

**The Project of the Islamic
Virtual University
-Complementary Aspects-**

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ACADEMIC PLAN

1. Introduction

This document describes the Academic Plan for the establishment of Islamic Virtual University.

IVU intends to offer educational services including general and specialized short courses, academic courses such as Associate's, Bachelor's, and Master's programs in all majors capable of being offered in internet-based environment. This will be done either through directly offering the programs under the supervision of FUIW or in cooperation with member universities, through establishment of a network consisting of the member universities. These programs will be offered to all qualified candidates all around the world.

A separate financial plan is available which discusses the estimated revenue and costs of the operation.

2. Programs

1.1 Short Courses

Every body who is interested in enhancing their non-academic skills can take these short courses. These courses will be designed based on career and scientific needs of the candidates, and on the policies adopted by ISESCO and FUIW. These courses include Arabic language, computer and management courses among others.

Candidates will be awarded valid certificate of completion by IVU. In case IVU establishes cooperation with prominent international institutions or universities, candidates will be awarded jointly issued certificate.

1.2 Under-Graduate Programs

Secondary School Leaving Certificate holders, who manage to fulfil admission requirements, can directly enter under-graduate programs at IVU.

It is anticipated that such students will be drawn both from within the UAE and also in the target geographic markets discussed.

1.3 Graduate Programs

Graduate programmes in the major professions will also be available for students wishing to achieve an advanced qualification based on state-of-the-art knowledge and advanced analytical skills within industrially and commercially relevant disciplines.

In addition, IVU will operate in specific geographical target areas in Islamic world which are more populated by the youth and, based on feasibility studies conducted by FUIW and ISESCO; have higher priority for these courses.

3. Partnership

Under the supervision of FUIW, IVU prefers to operate its programs by a joint-venture program consisting of a powerful and complementary partnership of Interactive FUIW members, international leading universities and academic organizations. (Subject to the approval of the Board of Trustees)

IVU specialises in the development of International Education on behalf of FUIW members. It provides internet-based learning, technology and business services, to deliver high quality educational programs throughout the World of Islam. While building sustainable international educational partnerships, IVU also acts as a catalyst for educational reform and collaboration within the Islamic World.

4. Academic Functions

The functions of the IVU and the academic partners will include the following:

- Curriculum Design;
- Learning Materials and e-contents;
- Academic Quality Assurance;
- All summative assessment;
- Transcripts and awards;
- Educational Development;
- Providing prominent teachers for the said courses;
- Issuing academic degree certificates and diplomas;

IVU will be entrusted with all educational issues and the preparation of the Academic Plan including:

- Educational Governance;
- Quality Assurance of Educational Delivery;
- The Academic Plan;
- Teaching and Student Support;
- Continuous Assessment;
- Administration of Examinations;
- Liaison with Academic Partners;
- Providing and developing of the Internet based learning environment (LMS);
- Registration of students;

- Providing all technical requirements and necessary grounds for the courses to be offered on–line;
- Cooperating with the universities and institutions that offer the courses in order to use in IVU Learning Management System(LMS) and other facilities to offer the courses;
- Training teachers and students to be able to work with on-line system;

The functions of the IVU Board of Trustees in securing financial resources and giving advice and support to establish relationships, etc. have been stipulated in other documents.

We believe that this explicit distribution of roles amongst the partners involved in IVU allows each partner to focus on their key strengths and together they can create a very significant partnership in the operation of IVU.

5. Academic Plan

IVU will cover a wide range of programs from Short Courses, Under Graduate and Graduate Programs, across a wide range of sciences, humanities, industries, commerce and linguistics.

Each field represents major programs to be provided within IVU .They will be offered within a phased program as follows:

Phase One, 2008

- ICDL (Short Course)
- Arabic Language (Short Course)

Phase Two, 2009

- Information technology management (Under Graduate Program)
- Information technology management (Under Graduate Program)

Phase Three, 2010

- Enhancement of the courses based on the contracts to be concluded with FUIW member universities as well as other leading universities and international institutions in order to offer courses within a system of universities which will be devised to this end.

