5 – Bookshop

Quality and Accreditation

Deanship of Quality Assurance and Accreditation in Brief:

Springing from the keenness of the Almajmaa University administration since its inception on 3rd of Ramadan 1430, the university dedicates its efforts to be among those distinguished worldwide; hence, it has been keen to adopt the application of quality in its comprehensive concept. Accordingly, the Deanship of quality and skills development was one of the first deanships established by Resolution No. (9) on 02/03/1431 H to take over the application of quality in all units of the University and satisfy the needs of real community. It aims to improve performance in all areas of the university; ensure the establishment of systems determining how to implement the work at the best efficiency and quality. In addition, it takes all the precautions to evaluate and measure performance according to specific criteria and enable the University of Competitiveness at local, regional and global levels. Respectively speaking, the Deanship is merely polarized to improve the level of internal and external communications, follow-up work in the Quality centers and units deployed in all sections of the university such as deanships, faculties and Female departments, coordinate with third parties concerned and link between these departments and units to coordinate efforts.

The Deanship of Quality and Skills Development Tasks:

1. Coordination with the National Assessment and Accreditation Commission, and act in accordance with its antipersonnel regulations and instructions.

2. Work to strengthen the awareness of staff of the University of the importance of quality assurance processes and knowledge of the strategies needed to achieve them.

3. Develop specific mechanisms of what is required to be done at the university, which appoints the quality, and help achieve it via performance and output.

4. Provide assistance and support to academic departments and administrative units at the university in order to achieve quality improvement plans, and follow-up steps and updates.

5. Develop training plans appropriate for strategies of teaching, evaluation and review processes in coordination with the university colleges and units.

6. Help university units and colleges in the preparation of programs to improve the quality and output of the operations of the standardizing, and implementation.

7. Development of standard models used for the purpose of conducting the study and the preparation of reports on the quality indicators, special models characterization programs and disciplines, and other reports to help achieve quality in all fields.

8. Conducting periodic review process for graduates and other beneficiaries of the activities of the university and the pursuit of knowledge and the level of quality of education during, and after.

9. Continuous communication with those concerned and beneficiaries of the activities of the university, seeking to know and perceive their opinions and advice regarding skills development strategies.

10. Provision of the required referent materials, spreading all the data needed for quality and accrediting from its inner and outer sources.

11. Identify key performance indicators: for use in all faculties of the university and its deanship and departments, to enable each unit to determine which additional indicators related to its activities resume.

12. Preparing annual reports on the level of quality assurance, and submitting them to the university administration, pointing out the key performance indicators and proven (fixed) data, depending on the internal university units' reports, and the work of the Deanship.

Objectives:

The Deanship, with its units and branches spread in the university's colleges and deanships aim to assess the university performance and development the educational, research, administrative and community service process. It also aims to attain the institutional accreditation for all its programs through the following sub-goals:

1. Establishing General development strategies for application of quality in the university.

2. Spread the culture of quality, academic accreditation and continuous improvement among the university affiliates.

3. Provide support and assistance to various university units in all quality and academic accreditation related matters.

4. Design and develop the tools necessary to evaluate the educational process by measuring the performance indicators of inputs and outputs of the educational process (teaching staff - workers - Students - Graduates ... etc.).

5. Identify strength and weakness points of the study programs offered by the university and submission of proposals and the appropriate means for continuous improvement.

6. Coordination with the National Commission for Academic Accreditation & Assessment, in the related subjects.

7. Continuous communication with the University activities related persons and beneficiaries and seeking their opinions and satisfaction for the various services offered to them.

8. Prepare, implement and follow-up the training programs that contribute to the development of skills of the university affiliates.

9. Exchange of experiences and ideas for the development of university education with the centers and similar units in Saudi universities and on global levels.

10. Preparation of annual reports on the status of the university quality.

11. Identify key performance indicators: for use in all faculties deanships, and departments, so that each unit can identify additional indicators related to self activities.

12. Preparation of annual reports on the level of quality assurance, and submission to the university administration, pointing out key performance indicators and static information, based on reports of internal university units, and the Deanship work.

The reasons behind increasing interest in the application of quality in higher education:

1. Achieve a high level of performance in the educational process.

2. Increase the preparation of students enrolled in higher education.

3. Lifelong learning.

4. Revolution of information and communication technology, and its impact on the educational process.

5. To achieve adequate output of higher education institutions with the aspirations and requirements of the society.

6. Intense competition among educational institutions in the provision of higher education.

7. Rationalize spending and setting priorities to meet the needs of the community.

Introduction to the importance and content of academic quality:

Quality is at the forefront of vital strategic interests that we face in our lives in general, and in the specific areas of specialties, in particular, due to the successive scientific and technical progress and increased competition between the service productive institutions. Furthermore, quality goes beyond its traditional concept of any product or service; it does extend to include the quality of institution or organization in order to improve and develop the operations and performance. In addition, it

reduces costs, prizes time control, and achieves customer's wishes and requirements of the market. It also attains teamwork ship, and strengthens the sense of belonging, and all these can be summarized in two main points:

a. Compliance with specifications

b. Satisfying the requirements of the market or as contracted by the quality scientist Goran "harmonization for the use".

The recent developments in science and academic fields have led to a sharp increase of attention to academic quality. The issue of quality and its assurance has become the emphasis and the focus of attention of the Ministry of Higher Education at all levels in order to push up graduates to reach the levels and standards internationally recognized so that they are able to compete locally, regionally and globally. Therefore, quality assurance and accreditation have become one of the most important topics tackled by the Ministry of Higher Education. It gives them a heavy weight of attention through the establishment of an independent body (commission) whose main functions are following-up quality issues and indigenizing them at Saudi universities; this body is the National Commission for Assessment and Accreditation (NCAAA).

The National Commission for Academic Accreditation & Assessment

The National Commission for Academic Accreditation and Assessment was established with accordance to the High Majestic approval No. 7 / b / 6024 dated on 02/09/1424 AH, and the decision of the Council of Higher Education No. 28/03/1424 AH at its twenty-eighth session held on 15/01/1424 AH. This body enjoys a moral personality and administrative and financial independency under the supervision of the Higher Education Council that is the authority responsible for the affairs of academic accreditation in higher education institutions over the secondary school level except for military education. This is all to improve the quality of higher public and private education, to ensure clarity and transparency and to provide standards rating the academic performance. Accordingly, some of Commission's main functions are setting rules, standards and conditions of evaluation and academic accreditation, and the drafting of regulations to ensure its application in higher education institutions.

The role of student in quality

First, quality activities:

1. Dealing with transparency and seriousness with questionnaires distributed by the university, college or department.

2. Paying attention to participate in the activities of quality at the university or college level and seek to get exposed at their culture.

3. To maintain the gains and Student's rights, whether academic or extra-curricular through participating in the assessment of these services, improving them and proposing some solutions to help promote them.

4. To ensure the transparency and objectivity when participating in focus groups to discuss topics serving quality issues, whether at the university or college level.

5. To keep in touch with the university graduate unit after graduation to follow the activities serving the university graduates and contribute to their development.

6. To respond effectively to the university, college or department invitation to participate in the work of the committees dealing with graduate auditors.

Second, the developmental activities:

1. To actively participate in the university external and internal activities contributing to raise the university rank with regard to the students' activities.

2. To actively participate in the departments scientific and extra-curricular activities for accreditation purposes.

3. To stick to the values reported in the context of the strategic plan of the University.

4. The initiative in making proposals for developmental proposals for the college or department to improve the educational process.

5. Participating in the membership of colleges' and departments' boards and committees related to the activities of the students to build up the principle of active participation in decision-making.

6. To ensure the registration and updating of one's personal data in the unit of Student Affairs during the study and after graduation.

Third, educational activities:

1. Making use of assistance offered by the scientific faculty members and a private office hours as well as careful evaluation of its effectiveness in helping students.

2. Interaction with and participation in events offered in the classroom and serving the quality of the educational process.

What is the importance of accreditation?

For students:

- Helps students in the process of selecting the university and finding out its reputation.
- Accreditation strengthens the university's reputation and popularity as an attracting destination for students and facilitates the process of attracting outstanding students.

For educational institutions:

- Direct feature of accreditation for the University is to help build a goodwill and a brand so that its members are proud of their sense of belonging to it.

For discipline:

- Accreditation helps to promote discipline among new and existing students.

- Accreditation is particularly useful for new and future disciplines and is useful for industries facing a shortage of skilled labor.

For recruiters:

- Universities and specialties accredited give employers, locally and internationally, a good idea about the level of skills and behaviors of graduates (prospective employees) before they can be assigned to any actual workplace.

- Accreditation provides assurances to employers that the graduates of the program are theoretically and practically proficient in their fields and ready to enter the labor market

For Businessmen:

- Arecognition by international accreditation bodies open borders and facilitate the free movement of skilled and qualified people among the various countries.

- Academic Accreditation provides appropriate insurance for businessmen that university graduates have approved the minimum knowledge and skills necessary for the success of the work.

For the State:

- Local and international academic Accreditation, based on the strict quality standards, helps to build a stereotypical image of the State as an attracting destination for students seeking higher education and promotes educational tourism.

- Accreditation helps to draw a realistic picture of the State as a source of high-level skills to work in the global markets.

Terms of quality:

To help achieve a common understanding of the concepts and terminologies important used in the system of accreditation and quality assurance, we offer definitions of certain terms commonly used.

1. Accreditation:

Is the recognition granted by a responsible and recognized commission (the quality assurance and accreditation) for an organization if they can demonstrate that their programs are compatible with the standards declared and certified, and have systems in place to ensure the quality and continuous improvement of its academic activities, in accordance with the regulations stated by the Commission.

2. Academic Accreditation:

Is the recognition that the programs of an educational institution have achieved or reached the minimum standards of efficiency and quality set in advance by the awarding body (commission) for certification.

3. Academic standards:

Are specific criteria approved by the institution and derived from external references, national or global, and includes a minimum of skills and knowledge that are supposed to be acquired by the graduates of the program, and meet the stated mission of the institution.

4. Academic Reference Standards:

Are the points of reference with which the standards and qualities of the program are compared , and thus represent general expectations about achievement levels and general qualities that must be met in a graduate of any program(major).

5. Action Plans:

The range of activities developed and implemented in a clear chain to reach specific goals.

6. Annual Report:

Self-assessment report which is prepared every year for the educational institution and based on the reports of its academic programs and various activities that achieve the organization's mission.

7. Calibration:

Adjustment and emulation of hardware and measurement in order to ensure the unit of measurement in various sectors that are used.

8. Commitment:

The individual's sense of duty and responsibility towards his work, which makes it proficient work and raises the level of work quality.

9. Customer requirements:

The desire of the customer who buys a product or ask for a service in order to get it, and therefore it must be available; otherwise, it will lead to consumer dissatisfaction that affects the sales and reputation of the company.

10. Consumer Satisfaction:

Consumer feeling of happiness and satisfaction with the service he received. This satisfaction is the primary goal of quality in all its principles. Consequently, an institution is not considered reputable unless it receives the consent of the beneficiaries about its products and services.

11. Documentation:

The process of writing and recording of all business data in an organization so that the institution has a history and reference points or mechanisms through which the data recorded can be analyzed with the aim of development and improvement.

12. Efficiency:

Is the ratio of the output quality performance of a process in comparison with the quality of the input.

13. Evaluation:

The process of measuring the quality of performance in all activities with the aim of continuous improvement of future performance.

14. General and Transferable Skills:

Skills gained from the study method and has no relationship to specialized course material, but it is rather generally such as the ability to work in a team effectively.

15. Higher Education Enhancement Projects:

Projects proposed and approved by the Ministry of Higher Education including the adoption of the necessary funding, which would enhance the quality of education in educational institutions, and increase the confidence of the beneficiaries in the outputs of institutions.

16. Human Resources:

Manpower who are working within an organization and use of raw materials for an organization in order to complete the work of the institution and they are paid salary due this work.

17. Infrastructure:

Infrastructure that serves the workers within an organization, such as buildings, laboratories, connections, telephones, and computers ... etc.

18. Educational institution:

College or university or a higher institute which offers programs of higher education leading to a university qualification (BA) or higher degree (Diploma - Master - PhD).

19. Institutional accreditation:

Is the process of evaluating the quality of the educational level of the institution on the ground that the institution conducts an investigation of the largest amount of goals, and has the resources to enable them to continue in the future.

20. Learning resources:

Educational facilities of the institution that provide easiness and flexibility for students to learn and get the targeted skills.

21. The Mission:

It is a declared constitution of an institution demonstrating the institution's mission and outputs targeted.

22. The Vision:

It is an image of the institution and its long-term ambitions and objectives.

23. The organizational structure of the institution:

The chart that shows the division of work within the organization, the name of positions available within the organization, and administrations hierarchical structures.

24. Curriculum:

Is a set of mechanisms to achieve a set of knowledge and skills offered by the university on and off campus to achieve the desired learning outcomes of the educational program in specified period of time.

25. Program Assessment:

The methods used for obtaining the views of the beneficiaries of the program, and include students, faculty members, alumni, and the labor market. All this is intended to improve and develop the educational program to respond to the progress that occurs on the content of the article and the needs of society and the environment.

26. TQM: Total Quality Management,

It is a philosophical ideology aims to develop enterprise activity using analytical methods and sophisticated and varied statistics to obtain the best results. It involves all elements of the system and management in order to achieve the required quality in institutional work and satisfaction of the beneficiary.

27. Quality:

A product that achieves and even exceeds the expectations of the consumer.

The ability of the product to meet the requirements of a job.

Matching the product to the specifications developed during design.

Meeting requirements expected by the service user or beneficiary.

28. Quality Assurance:

Is an activity and a mean to ensure requirements and the standards required for the institution to accomplish the goal of the organization to reach the outputs satisfying the labor market.

29. Quality Committees:

A group of people from both inside and outside the institution, who are responsible for following up the smooth running of the system of quality within the organization.

30. QC: Quality Control,

Are the techniques and practical activities used for conducting a Permanent examination for activity output.

31. QCs: Quality Circles:

A small group of workers involved in the process of ongoing cooperative study aimed at detecting problems that obstruct the running of work and provide appropriate solutions.

32. Quality Improvement:

The executive procedures and regulations taken by the organization to increase the effectiveness of the activities and operations within the organization per se'.

This is done so to turn with a valuable benefit at both the institution and the consumer.

33. Quality Indicators:

Set of standards that describe the quality of the work and upon which the assessment is based.

34. Quality Objectives:

Set of ambitions for which the organization draw a plan to reach; this pattern is to increase the confidence of the customers and its success as a result.

35. Quality Policy:

A method of the institution allowing it to have an access to a high-quality level; and this would lead to a greater chance to gain customer satisfaction.

36. Quality Standards:

Systems and limits to organize the work within an institution so that all outputs become of a high degree of quality and this is in accordance with the recognized standard issued by a local or an international organization.

37. Quality Strategy:

Short-term plans that will fulfill the quality to upgrade the standard of quality.

38. Quality tools:

Methods, techniques and schemes that are used to solve the problems of quality, assess the level of performance within the organization and help the development of the institution.

39. TQM: Total Quality Management,

It is a philosophical ideology aims to develop enterprise activity using analytical methods and sophisticated and varied statistics to obtain the best results. It involves all elements of the system and administrations in order to achieve the required quality in an institutional work and satisfaction of the beneficiary.

40. Self-Assessment:

A personal measure for the progress made in the individual work by thinking about what one learned and the one's personal benefit from that work and the result of it.

41. Product:

It is an output of any process, whether material or moral.

42. Service:

It is a work performed by circulation of papers and documents among persons or by giving verbal orders so that the consumer gets his/her request.

43. Site Visit:

It is a visit by the external auditors to verify the self-study provided by the institution requesting accreditation.

44. Students' achievement:

It is the students' performance level within an institution, and what they achieve of superiority, knowledge and skill acquisition.

45. Students' Support:

It is a process of assisting and guiding students on how to get the most benefit out of the educational program of the institution.

46. SWOT Analysis: Analysis of the Strengths, Weaknesses, Opportunities and Threats,

It is a tool of analytical quality aiming to assess and study the current strategic situation for an organization; it helps identify strengths and weaknesses in the organization and find out its chances of development and the threats that affect it. Such a process helps design the developmental strategic plans for the organization.

47. Teaching and Learning Methods:

The methods used by teachers to help students achieve the targeted scientific results to the course.

48. Work Environment:

The place and the circumstances surrounding the jobs and staff within a single institution.

49. Process Capability:

A statistical measure of the extent of any process managed to meet the requirements according to the standards of its design.

50. Peer Reviewer:

An individual, from outside the organization, in the same professional staff and specialization such as individuals who are delivering what the organizations offers.

Still, this individual, with no conflict of interest, can contribute in reviewing the educational program for the purposes of accreditation or internal quality assurance.

51. Preventive Action:

The action taken to prevent the occurrence of errors in the work, and thus protects the institution from the consequences of its occurrence.

52. Teamwork:

A group of people with several different skills working with each other to reach the unified goal within a certain period of time in which they share their different skills.

53. Team Leader:

A person with a leading figure and self-confidence, who gives his team a sense of power and can lead the team without problems. He/she is responsible for managing the work and the involvement of everyone in the work and meetings; he impartially manages the talk without bias for a particular side. Above all, he is responsible for the development of operational steps for action.

54. Team Recorder:

Someone with the skill of listening, a high concentration and a very fast organized writing; he is responsible for writing and documenting precisely what was going on in the team meetings.

55. Team Sponsor:

He is a tactful person and eloquent speaker with a clear utterance and polite way of talking, who can deliver what he wants to others in an easy and simple way. He is responsible for conducting the problems faced by the team to the management, discussing them in an objective manner and resolving them.

Undergraduate Study and Examinations

Definitions:

Academic Year:

Two regular semesters and a summer session, if any

Academic Semester:

A period of no less than fifteen (15) weeks of instruction, not including the registration and final examination periods

Summer Session:

A period not exceeding eight (8) weeks of instruction, not including the registration and final examination periods. The weekly duration of each course in a summer session is twice its duration during the regular academic semester.

Academic Level:

Indicates the level of study. The levels required for graduation are eight (8) or more, in accordance with the specifications of each approved degree program.

Course:

A subject of study within a certain academic level of the approved degree plan in each major. Each course has a number, code, title, and detailed description of its contents to distinguish it from other courses. A portfolio on each course is kept in its corresponding department for follow-up, evaluation, and updates. Some courses may have prerequisite or co requisite requirement(s).

Credit Hour:

Each of the weekly lectures, with a duration not less than fifty (50) minutes or a laboratory session or field study of not less than 100 minutes' duration.

Academic Probation:

A notification given to a student with a cumulative GPA below the minimum acceptable limit as explained in these regulations.

Class Work Score:

The score which reflects the student's standing during a semester according to his/her performance in examinations, research, and other activities related to a particular course.

Final Examination:

An examination in course materials, given once at the end of every semester.

Final Examination Score:

The score attained by a student in the final examination for each course.

Final Score:

The total sum of the class work score plus the final examination score for each course out of a total grade of 100.

Course Grade:

A percentage, or alphabetical letter, assigned indicating the final grade received in a course.

Incomplete Grade:

A provisional grade assigned to each course in which a student fails to complete the requirements by the required date. This is indicated in the academic record by the letter grade (IC).

In-Progress Grade:

A provisional grade assigned to each course which requires more than one semester to complete. This is indicated in the academic record by the letter grade (IP).