6. IVU Credit and Qualification Framework

All programs provided through IVU will be compliant with accreditation of the university or the consortium that offer the courses which are already approved by IVU and FUIW.

Therefore, the credit and qualification systems of the universities offering programs will be evaluated and approved by IVU, based on the structure of the respective university or that of the members of the IVU. Then the courses will be held based on the agreed upon conditions.

7. Timeframe of the programs

Time setting of the courses offered by IVU is overwhelmingly flexible, since internet-based courses, unlike regular classes, can be exclusively redefined.

Yet the timeframe of the courses depends upon the university that offers the courses. The advantage of IVU is the available flexibility in time and place. This can make it possible for the courses to meet every where across the Islamic World, though very vast and different in time zones.

ADMINISTRATIVE PLAN

Introduction

Prospective studies have shown for the most part that the demand for higher education will increase at an accelerating pace in future years and decades, and that with the present technological development it has become necessary for Man to extend their scope of specialty, modernise their means and harness available tools to respond effectively to the increase in educational needs as well as to keep abreast of developing changes. It is therefore important for higher education to cater for the needs of a larger community of learners, including the youth, adults, as well as in-service and vocational training recipients, anywhere – a challenge simply not easy to meet in the conventional type of education system.

By the same token, the development of higher education academic and scientific performance standards depends on encouraging leading, successful experiences in diversifying higher education structures and systems, as well as spreading them for general benefit. In this regard, prior attention is to be focused on keeping pace with educational developments as well as technological and technical mutations with the purpose of putting them into effective use, in line with the Islamic frame of reference and the cultural specificities of Muslim societies.

Chief among advanced educational systems which have to be encouraged is distance education. It has the following features:

- Distance learning offers students a flexible form of education creating options of where and when they can learn, as well as of the course content and relevant learning means and methods.
- It also offers learners programmes and course contents which fit their own schedule.

After the emergence of correspondence education institutions, there came into existence a number of other educational settings using mass media materials, such as television and radio as well as registered tapes. This type of education has the following characteristics:

- It helps reduce costs in higher education, in consideration of the scarcity of financial resources.
- The teaching aids used are entirely different from those in conventional face-to-face classroom setting.
- It provides access to higher education for large social categories, and offers the possibility to acquire knowledge for all.

- It caters to learners seeking to carry on their studies and develop their professional potential, thus allowing them to join training courses at a time of their choosing.
- It allows learners to develop their sense of self-dependence.
- This type of learning can cater for needs in basic education, retraining, and training of trainers.

The Internet has become one of the most valuable mediums for the development of the concept of distance-learning. This has opened the way for the establishment of virtual universities and extended the scope for using the Internet to attain the objectives set by this type of universities, consisting in affording information-rich course contents as well as making available books and reference material, conducting direct assessment, and more.

In this regard, university administration assumes a vital and crucial importance in the achievement of the academic, scientific and training objectives targeted by virtual universities. In view of the nature of the project, which is committed to the core aim of providing education and training using state-of-the-art connections, and affording information and knowledge through developed mediums, in a positive spirit aiming to sustain renovation and close contact with students, university administration stands as a real driving force in the process for organization, renovation and development, and a vital tool in determining the orientations and strategies of the university.

The required system of university administration at the Islamic virtual university has as a main task the general supervision and control of the activities of the University and the steering of its general policy in all its aspects. University administration is responsible also for assigning roles, as well as laying down regulations and procedural rules. Therefore, we propose that the organizational structure of the Islamic virtual university be composed of the following main components:

1. The Board of Trustees.
2. The Executive Board or Board of Governors.
3. The Chancellor of the University.
4. The Vice-Chancellor of the University.
5. The Academic Affairs Department.
6. The Administrative and Financial Affairs Department.
7. The Communication and University Development Department.
8. The Information and Technology Department.
9. The Scientific Research Department.

1. The Board of Trustees:

The Board of Trustees shall be composed of members to be chosen by the General Secretariat of the Federation of the Universities of the Islamic World.