Semester GPA:

The total quality points a student has earned, divided by the credit hours assigned for all courses taken in a given semester. Total quality points are calculated by multiplying the credit hours by the grade point in each course.

Cumulative GPA:

The total quality points a student has earned in all courses taken since enrolling at the University, divided by the total number of credit hours assigned for these courses (see Appendix B).

Graduation Ranking:

The assessment of a student's scholastic achievement during his/her study at the University.

Minimum Course load:

The minimum number of credit hours a student can register determined by his/her academic status, and in accordance with the University Council decisions.

Absences and Warnings:

1. Absences are counted from the first day of the semester. The student must regularly attend all lectures and practical lessons. The student will not be allowed to continue the course or participate in the final examinations if his percentage of attendance is less than (75%) of the lectures and practical lessons allotted for the course. The student who is deprived of attending the final examination will fail that course.

2. College council must approve lists of deprived students

3. College which offers the course or its behalf may allow a deprived student to enter the final examination if they submit a valid excuse provided that the missed classes are not 50% or more of class time.

4. Lists of deprived students are to be announced before final examinations.

5. Students whose excuses are valid take the final examinations with their peer students. College council has the right to make exceptions to this.

6. The student will receive an academic warning if his accumulative average doesn't go beyond (2.00) and he will be expelled if he receives three consecutive warnings.

7. A student who is absent for a final examination, will be given a zero grade for that examination. His/Her grade in the course will be calculated on the basis of the class work score he/she obtained over the semester.

Leave of Absence:

Students are allowed to be excused from the semester for a period not exceeding five weeks or eight weeks (for students in the academic year system) prior to the beginning of the final examination if he submits an excuse acceptable to the college council.

The student must complete all the appropriate procedures and submit the form to the Department of Documentation in the Deanship before the deadline.

The Deanship requires the consent of the female student's guardian when she applies to be excused. The duration of absence is counted within the duration required for fulfilling the requirements of graduation.

The student must obtain the approval of his employer if he works or has a scholarship when applying for a leave of absence. A visiting student will not be approved for leave of absence during the semester if he studies outside the university.

Study Postponement and Suspension:

The student is allowed to apply for postponement before the end of the first week of the semester, if he presents an excuse acceptable by the dean, and the postponement duration must not exceed two consecutive semesters or a maximum of three in consecutive semesters.

The students applying for postponement during the academic year are not allowed to postpone two consecutive years or more than a maximum of two in consecutive years throughout the duration of study, otherwise, the student's file will be cancelled and he will be terminated from the University.

The postponement is not calculated within duration necessary for fulfilling the requirements of graduation.

Expulsion from University:

The student shall be discharged from university in the following cases:

1. If the student receives a maximum of thee academic warnings due to his low accumulative average (less than 2). The student may have a fourth chance to increase his accumulative average assuming that he will obtain 48 points by studying 12 units. This process is automatically calculated.

2. If the student does not finish the university requirements within a maximum of half the duration allotted for his graduation. In addition to the program duration, the college council may give the student an additional chance to finish the university requirements within a maximum of double the duration allotted for graduation, based upon specific conditions.

Visiting students:

A "visiting student" is a student who studies courses at another university or in any branch of the University to which he/she belongs without transferring. These courses are considered equivalent to those offered at the University, according to the following rules:

1. The student must obtain the approval of his/her college before he/she begins his/her studies.

2. His/Her studies should be at a recognized college or university.

3. The course the student takes outside his/her college should be equivalent, in terms of content, to a course required for graduation.

4. If the visiting student is studying in one of the branches of the University to which he/she belongs, the rules under Article 47 apply.

5. The University Council determines the maximum credit hours to be allocated to a visiting student from outside the University.

6. The course grades credited to the visiting student will be recorded in his/her academic record, but not included in the calculation of his/her cumulative GPA.

7. Any other conditions required by the University Council should be satisfied.

Transfer:

❖ **Transfer from One University to Another:**

The transfer of a student from outside the university may be accepted under the following conditions:

1. Acceptance of both deans of the two designated colleges in both universities

2. The student should have studied at a recognized college or university for at least one semester.

3. The student must not have been dismissed from that university for disciplinary reasons.

4. The student must satisfy the transfer conditions, as determined by the receiving college council.

5. The course load to be taken at Majmaah University should not be less than 60% of the required course to earn a BA from Majmaah University.

6. Students may transfer from one university to another in Saudi Arabia for one time only.

7. The duration of stay at the first university and the remaining duration for graduation from Majmaah University should not exceed the average of the maximum and minimum limits for completing his/her degree program.

8. Transfer procedures must finish two weeks before the commencement of the semester or the academic year for colleges that follow the year system

9. For students who do not satisfy the above conditions, the university rector in extreme cases may make exceptions based on the recommendations of the Committee for student academic problems. Exceptions may not contradict what article 42 reads.

❖ **Transfer from One College to Another within the University:**

1. A student may transfer from one college to another after obtaining a recommendation from the designated deans and the acceptance of the Committee for student academic problems. Transfer must be in accordance with any conditions set fourth by the college to which the student will transfer.

2. The student remaining duration for graduation is enough to finish all graduation requirements of the new degree

3. All transfer procedures must be finished within the first week of the semester or the year for the colleges that follow the year system

4. A student may not be allowed to transfer except after studying for one semester

5. A student may transfer for one time only during his study at the university

6. For students who do not satisfy the above conditions, the university rector in extreme cases may make exceptions based on the recommendations of the Committee for student academic problems. Exceptions may not contradict what article 46 reads.

❖ **Transfer from one course of study to another within the College:**

 Upon the approval of the dean of the college, the student is allowed to transfer from one course of study to another in accordance with the conditions set by the college council.

 All courses previously taken by the student, along with the scores, accumulative and semester averages are all fixed in the academic record of the student during his university study.

Withdrawal from University:

 The student can completely withdraw from the university if he finishes the clearance procedures, returns the student I.D. card and brings his identity documents to restore his file.

If the student is willing to re-register in the university after withdrawal, he will undergo the regulations of suspension.

When a student withdraws from the university, he must take the following points into consideration.

1. The period of his withdrawal from university is counted as if he was suspended from study.

2. The student who withdraws from university will not be granted a stipend until he registers in a new semester.

3. Monthly stipends are not granted during the summer semester unless the student registers in the summer semester.

4. The student must submit a letter of clearance concerning housing, library and other university facilities.

Semester Average and Accumulative Average

Semester Average:

The result of dividing the sum of points obtained by the student by the number of units representing the courses the student has studied in any semester. The points are calculated by multiplying the academic unit with the equivalent grade the student gets in each course.

Accumulative Average:

The result of dividing the sum of points obtained by the student in all the courses that he has studied by the number of units representing these courses.

Examinations and Grading:

The council of the college that teaches the course may allow the student to study the requirements of any course in the following semester on the basis of a recommendation by the instructor of the course.

The student then receives (IC) grade in his academic record and it is not calculated in his semester average nor in his accumulative average unless he fulfill the requirements of that course. If one academic semester passes without changing the (IC) grade in the student's record due to not fulfilling the course, the (IC) grade is replaced by (F) which is calculated in his semester average and in his accumulative average.

The mark of class work is calculated in these two ways:

- Oral exams, practical exams, researches, class activities or all of these choices or some of these choices in addition to at least one written exam.
- At least two written exams.

If research courses entail more than one semester, the student receives (IP) in his record.

By fulfilling the requirements of the course, the student will obtain the grade of that course. However, if the student cannot fulfill the course within the allotted time, the council of the college may approve an (IC) grade in his record.

The grades are calculated as follows:

Percentage	Grade Significance	Grade code	GPA (out of 5.0)
95 – 100	Excellent Plus	A+	5.00
90 – 94	Excellent	A	4.75
85 – 89	Very Good Plus	B+	4.50
80 – 84	Very Good	B	4.00
75 – 79	Good Plus	C+	3.50
70 – 74	Good	C	3.00
65 – 69	Pass Plus	D+	2.50
60 – 64	Pass	D	2.00
Less than 60	Fail	F	1.00

The general grade of the student when he graduates (based on his accumulative average) shall be as follows:

• Excellent: if the student's accumulative average is not less than (4.50).

• Very Good: if the student's accumulative average ranges from (3.75) to less than (4.50).

• Good: if the student's accumulative average ranges from (2.75) to less than (3.75).

• Pass: if the student's accumulative average ranges from (2.00) to less than (2.75).

The first honor rank is granted to the student who scores an accumulative average ranging from (4.75) to (5.00) at the time of graduation. The second honor rank is granted to the student who scores an accumulative average ranging from (4.25) to less than (4.75) at the time of graduation.

A Sample of Calculating the Semester Average and the Accumulative Average for the First Semester

Course	Units	Mark	Grade	Course Grade	Quality Points
ISC 301	2	85	B+	4.50	9:00
CHEM 324	3	70	C	3.00	9:00
MATH 235	3	92	A	4.75	14.25
PHY 312	4	80	B	4.00	16:00
TOTAL	**12**				**48.25**

First Semester

$$\frac{\text{Total quality points (48.25)}}{\text{Total credits (12)}} = 4.02$$

Second Semester

Course	Units	Mark	Grade	Course Grade	Quality Points
ISC 104	2	96	A+	5.00	10
CHEM 327	3	83	B	4.00	12
MATH 314	4	71	C	3.00	12
PHY 326	3	81	B	4.00	12
TOTAL	**12**				**46**

Second Semester

$$\frac{\text{Total quality points (46)}}{\text{Total credits (12)}} = 3.83$$

Cumulative $\dfrac{\text{Total quality points (48.25+46)}}{\text{Total credits (12+12))}} = 3.93$

Graduation:

The Deanship of Admissions and Registration Affairs prepares the graduation report (i.e. memorandum) at the end of each semester and delivers it to the university council to be approved.

Students will not graduate unless they obtain the approval of the university council.

The prospective graduates must go to the Deanship of Admissions and Registration Affairs to make sure that they have fulfilled the requirements of graduation and to fill in the form related to the graduation book within the first week of the semester in which graduation is expected.

They must submit the following:

1. One photo (4x6): (for male students only).

2. One copy of Passport (page one, for those who want to write their names in English).

3. Identification card (one copy for Saudi male students) or Family notebook for Saudi female students.

The university invites you to attend the graduation ceremony. The graduate student must go to the Deanship of Admission and Registration Affairs file section and obtain a clearance letter to be signed by the respective Departments.

Department of Computer Science and Information

A brief on Department of Computer Science and Information:

Department of Computer Science and Information was established in the academic year 1427/1428 h,(2007-2008) with the establishment of the College of Science in Al-Zulfi. The department was established, to meet the requirements of different sectors in Computer Science in the Kingdom , and to develop the required qualification and expertise. The department seeks to develop graduates which are expert in the field of computer sciences in terms of study and analysis of computer system and methods of construction, as well as expert in assisted software tools;, such as operating systems, various programming languages and computer networks. The curriculum has been prepared to provide the student with the knowledge and skills necessary for him to be proficient in this field. The department staff is continuously working on updating the B.Sc. program to meet the latest technologies in computer science and the fast changing needs of the society. As so, it was found that it is necessary to revise the curriculum that has been used for more than 5 years.

Message:

Providing higher outstanding education to equip graduates with sufficient skills and knowledge to communicate and work effectively in team to compete in the job market.

Vision:

Building an outstanding teaching environment that empowers the graduates in professional computing and contributes in development of an informatics knowledge society.

Objectives:

The most important objectives of the department are to produce high quality graduates having analytical and; interpersonal skills with entrepreneurial and computer-based problem-solving mindset.

The following are the main objectives of the department:

1. Graduates should be able to deploy appropriate tools for development of computer-based solutions.
2. Graduates should be able to deploy effectively information systems used in modern computing practice.
3. Enable graduates to compete in the job market.

4. Prepare graduates to be capable of communication and work effectively in teamwork.

5. Develop the scientific research in computer science

Study approach in the department:

Student in the College of Science spends five years spread over ten semesters. The study courses include the core courses (the requirements of the University , requirements of the College and; the requirements of the department and specialized courses). The student must finish 161 units of study.

Entry requirements for the department:

o General assimilation off the Department
o Cumulative average for the student
o Will of the student

Serving the environment and Society:

o Teaching Computer Science in the different colleges.
o Participating in research projects for the environment and society.
o Participating in various committees within and outside the college.
o Participating in cultural and scientific activities at the college and university.

Career Opportunities for Graduates:

o Working in the education in public and private sectors.
o Working as research assistant in the department or in any other Computer Science departments at the Kingdom Universities.
o Working in research centers.
o Working in the military sector.
o Working in IT as data analysts and shareholders in the preparation of strategic plans

Educational methodology to get a Bachelor's degree

The students who study in the faculty of science spend five years spread over ten semesters which include basic courses (University requirements -Faculty requirements —the department and specialization requirements). A student must study 161 credits.

Study Plan for Bachelor's Degree in Computer Science &Information

First: The Mandatory and Elective requirements:

Requirements	Type Requirements	Credits	(%) Percentage	Remarks
University	Mandatory	2	% 1.24	
	Elective	10	% 6.21	
College	Mandatory	29	% 18	
	Elective	-----	-----	
Department Core	Mandatory	81	% 50	
	Elective	12	% 7.5	
Mathematics and Sciences	Mandatory	23	% 14.3	
	Elective	-----	-------	
Summer Training	Mandatory	1	% 0.6	
	Elective	-----	-------	
Free Elective Course		3	% 1.86	
Total		161	% 100	

Second: University Requirements: (Mandatory 12 credit hours)

Course Number	Course Title	Credit Hours	Weekly Hours		Elections	Total Credits
			Lecture	Lab		
ZPSY 211	Educational & Thinking Skills	2	2	0	Mandatory	2
SALM 101	Introduction to Islamic Culture	2	2	0	Students choose 3 courses	6
SALM 102	Islam and Society Building	2	2	0		
SALM 103	Economic System in Islam	2	2	0		
SALM 104	Fundamentals of Political System	2	2	0		

	in Islam					
ARAB 101	Arabic Language Skills	2	2	0	**Students choose 1 course**	2
ARAB 103	Arabic Writing	2	2	0		
ELEC 101	Principles of Health and Fitness	2	2	0	**Students choose 1 course**	2
ELEC102	Business Entrepreneurship	2	2	0		
SOCI 101	Societal Issues	2	2	0		
LHR 101	Human Rights Systems	2	2	0		
FCH 101	Family and Childhood	2	2	0		
VOW 101	Volunteering Systems	2	2	0		
				Total		12

Third : College Requirements: (Mandatory 29 credit hours)

Course Number	Course Title	Credit Hours	Weekly Hours			Prerequisite
			Lecture	Lab	EX	
PENG 111	Preparatory English (1)	8	20	0	0	-
PMTH 112	Introduction to Mathematics (1)	2	2	0	1	-
PCOM 113	Computer Skills	2	1	2	0	-
PSSC 114	Learning and Communication Skills	2	1	2	0	-
PENG 121	Preparatory English (2)	6	14	0	0	PENG 111
PENG 123	English for Science and Engineering	2	2	0	0	PENG 111
PMTH 127	Introduction to Mathematics (2)	4	4	0	1	PMTH 112
PPHS 128	General Physics	3	2	2	0	-
	Total	**29**	**48**	**2**	**0**	

Fourth : Department Requirements (93 Credits):

4-a) Mandatory Department Courses (81 CHs):

Course Number	Course Title	Credits Hours	Weekly Hours			Prerequisite
			Lec.	Lab	Ex	
ENG 210	Technical English	2	2	0	0	PENG 121
CSI 211	Programming 1	3	2	2	0	PCOM 113
CSI 221	Programming 2	3	2	2	0	CSI 211
CSI 223	Digital Logic Design	3	2	2	0	PHYS 217
CSI 224	Fundamentals of Information Systems	3	3	0	0	---
CSI 311	Visual Programming	3	2	2	0	CSI 221
CSI 312	Data Structure	3	2	2	0	CSI 221, CSI 212
CSI 313	Computer Organization and Assembly Lang.	3	2	2	0	CSI 223
CSI 314	Database	3	2	2	0	CSI 211
CSI 321	Design & Analysis of Algorithms	3	2	0	2	CSI 312
CSI 322	Computer Networks	3	2	2	0	CSI 224
CSI 323	Computer Architecture	3	3	1	0	CSI 313
CSI 324	Advanced Database	3	1	4	0	CSI 314
CSI 325	Software Engineering 1	3	2	2	0	CSI 221
CSI 411	Artificial Intelligence	3	2	2	0	CSI 321
CSI 412	Operating Systems	3	2	2	0	CSI 313
CSI 413	Compiler Design	3	2	2	0	CSI 222
CSI 421	Distributed Systems & Parallel Processing	3	2	2	0	CSI 321
CSI 422	Software Engineering 2	3	2	2	0	CSI 325
CSI423	Cryptography	3	3	1	0	CSI 321
CSI 425	Computer Graphics	3	2	2	0	Math 310
CSI 510	Graduation Project 1	2	2	0	0	120 Cr. Hrs
CSI 511	Web Programming & Internet Technology	3	2	2	0	CSI 322
CSI 512	Data Mining	3	2	2	0	CSI 314
CSI 513	Concepts of Programming Languages.	3	2	2	0	CSI 222

CSI 520	Graduation Project 2	3	3	0	0	CSI 510
CSI 522	Human Computer Interaction	3	2	2	0	CSI 511
CSI 525	Professional Ethics	2	2	0	0	CSI 422
	Total	81	59	44	2	

4-b) Department Elective Courses (12 Credit Hrs):

- Student must select 4 courses from either of the next three tracks:-

Track I: Computer Graphics and Multimedia

Course Number	Course Title	Credits Hours	Weekly Hours		Prerequisite
			Lecture	Lab	
CSI 414	Digital Image Processing	3	2	2	MATH 310
CSI 424	Computer Vision	3	2	2	CSI 414
CSI 514	Interactive Computer Graphics	3	2	2	CSI 425
CSI 521	Multimedia Technology	3	2	2	CSI 425
CSI 530	Digital Photography	3	2	2	MATH 220

Track II: Computer Networks

Course Number	Course Title	Credits Hours	Weekly Hours		Prerequisite
			Lecture	Lab	
CSI 431	Advanced Computer Networks	3	2	2	CSI 322
CSI 432	Network Security	3	2	2	CSI 431
CSI 531	Wireless & Mobile Computing	3	2	2	CSI 322
CSI 532	Network Programming	3	2	2	CSI 431
CSI 533	Cloud Computing	3	2	2	CSI 322 , CSI 321

Track III: Individual Track: Student should select his courses from the above two tracks or from the following table

Course Number	Course Title	Credits Hours	Weekly Hours		Prerequisite
			Lecture	Lab	
CSI 441	Machine Learning	3	2	2	CSI 411
CSI 442	Introduction to Robotics	3	2	2	CSI 411
CSI 443	Expert Systems	3	2	2	CSI 411
CSI 444	Computational Methods	3	2	2	Math 310
CSI 445	Operational Research	3	2	2	STAT 320, MATH 310
CSI 446	Information System Management	3	2	2	CSI 314
CSI 447	Information Security	3	2	2	CSI 423
CSI 448	Project Management	3	2	2	CSI 422
CSI 449	Geographic Information Systems (GIS)	3	2	2	CSI 324

Fifth: Mathematics and Sciences Requirements (31 Credits)