Functions of the Board of Trustees:

- The Board of Trustees shall be in charge of supervising and controlling administrative, financial and academic affairs as well as laying down the general policy of the Virtual University. It may take appropriate decisions to achieve the objectives and goals established for the University.
- It shall take the measures necessary to strengthen collaboration between ISESCO, the FUIW and the host country in the achievement of the mission of the University.
- It shall approve proposals about setting up faculties or institutes, or creating departments within these institutions.
- It shall adopt the draft budget.
- I shall regulate admission fees to the University.
- It shall appoint the Chancellor of the University and dismiss him if need be.
- It shall appoint the Vice-Chancellor of the University, its Secretary General, and endorse the appointment of deans of faculties, directors of institutes and heads of administrative departments.

Meetings of the Board of Trustees:

- The Board of Trustees shall elect a President from among its members, for a four-year term of office, renewable twice. The President may convene the Board and preside over its meetings.
- The Board shall convene in an ordinary session, at least once every year, and may hold extraordinary sessions when necessary.
- The Board shall design statutes to govern its proceedings and internal regulations, as well as the working of its meetings and their venue, and the method of discussion and decisions making.
- The Islamic Virtual University shall retain administrative autonomy, as stipulated in its statutes, the frame of reference of the Board of Trustees and the regulations adopted in this connection.
- The general supervision of the University shall vest in the Board of Trustees, which reaffirms the principle of autonomy and representation of the various active parties in the University. In order to enhance the action of the Board of Trustees, the following organs can be set up: namely,

- a. **Scientific Council:** it shall propose the general orientations of the training and research policy of the university to the Chancellor, and provide counsel regarding basic and continuous training programmes, scientific research programmes, and all different projects in relation to the launching or development of academic titles.
- b. **Academic Activities Council:** it shall set forth the orientations and procedures regarding students' training activities as well as complementary, parallel and supportive activities, as relate to documents, documentation and technological communication.

2. The Executive Board or the Board of Governors

- The Executive Board of the University shall be composed of the Chancellor of the University, the Vice-Chancellor, Deans of Faculties, Directors of Institutes and Heads Centres, and the Secretary General of the University. Membership of the Executive Board shall also include a limited number from among the teaching staff.
- The Board of Trustees shall set out the procedures regulating the Executive Board and its meetings.
- The Executive Board shall be responsible for the daily management of the University, as well as proposing creation of faculties and institutes, awarding scientific degrees and elaborating the closing account.
- The Executive Board shall also be entitled to adjudicate on administrative or academic disputes or other matters relating to the daily operation of the University, through setting up permanent or provisional committees to consider the matters falling within the Council's ambit.
- The Executive Council shall approve study plans and curricula, as well as examination systems, and ensure coordination between faculties and institutes affiliated to the University or other partner departments and faculties.
- Faculties, institutes and centres shall have councils to consider the management of their academic activities. Such councils shall be composed of the dean of the faculty or the director of the centre or the institute, as well as heads of departments and a representation of teaching staff and students. The council of a faculty or a centre shall have as a mission to propose study plans and curricula, as well as lay down examination rules, and determine the needs of the faculty or the centre in terms of teaching staff.
- The University shall also have internal councils which will be commissioned with managing the affairs of departments, supervising educational activities, as well as planning and recording courses to be broadcast on the Internet.

3. The Chancellor of the University:

The Chancellor of the university shall be appointed by the Board of Trustees upon nomination by the President of the Board of Trustees for a four-year term, renewable twice.

The Chancellor of the University must be known for his commitment to the mission of the Islamic University. He also must hold a PhD degree and have an appropriate expertise in higher education, in general, and in distance university education, in particular. He must also be open to modern teaching aids and methods, with the ability to adjust them to the requirements of modern Islamic university.