Course Number	Course Title	Credit Hours	Weekly Hours			Prerequisite
			Lec.	Lab.	EX.	
PMTH 112	Introduction to Mathematics (1)	2	2	0	1	
PMTH 127	Introduction to Mathematics (2)	4	4	0	1	PMATH 112
PPHS 128	General Physics	3	2	2	0	
PHYS 217	Physics 2	3	2	2	0	PPHS 128
CHEM 225	General Chemistry	2	2	0	0	-
MATH 212	Calculus I	3	3	0	1	PMTH 127
MATH 220	Calculus II	3	3	0	1	MATH 212
MATH 310	Linear Algebra & Differential Equations	4	3	0	2	MATH 220
Stat 320	Probability & Statistics	3	3	0	1	MATH 220
CSI 212	Discrete Math for Computer Science 1	3	2	0	2	PMTH 127

CSI 222	Discrete Math for Computer Science 2	2	2	0	0	CSI 212
	Total	32	28	4	8	

> **The Study Plan of Computer Science and Information Program**

Third Level:

Course Code	Course Name	Lec	Lab	Ex	Cr	Prerequisite
CSI 211	Programming 1	2	2	0	3	PCOM 113
CSI 212	Disc. Math for CS 1	2	0	2	3	PMTH 127
Math 212	Calculus 1	3	0	1	3	PMTH 127
PHYS 217	Physics 2	2	2	0	3	PPHS 128
ENG 210	Tech. English	2	0	0	2	PENG 121
ZPSY 211	Educational & Thinking Skills	2	0	0	2	--
Total					**16**	

Fourth Level:

Course Code	Course Name	Lec	Lab	Ex	Cr	Prerequisite
CSI 221	Programming 2	2	2	0	3	CSI 211
CSI 222	Disc. Math For CS 2	2	0	0	2	CSI 212
MATH 220	Calculus 2	3	0	1	3	MATH 212
CSI 223	Dig. Logic Design	2	2	0	3	PHYS 217
CSI 224	Fund. of Inf. Systems	3	0	0	3	---
CHEM 225	General Chemistry	2	0	0	2	---
Total					**16**	

Fifth Level:

Course Code	Course Name	Lec	Lab	Ex	Cr	Prerequisite
CSI 321	Design & Analysis of Algorithms	2	0	2	3	CSI 312
CSI 322	Computer Networks	2	2	0	3	CSI 224
CSI 323	Computer Architecture	3	1	0	3	CSI 313
CSI 324	Advanced Database	1	4	0	3	CSI 314
CSI 325	Software Engineering 1	2	2	0	3	CSI 221
STAT 320	Probability & Statistics	3	0	1	3	MATH 212
Total		**18**				

Sixth Level:

Course Code	Course Name	Lec	Lab	Ex	Cr	Prerequisite
CSI 311	Visual Programming	2	2	0	3	CSI 221
CSI 312	Data Structure	2	2	0	3	CSI 221, CSI 212
CSI 313	Computer Organization and Assembly Language	2	2	0	3	CSI 223
CSI 314	Database	2	2	0	3	CSI 211
MATH 310	Linear Alg. & Diff. Eq.	3	0	1	3	Math 220
ISL ***	Elective Islamic Course 1	2	0	0	2	--
Total		**17**				

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Seventh Level:

Course Code	Course Name	Le	Lb	Ex	Cr	Prerequisite
CSI 411	Artificial Intelligence	2	2	0	3	CSI 321
CSI 412	Operating Systems	2	2	0	3	CSI 313
CSI 413	Compiler Design	2	2	0	3	CSI 222
***	Elective Course 1	*	*	*	3	***
ARAB ***	Elective Arabic Course	2	0	0	2	--
ISL***	Elective Islamic Course 2	2	0	0	2	--
CSI 400	Summer Training	1	0	0	1	72 Cr. Hrs
Total					**17**	

Eighth Level :

Course Code	Course Name	Lec	Lab	Ex	Cr	Prerequisite
CSI 421	Distributed Systems & Parallel Proce	2	2	0	3	CSI 321
CSI 422	Software Engineering 2	2	2	0	3	CSI 325
CSI423	Cryptography and Information Security	3	1	0	3	CSI 321
CSI 425	Computer Graphics	2	2	0	3	Math 310
***	Elective Course 2	*	*	*	3	***
ISL ***	Elective Islamic Course 3	2	0	0	2	--
Total		**17**				

Ninth Level :

Course Code	Course name	Le	Lb	Ex	Cr	Prerequisite
CSI 510	Graduation Project 1	2	0	0	2	120 Cr. Hrs
CSI 511	Web Programming & Internet Technology	2	2	0	3	CSI 322
CSI 512	Data Mining	2	2	0	3	CSI 314
CSI 513	Concepts of Prg. Lang.	2	2	0	3	CSI 222
***	Elective Course 3	*	*	*	3	***
***	Elective Prerequisite Univ.	2	0	0	2	***
Total					**17**	

Tenth Level:

Course Code	Course	Le	Lb	Ex	Cr	Prerequisite
CSI 520	Graduation Project 2	3	0	0	3	CSI 510
CSI 522	Human Computer Interaction	2	2	0	3	CSI 511
CSI 525	Professional Ethics	2	0	0	2	CSI 422
***	Elective Course 4	*	*	*	3	***
***	Free Elective Course	*	*	*	3	***
Total				**14**		

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Elective Courses Descriptions

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Track I: Computer Graphics & Multimedia

Course Number	Course Title	Credits Hours	Weekly Hours		Prerequisite
			Lecture	Lab	
CSI 414	Digital Image Processing	3	2	2	MATH 310
CSI 424	Computer Vision	3	2	2	CSI 414
CSI 514	Interactive Computer Graphics	3	2	2	CSI 425
CSI 521	Multimedia Technology	3	2	2	CSI 425
CSI 530	Digital Photography	3	2	2	MATH 220

Track II: Computer Networks

Course Number	Course Title	Credit Hours	Weekly Hours		Prerequisite
			Lecture	Lab	
CSI 431	Advanced Computer Networks	3	2	2	CSI 322
CSI 432	Network Security	3	2	2	CSI 431
CSI 531	Wireless & Mobile Computing	3	2	2	CSI 322
CSI 532	Network Programming	3	2	2	CSI 431
CSI 533	Cloud Computing	3	2	2	CSI 322 , CSI 321

Track III: Individual Track :

Course Number	Course Title	Credit Hours	Weekly Hours		Prerequisite
			Lecture	Lab	
CSI 441	Machine Learning	3	2	2	CSI 411
CSI 442	Introduction to Robotics	3	2	2	CSI 411
CSI 443	Expert Systems	3	2	2	CSI 411
CSI 444	Computational Methods	3	2	2	Math 310
CSI 445	Operational Research	3	2	2	STAT320,MATH 310
CSI 446	Information System Management	3	2	2	CSI 314
CSI 447	Information Security	3	2	2	CSI 423
CSI 448	Project Management	3	2	2	CSI 422
CSI 449	Geographic Information Systems (GIS)	3	2	2	CSI 324

Courses Descriptions

CSI 211 Programming 1:

This course introduces the students to basic programming concepts and constructs. Student gain fundamental experience in how C++ is used. Topics include: control structures, functions, recursion, arrays, pointers and strings of the C++ programming language. The course introduces students to structured, top-down programming design and implementation. This course should serve as a foundation for programming to the students in the programming.

CSI 212 Discrete Mathematics for Computer Science 1

The current course introduces the basic concepts of logic and its tools. This enables problem formulation in a logical manner. Also the logical way of thinking can be applied to the real life. These objectives can be successfully achieved through the conduction of the following topics: Propositional Logic; Set Theory; Proofs; Functions, Sequences, and Relations; Methods of Counting; Recurrence Relations; Graph Theory and Introduction to Trees.

MATH 212 Calculus 1

The current course aims to provide a language for working with ideas relevant to computer science. The course is concerned with two main topics: Differential and Integral Calculus. The 1st topic is covered completely including basic concepts of the function as: Domain, Range, Mathematical Modeling, Composition, Boundness, Equality, Intervals of Increase and Decrease, Piecewise-definition, Symmetry and Homogeneity. Classification, Important types, Graphs and Related Properties, Algebraic Operations on the graph. The Inverse: Conditions and

Tests of Existence, Principal Branches, Analytical and Graphical Determination of the inverse. Indeterminate Forms ($0*\infty$, $\infty-\infty$): Definitions, Concepts, Related Theorems, and Evaluations, Definitions of Continuity and Discontinuity. The Derivatives of all standard functions: Power Function, Trigonometric Function and their Inverse, Hyperbolic Functions and their Inverse, considering : Graph, Domain, Range, Symmetry, and Periodicity. Applications of the Derivatives regarding: General derivatives, Implicit Differentiation, Parametric Differentiation and the Chain Rule, Important theorems as: Roll's,   Mean Value, Maclurin's, Taylor's and L'Hopital Theorems, Geometric applications: Curve tracing, Polar Coordinates, Famous polar curves. The 2nd topic covers all the essential requirements of integral Calculus, starting with Indefinite Standard Integration including all the Basic Concepts and Properties, Notable Remarks, Tables Of Standard Integration (All Elementary Functions), Basic Forms, Various Skills Using Algebraic Relations to obtain different forms of the solution of the same problem. Also, the student will have robust study of Techniques of Evaluation of Indefinite Non-standard Integration: Completing a perfect square, Using Partial Fractions, By Parts, By Substitutions

PHYS 217 Physics 2

This course includes two parts;

Part A: general physics: Electric fields, Coulomb's law, Gauss' Law, electric potential, capacitance and dielectric, currents and resistance, electrical energy and power, direct current circuits, Kirchhoff's rules, magnetic fields, motion of charged particle in a magnetic field, sources of the magnetic field, Faraday's law of induction, Ampere's law, mutual inductance, alternating current circuits, the RLC series circuit(a resistor, an inductor, and a capacitor connected in series), power in an A.C. circuit, resonance in RLC services circuit.

Part B Basic Electronics: The P-N junction diode and Zener diode with their applications, Junction Field effect transistor, Bipolar junction transistor (Bias and amplifiers: JFET & BJT).

ENG 210 Technical English :

In this course students learn to read various computer science related materials. Use of the internet both for research and communication is an integral part of the course experience. Most of the course activities are student centred and they learn to cooperate with their friends and partners. Also student-teacher interactions become more frequent in the lecture room.

This course will also offer students a broad introduction to English in the context of information Technology assuming a general English base. It is essentially a functional course that builds IT- related vocabulary with a strong emphasis on reading skills, searching, understanding and utilizing information. Use of the computer dictionary is an essential part of this course.

CSI 221 Programming 2 :

This course is an introductory course in object oriented programming. The fundamental concepts of object oriented programming will be studied using the C++ programming language. Topics to be covered: Functions - Classes and Objects - Inheritance – Polymorphism – Operator Overloading - File processing and Streams.

CSI 222 Discrete Mathematics of Computer Science (2):

This course covers the mathematical topics that are mostly directed to computer science. Students may need them in courses like cryptography, compiler, and programming design. Topics include: Introduction to number theory, concepts of abstract algebra, and formal languages - Number Theory: Divisibility and Euclidean algorithms. Modular arithmetic, Fermat's and Euler's theorems, Chinese remainder theorem - Concepts of Abstract Algebra: groups, rings, fields, Homomorphism, Lagrange's theorem, Finite fields - Automata Theory: Finite state machine, Regular expressions, DFA, NDFA, and their equivalence, Grammars and Chomsky hierarchy.

MATH 220 Calculus 2

The current course aims to abstract the essentials of problems and formulate them mathematically and in symbolic form so as to facilitate their analysis and solution. The 1st topic is The definite integration: Introduction & Basic Concepts and Properties of Definite Integrals, Theorems

Facilitating Evaluation of Definite Integrals, Improper Integrals of First And Second Kinds, Case Study: Special Functions Defined As Definite Integrals. Applications of definite integration: Using Cartesian, Parametric, and Polar coordinates in: Area between two curves, Length of plan curves. The 2nd topic is The Partial Differentiation: Basic Concepts: of Functions of several variables, Partial derivatives of order one and higher orders, Chain rule for one parameter and more. Applications: Rates, Exact differential expression, Del operator: Gradient & Divergence & Curl. The 3rd topic is The Analytic Geometry: Two Dimensions: The different forms of equations of straight line, The conic sections: equations and geometric properties. Three Dimensions: The Cartesian, Cylindrical, and Spherical Coordinates and their interrelations. The Directional Cosines and Ratios. The Plane, The Straight Line, The Quadric Surfaces. The 4th topic is The Multiple Integral and Vector Calculus: Double Integral: The Cartesian coordinates, Change of order, Polar coordinates. Line Integral: Opened/Closed paths in different coordinate systems. Green's Theorem, Path independence. The 5th topic is The sequences and Infinite Series: Definition: Sequence, Series, Convergence, Divergence. Tests for Convergence And Divergence For Positive Series: N^{th} term test, Polynomial test, Comparison test, N^{th} root test, Ratio test, Integral test. Alternating Series: Leibnitz theorem for Absolute and conditional convergence. Power Series: Formation, Interval of convergence.

CSI 223 Digital Logic Design :

The course provides students with basic knowledge in: Binary Numbers, Octal and Hexadecimal Numbers, Number Base Conversions, Complements, Signed Binary Numbers, Binary Codes; Boolean Algebra and Logic Gates, Basic Definitions, Axiomatic Definition of Boolean Algebra, Basic Theorems and Properties of Boolean Algebra, Boolean Functions, Canonical and Standard Forms. Digital Logic Gates, Integrated Circuits, Transistor equivalent of Digital Logic Gates; Gate-Level Minimization, The Map Method, Four-Variable Map, Five-Variable Map, Product of Sums Simplification, Don't-Care Conditions, NAND and NOR Implementation, Exclusive-OR Function; Combinational Logic, Combinational Circuits, Analysis Procedure, Design Procedure, Binary Adder-Subtractor, Decimal Adder, Binary

Multiplier, Magnitude Comparator, Decoders, Encoders, Multiplexers; Sequential circuits: Latches and Flip flops, Sequential circuits analysis and design, Finite state machines, Registers and Counters.

CSI 224 Fundamentals of Information Systems:

The current course furnishes an overview of the fundamentals of data and information processing as they relate to meeting the needs of an organization in immediate and long run operations. Also, it provides an understanding of how information systems are used in organizations. These objectives can be successfully achieved through the conduction of the following topics: Basic Concepts of systems: What is it? Why we need it? How it is constructed? When and where it is used? Components of information systems, levels and types of information systems, important illustrative examples of real-life practical information systems: DSS, ERP, Expert Systems, GUI, and Internet portals, and introduction to Database.

CHEM 225 General Chemistry

General chemistry course should be studied in the first levels. It describes atomic theory, chemical bonding, chemical reactions, gases, liquids, chemical equilibrium, thermochemistry and chemical kinetics.

CIS 224 Visual Programming :

This course offers comprehensive coverage of C#, explaining the core of the language including the basics of LINQ vocabulary (Language Integrated Query). You gain fundamental experience in how C# is used as part of the .NET Framework, including: 1-language fundamentals: data types and control constructs, defining and calling methods, and employing .NET library classes. 2- Developing C# Classes: defining classes, and creating and using objects. 3-Interconnecting Objects: associating classes, and exposing interfaces.

CSI 312 Data Structures:

This course introduces the basic theories and methodologies of data Structure. It is organized to provide a pedagogical path that starts with the basics of C++ programming and object-oriented design based on concrete structures, like arrays and linked lists, in order to provide a concrete footing to build upon when constructing other data structures. Then add foundational techniques like recursion and algorithm analysis, and, in the main portion of the course, we present fundamental data structures and algorithms, concluding with a discussion of memory management (that is, the architectural underpinnings of data structures). Specifically, the chapters for this course are organized as follows: Arrays, Linked Lists, and Recursion , Analysis Tools, and Stacks, Queues, and Deques , and List and Iterator ADTs, Trees, Heaps and Priority Queues , Hash Tables, Maps, and Skip Lists , Search Trees , Sorting, Sets, and Selection ,Strings and Dynamic Programming.

CSI 313 Computer Organization and Assembly Language :

This course introduces topics related to computer organization and architecture in two paradigms: "what", and "how". To answer "what", the course presents the fundamental principles of computer organization and architecture. This leads to an understanding of the design of processors, the structure and operation of memory and virtual memory, cache, storage, and pipelining, system integration, and peripherals. The course also provides an introduction to issues of system performance evaluation and the relationship of architecture to system software. Regarding the "how", the course provides basic programming in assembly language. This leads to a direct and practical understanding of the inner working stages of a processor in relation to the rest of the system, including memory and cache management, interrupt processing and pipelining. Execution of software via assembly language and high level languages is explained in terms of system software tools which include assemblers, compilers, linkers, and loaders.

CSI 314 Database :

This course aims to discuss the basic concepts and design of database. It covers topics such as: data model, levels of abstraction, data independence, and concurrency control. Focuses on how to design databases for given problems, and how to use database effectively, these including ER model, key and participation constraints, weak entities, class hierarchies, aggregation and conceptual DB design using the ER

model. Relational model: creating and modifying relation using query language, enforcing integrity constrains, ER to relational and view. Schema refinement and normal forms: Functional dependencies, reasoning about functional dependencies, normal forms, decompositions and normalization. Relational Queries: Relation algebra and calculus and commercial query languages. Object database systems: User defined abstract data type, structured types, objects; object identity; and reference type, inheritance, and database design for an ORDBMS. Students will be trained on some software tools such as: Oracle, Sybase, DB2, and Informix.

MATH 310 Linear Algebra and Differential Equations:

The course has two basic tracks. The 1st track is concerned with the Linear Algebra where the student will study the theory and applications of arrays, mainly vectors and matrices through the subjects: Basic Concepts of Arrays, Important frequent types of matrices, Echelon Form, Important algebraic operations on matrices, , the Model matrix; Orthogonal, Orthonormal, and Unitary matrices. Diagonalization, and Similarity properties, Caley_Hamilton theorem and its Applications, The minimal polynomial. Functions of matrices, Positive and negative definite matrices. The 2nd Track is devoted for the Differential Equations: Basic Concepts: First Order and First Degree Differential Equations: Separable & reducible to separable, Homogeneous & reducible to homogeneous, Exact & reducible to exact (integrating factor), Linear & reducible to linear (Bernoulli), High Order and First Degree Differential Equations: (with constant coefficients): Independent Solutions and the Wronskian, D-operator & Inverse D-operator, Method of undetermined coefficients, Complementary and Particular solutions, Simultaneous high order differential equations, Shift rule and its application for the particular solution.

CSI 321 Analysis and Design of Algorithms:

This course is continuing to provide students with the ability to select algorithms appropriate to particular purpose and to apply them, recognizing the possibility that no suitable algorithm may exist. This relies on understanding the range of algorithms that address an important set of well-defined problems, recognizing their strengths and weaknesses, and their suitability in particular contexts. Efficiency is a pervasive theme throughout this area. A new range of paradigms and techniques to design algorithms and to solve problems is considered: Review of

Basic Analysis - Algorithms strategies - Solving Recursions - Sorting and Searching: Insertion sort, Selection sort, Bubble sort, Merge Sort, Quick sort, linear search, Binary search - Dynamic Programming - Advanced data structures – and Graph Algorithms.

CSI 322 Computer networks :

This course is an introduction to computer networks, stressing the logical organization of the three networking features architecture, algorithms, and implementations with focus on performance. Topics include:

- Introduction: overview of computer networks
- Fundamentals of data transmission: wired/wireless media, digital vs. analog transmission, data coding.
- Multi-user communication and multiplexing

LAN technology and data link protocols: point-to-point links and sliding window flow control, Ethernet and CSMA/CD, switched and carrier Ethernet, Wireless LAN and CSMA/CA, cellular networks and advanced multi-user communication.

CSI 323 Computer Architecture :

This course provides students with basic knowledge in: Fundamentals of computer design, Performance evaluation, Instruction set principles, Processor organization and design, Pipelining, Instruction and arithmetic pipelines, Dynamic and speculative execution, Precise exception, CISCS, RISC, and VLIW processors, Memory Hierarchy, Virtual memory, Multilevel caches, Storage and I/O, Introduction to Multicore, multiprocessors, and clusters, New trends in computer architecture.

CSI 341 Advanced Database:

This course introduces the concepts and principles of database management systems (DBMS). It focuses on terminology and fundamental concepts of relational databases and database management systems. Students will learn SQL and PL/SQL including, triggers and transaction processing. They will understand performance issues and optimization strategies through query rewriting, secondary storage characteristics, and access strategies. This course also exposes student to some of the current challenges facing database professionals (e.g. semi-structured data management, XML databases, information extraction, data integration) as well as some DBMS design and management issues. Major topics include: Transaction management - Recovery, concurrency control - PL/SQL Programming - Indexing and Hashing - Parallel Databases, Distributed Databases - File organization and access - Buffer management - Performance analysis and storage management - Database system architecture - Query processing and optimization, Reliability, protection, and integrity.

CSI 325 Software Engineering 1:

The main objective of this course is to provide students with an overall foundation of software engineering to effectively and efficiently design and implement function-oriented systems. Topics to be covered include: software development life cycle models, system analysis, system development tools, cost benefit analysis, system planning and selection, requirements engineering, system design strategies, designing human interface, rapid application development and CASE tools for function-oriented systems, and system testing, operation and maintenance.

STAT 320 Probability & Statistics:

Discrete Probability Distributions, Continuous Probability Densities, Joined Conditional Probability, Random Variables, Joint Distribution: Expectation, Variance, Covariance, Correlation Coefficient, Law of Large Numbers, Central Limit Theorem, Generating Functions, Markov Chains, Random Walks. Statistics: Towards Statistical, Thinking for Decision Making, Descriptive Sampling Data , Analysis,   Probability for Statistical Inference and Modelling. Necessary Conditions for Statistical Decision Making,   Estimators and Their Qualities, Hypothesis Testing:

Rejecting a Claim, Hypotheses Testing for Means and Proportions, Tests for Statistical Equality of Two or More Populations, Applications of the Chi-square Statistic, Regression Modelling and Analysis, Index Numbers with Applications.

CSI 311 Artificial Intelligence:

The course provides an introduction to the types of problems and techniques in Artificial Intelligence. Problem-Solving methods and major structures used in Artificial Intelligence programs, constraint satisfaction problems. Study of knowledge representation techniques such as predicate logic, non-monotonic logic, and probabilistic reasoning. Application areas of AI such as game playing, expert systems, Machine learning, natural language processing, Neural Network, agents – multi-agents systems, and robotics. Project: cover some course areas using a logic programming tool (Prolog language for example).

CIS 412 Operating Systems:

Fundamental concepts of operating-systems, principles of modern operating systems, including operating systems structures, system performance and models, systems with multiprogramming, process and thread management, processor scheduling, synchronization, basic concepts of deadlock, memory management, File-System Interface ,Storage Structure ,Data Storage on Disks ,File-Systems : Fat ، Fat32 ، NTFS, Hardware Protection.

CSI 413 Compiler Design:

This course introduces the student to the design and implementation of compilers. Topics include: compiler organization, algorithms for lexical, syntactic and semantic analysis, top-down and bottom-up parsing (e.g., recursive descent, LL, LR, LALR parsing), symbol table organization, error detection and recovery, intermediate and object code generation, and code optimization. Student has to implement a compiler for a simple high level language (like mini C) as a project .

CSI 421 Distributed Systems &Parallel Processing:

The objective of this course is to introduce students to the fundamentals and techniques of distributed computing and provide them with the basic skills of how to write distributed programs. Topics to be covered include: distributed computing, distributed programming, distributed systems, concurrency, distributed computing paradigms, inter-process communications, group communications, operating system support, distributed objects, application programming interfaces (RMI, RPC), client server model, the socket API, security issues and Internet applications. In this course also, student will study an introduction to parallel processing. Models of parallel machines. Parallel programming paradigms and models. Performance analysis of parallel systems. Parallel programming languages and frameworks. Students are expected to develop distributed applications using latest technologies.

CSI 422 Software Engineering2 :

This course covers the main concepts of object-oriented software engineering concepts. Topics include: object-oriented software processes:

Agile process models, process activities, the Rational Unified Process, Computer-Aided Software Engineering. System Models: Context models, Behavioural models, Data models, Object models, CASE workbenches. Object Oriented Concepts: Object approach. Unified Modelling Language (UML): Class Diagram, Object Diagram, Use Case Diagram, Collaboration Diagram, Sequence Diagram, Component Diagram, and Deployment Diagram. Rapid application development and CASE tools for object-oriented systems – Object-oriented systems testing, operation and maintenance.

CSI 423 Cryptography and Information Security :

The aim of this course is to facilitate understanding of the inherent strengths and limitations of cryptography, especially when used as a tool for information security. Armed with this knowledge, student should be able to make more informed decisions when building secure systems. The course covers various aspects of symmetric and asymmetric cryptography. While some topics will be dealt with in more detail, the course will

attempt to provide a broad coverage of possibly all the core areas of cryptography. The students will be expected to implement and analysis some simple cryptographic schemes and read various articles. To understand the principles of encryption algorithms; conventional and public key cryptography. To have a detailed knowledge about authentication, hash functions and application level security mechanisms. Topics include: Overview - Encryption Techniques - Block ciphers and DES - Review of Mathematical concepts - Finite Fields. Advanced Encryption Standard - Block cipher operation - Public key Cryptography and RSA - Other public key cryptosystem - Hash functions: Applications of Cryptographic hash functions, simple hash functions, SHA-3, Digital signatures.

CSI 449 Geographic Information Systems:

Fundamental Geographic Information Systems concepts to create, edit, and query spatial data. - An introduction to map projections, coordinate systems, data capture, attribute tables - Data manipulation, remote sensing, aerial and satellite imagery and using Global Position Systems (GPS) - Transferring data to GIS data models - Spatial relationships analysis and making decisions from presented information through various geo-processing techniques - Applications of GIS in many fields - Development of GIS systems.

CSI 425 Computer Graphics:

Computer Graphics I is a study of the hardware and software principles of interactive raster graphics. Topics include an introduction to the basic concepts, 2-D and 3-D modelling and transformations, viewing transformations, projections, rendering techniques, graphical software packages and graphics systems. Students will use a standard computer graphics API to reinforce concepts and study fundamental computer graphics algorithms.

CSI 510 Graduation Project 1:

This course is the first of a two-course sequence in which the students will develop a complete software system. The second stage will be carried out in CSI420. Students will work in groups of up to four students, each group will have a supervisor to guide them through the system development process using a specific methodology.

In this first part, each group must identify a problem domain, define the problem, identify and specify the requirements, document the current system, analyze it, propose alternative systems, and design a solution. The design must include the definitions of all the required system models, such as the data model and the functional model. At the end of the course, each group must submit a formal report documenting the complete process.

CSI 511 Web Programming & Internet Technology:

This course presents number of powerful software technologies that will enable the student to build systems to integrate Internet, web components, and remote databases. It presents the "client-side" and "server-side" of web programming. For the client side it presents a carefully paced introduction to using the popular JavaScript language and the closely related technologies of XHTML (Extensible Hypertext Mark-up Language), CSS (Cascading Style Sheets). Novices will find that the material in the JavaScript chapters presents a solid foundation for the deeper treatment of scripting. The third class concentrates on using technologies such as web servers, databases (integrated collections of data), PHP, ASP.NET, to build the server side of web-based applications.

CSI 512 Data Mining:

This course introduces the basic theories and methodologies of data mining process includes data selection and cleaning, machine learning techniques to ``learn" knowledge that is ``hidden" in data, and the reporting and visualization of the resulting knowledge. This course will cover these issues and will illustrate the whole process by examples of practical applications from the life sciences, computer science, and commerce. Several machine learning topics including classification, prediction, and clustering will be covered. Machine learning packages.

CSI 513 Concepts of programming languages:

This course introduces to students the following topics: Brief history of programming languages - Formal grammars - BNF notation - Principles of modern programming languages: features, design and evaluation - Imperative versus declarative language styles - General-purpose language features, such as types, operators, expressions, subprograms, recursion, and object-orientation - Special purpose language features, such as support for graphical interface, concurrency, and non-determinism - Relationship between language design and implementation.

CSI 520 Graduation Project 2:

In this course, each group will continue developing the software systems started in CSI 410. Each group must use a particular tool to implement its system in a good programming practice. This implementation tool is preferably new –i.e. not taken in previous courses. Furthermore, students must generate a user manual for their information system in an appropriate format. At the end of the term, each group must submit a final report, which documents completely the information system from the problem definition phase to the implementation phase and contains a user manual for the information system. Team work, leadership, communication and writing skills are all important ingredients for a successful project.

CSI 522 Human-Computer Interaction:

Human-Computer Interaction (HCI) is a rapidly expanding research and development area that has transformed the way we use computers in the last thirty years. The course introduces fundamental methods, principles and tools for designing, programming and testing interactive systems. It also introduces students to the design, implementation, and evaluation of human-computer interfaces, with emphasis on user-centered design and graphical user interfaces (GUI). The course covers topics such as usability and affordances, user-centered design, human cognitive and physical ergonomics, information and interactivity structures, interaction styles, interaction techniques, and user interface software tools with a special focus on mobile user interfaces.

CSI 525 Professional Ethics:

This course will examine the ethical issues that arise as a result of increasing use of computers, and the responsibilities of those who work with computers, either as computer science professionals or end users. The course will stress the ways in which computers challenge traditional ethical and philosophical concepts, and raise old issues in a new way. By the end of this course, students will be expected to read and understand the ideas in the readings; explain the ideas; analyze issues and see them from diverse perspectives; and formulate and critique arguments. The readings will include technical issues in computer science and may focus on a particular area such as software design as well as more traditional topics such as philosophical theories (e.g. ethical relativism, utilitarianism, deontological theories, rights, and virtue ethics), privacy, intellectual property rights and proprietary software, security, accountability, liability, the digital divide, hacking, and viruses.

CSI 414 Digital Image Processing :

The current course aims to provide an introduction to basic concepts and methodologies for digital image processing in both theoretical and practical aspects. Therefore the course topics are selected to provide a good understanding and design principles for several effective techniques used for image enhancement and to provide the necessary knowledge for further study in Computer Vision, Scientific Visualization and Image Pattern Recognition. These topics are: Introduction: Image Models, Image Acquisitions and digitization, Terminologies - Image Transformations: Manipulation & Processing by (Fourier, Discrete Cosine, Hoteling, Wavelet transforms) - Image Enhancement: Spatial & Frequency Domain Filters methods - Image Compression methods and Restoration - Image Segmentation.

CSI 424 Computer Vision:

This course covers fundamental topics in computer vision. The course will provide an introduction to image formation, image processing, feature detection, segmentation, multiple view geometry and 3D reconstruction, motion, face detection, object recognition and classification. As such, after completing this course, students will learn the basics of computer vision and some of the state-of-the-art techniques. They will be able

to write programs that can perform image segmentation, image matching, object detection or recognition, and applications such as content-based image retrieval or construction of panoramas. Upon completion of the course they should be able to take an internship or job with a vision company or research lab doing vision or to participate in undergraduate research leading to potential graduate level research.

CSI 514 Interactive Computer Graphics :

This course is a study of principles and techniques of interactive computer graphics, display processors And device, graphics programming languages and algorithms for managing graphics data. As such, after completing this course the student should be: ☐ Upon completion of this course the student should be familiar with all aspects of 2-dimensional computer graphics. The student will also be introduced to certain topics in 3-dimensional computer graphics.

CSI 521 Multimedia Technology:

The creation of interactive multimedia products for cross-platform delivery - Introduction to Multimedia Authoring and Production - The Multimedia Development Process - Introduction to Multimedia Scripting - Types of Lingo Scripts / Behaviors / Handlers - The Sampling Process: Understanding Audio / Video - Using Lists and Casts - Understanding Programming Structures - Human Computer Interface Design - Graphics, Audio, and Movie File Formats - Databases, Lists, and Shockwave - Storage and Delivery Technologies - Global Development Issues - Legal Issues, Copyrights, Taxes.

CSI 530 Digital Photography:

This course is intended to introduce students to the basic concerns in digital photography *as a fine art medium*, and the computer as a darkroom. Includes digital imaging techniques of scanning, colour correction, retouching, composition, content and more. Hardware, image input and output processes, and software are also discussed as such. After completing this course, the student should demonstrate a basic

knowledge of fundamental digital photographic theory and make images which correspond to basic photographic design and communication principles. Students will also demonstrate proficiency in the use of image manipulation software and digital imaging applications in addition to utilizing major computer hardware components and accessories, including scanners, printers, CD recorders and storage devices while managing the colour digital workflow through all production stages from image capture to final output. Students will also be able to demonstrate an awareness of contemporary aesthetic, legal and ethical considerations in digital imaging.

CSI 431 Advanced Computer Networks :

This course is an advanced topic in design and analysis of computer networks. It comes as a second level module of the curricula which includes: Modeling, performance evaluation and queuing theory applied to computer networks.- Traffic flow management and error control - - Routing algorithms and protocols. - Switch and router architectures - Selected issues in high speed network design - Optical networks.

CSI 432 Network Security :

This course provides an introduction to the field of network security. Specific topics to be examined include Security attacks, mechanisms, and services. Network security and access security models. Network security practice. Email security. IP security and web security. Intrusion detection and prevention systems. Firewalls and virtual private networks. Cellular and wireless network security.

CSI 531 Wireless and Mobile Computing:

This course is offered for those who are interested in understanding and building systems support mechanisms for mobile computing and wireless systems including client-server web/database/file systems, and mobile ad hoc and sensor networks for achieving the goal of anytime, anywhere computing in wireless mobile environments. The technologies involved to realize such a system will be covered and the fundamental

concepts of mobile computing are introduced. These include mobility and service management, data management, routing in mobile ad hoc and sensor networks, and security issues for mobile systems. While mobile computing covers many topics, in this course the main focus will be on mobility, data and service management, and security issues in mobile computing environments. Students are expected to be familiar with basic concepts in Operating Systems and Networks in this class.

CSI 532 Network Programming :

Introduction to networking and Internet protocols via programming and hands-on labs. TCP/IP protocol architecture; user datagram protocol (UDP); multicasting; transmission control protocol (TCP); standard Internet services, and protocol usage by common Internet applications. Sockets programming; client/server; peer-to-peer; Internet addressing; TCP sockets; UDP sockets; raw sockets. Multithreading and exception handling. Finger, DNS, HTTP, and ping clients and servers. Routers and architectures, routing protocols. Router and switch configurations, Internet operating systems. Internetwork setup, network topology, wireless internetworking. Network protocol analyzers; traffic generation.

CSI 533 Cloud Computing:

Cloud Computing uses Internet as the platform for the development and delivery of computing technologies. Topics discussed in this course include: cloud computing concepts, cloud computing architecture, Infrastructure as a Service (IaaS), Platform-as-a-Service (PaaS), Software as a Service (SaaS), cloud computing access and implementation, and cloud computing with MapReduce.

CSI 441 Machine learning:

Machine learning is the science of getting computers to act without being explicitly programmed. This course provides a broad introduction to machine learning. Topics include: (i) Supervised learning (parametric/non-parametric algorithms, support vector machines, kernels, neural

networks). (ii) Unsupervised learning (clustering, dimensionality reduction, recommender systems, deep learning). (iii) Best practices in machine learning (bias/variance theory; innovation process in machine learning and AI)..

CSI 442 Introduction to Robotics :

Introductory historical development of robotics, robot arm kinematics, inverse kinematics, dynamics and control, trajectory planning, use of software packages, sensors, image acquisition and processing, control architectures, applications of mobile robots, autonomous mobile robots (navigation and localization), computer vision, vision-based control. Topics will include how to interface a computer with the real world, different types of sensors and their use, different types of actuators and their use, and forward and inverse kinematics of simple two link robotic manipulators.

CSI 443 Expert Systems:

This course introduces students to expert systems in general and to rule-based systems in specific. Students learn how to build a rule-based expert system in a variety of application areas. They also learn advanced programming techniques which include topics of inexact reasoning, intelligent database management methods, and how to develop a community of expert systems which cooperate over a blackboard structure. Students are also given the opportunity to demonstrate their understanding of the technology by building a rule-based expert system that addresses a real-world problem. The course prepares students for graduate research in the area of expert systems.

CSI 444 Computational Methods:

The current course provides powerful understanding and manipulation of what is called approximate/numerical solutions. The exact solution, in many practical cases, is not only difficult to be reached, but it may be impossible to find it. Therefore it was the need to look for effective algorithms to establish these stable, and convergent approximate solutions. These algorithms will handle important several topics concerned

with: Numerical Differentiation, Root location (Bracketing Methods, Opened Methods), Numerical Integrations, Numerical Solution of Linear Systems of Equations, Curve Fitting, Interpolation, Numerical Solution of Ordinary and Partial Differential Equations.

CSI 445 Operational Research :

The current course introduces the basic concepts of Optimization and its tools and how can this be applied to problems of the real life. This objective can be successfully achieved through the conduction of the following topics: Basic concepts of Optimization, Operations Research and the art of Problem Solving, Linear Programming: Convexity, Extreme Points, Formulation and Graphical Solution, Analytical Solution of Linear Programming: the Simplex-Tableau, Theorem of Duality.

CSI 446 Information Systems Management:

This course aims to develop the students' ability to plan, analyze, design, implement, validate, and maintain computerized information systems using software processes. Specifically, the course will: Develop the students' skills of selecting a suitable process model (for better project management and better quality software) for a specific software project, introduce frameworks and quality standards for software development and management, highlight and integrate new process models for new environments (e. g. the WWW), introduce software metrics for better quality management.

CSI 447 Information Security:

This course is to make students familiar with the basic concepts of information systems security. The course aims to the security goals, security functions, and security mechanisms. The content is: Introduction to information Security, Information security and risk management, Access control, Security architecture and design, Physical environmental security, Telecommunications and network security, Business continuity and disaster recovery, Application security and Operation security.

CSI 448 Project Management :

The course introduces the students to the various concepts and methodologies of Project Management. The course describes the actual procedures and techniques used in planning, monitoring and controlling projects. The course introduces a number of exercises and case studies (Workshops) within the learning scope of the course to help students to acquire basic and advanced concepts of project management fundamentals. This course enriches the students' understanding of best practices and the advantages of using project management skills to increase their productivity and enable them reach higher returns from investments in Information Technology (IT). As such, after completing this course the student should be able to: Understand the basic familiarity (literacy) of Project Management. Demonstrate an understanding of the basic concepts of Project Management, thus, enabling him/her to functionally utilize these skills in his/her future practices.