- The functions of the Chancellor of the University:

- The Chancellor of the University shall take on the overall control and supervision of academic, administrative and financial affairs at the University, and represent the University before affiliated bodies. He may also devolve some of his responsibilities to the Vice-Chancellor.
- The Chancellor of the University shall be accountable to the Board of Trustees for the policy of the University and the means to develop it. He may appoint all the staff members of the University and nominate the secretary general of the University as well as the deans of faculties, directors of institutes, and heads of administrative departments.
- The Chancellor of the University shall, in addition to reporting the decisions of the Board of Trustees, take note of the recommendations of the councils of faculties and institutes and centres, as well as report and implement them.

4. The Vice-Chancellor of the University:

The Vice-Chancellor shall be in charge of running the University in the absence of the Chancellor. He must hold a PhD degree with an appropriate expertise in distant higher education.

5. The Academic Affairs Department:

The Board of Trustees shall approve the appointment of deans of faculties and directors of institutes from among the teaching staff of the University, following nomination by the Chancellor of the University.

The dean of the faculty or the director of the institute must hold a scientific degree with an appropriate expertise in higher education.

Deans of faculties and directors of institutes shall be in charge, *inter alia*, of the academic, scientific, administrative and financial affairs of the faculty or the institute.

They shall also have to present regular reports in this respect to the Chancellor of the University, see to the appointment of officials of academic departments and ensure coordination between the various components of the institution.

The Academic Affairs Department shall be composed of the following main units:

- Cultural Affairs Unit.
- Planning Unit.
- Follow-up and Evaluation Unit.
- Curricula, Programmes and textbooks Unit.
- Library Unit.
- Students' Affairs Unit.

The Academic Affairs Department shall be responsible for:

- The supervision of teaching affairs.
- The management of students' affairs regarding registration, admission, control, examinations, and general enrolment of students in various disciplines and levels.
- The control and follow-up of students' attendance.
- The supervision of conditions for admission, fees, etc.

6. The Administrative and Financial Affairs Department:

The Chancellor of the University shall be in charge of appointing the Director of the Administrative and Financial Affairs Department. Working under the Chancellor's direct supervision, the director of the department must have a high level of competence in administration and accountancy.

- The Director of the Administrative and Financial Affairs Department shall be responsible, among other things, for accountancy, devising and following up the budget, maintaining equipment, and running staff affairs.
- He shall be accountable for these matters to the Chancellor of the University, and present proposals and recommendations thereon.
- The department shall be made up of the following units: Staff Affairs Unit; Budget and Accountancy Unit; Technology, Statistics and Data Unit; Documentation Unit; Training and Qualification Unit; Translation Unit; and Legal Affairs Unit.

7. The Communication and University Development Department:

It shall be in charge of supervising promotion of cooperation between the Virtual University and other contractual universities, the aim being to exchange scientific expertise and research works as well as share achievements.

The department shall also be responsible for establishing a well-devised framework for exchanging courses and necessary documents, given the specificity of distance education which requires diversity and variation, as well as transfer of the bulk of lecture units from one university institution or institute to another.

- Laying down a programme to benefit from available competences in the most effective manner among the universities contracting with the Islamic virtual university.
- Enhancing projects aimed at networking university institutions with inter-complementary orientations and competences.

Management of human and financial resources:

- It is the Administrative and Financial Affairs Department that is responsible for the management of teaching staff as well as administrative, technical, human and resources.
- The teaching staff of the University shall be composed of several categories depending on their competences and hierarchy: namely,
 1. Teacher-researchers.
 2. Lecturing professors.
 3. Assistant professors.
 4. Practical work professors.
 5. Visiting professors.

Teachers at the Islamic virtual university must satisfy the following conditions:

- Teachers must have, in addition to scientific qualifications as well as appropriate degrees and expertise, a highly required moral, religious and educational sense.
- They shall deliver lectures and take charge of academic and applied aspects.
- They must keep abreast of new developments, while being able to use modern means and methods in dispensing knowledge to students.
- They shall have to provide academic counsel and supervision to students.

8. The Information and Technology Department:

The Information and Technology Department is an indispensable support unit in the erection of the project of the Islamic virtual university. It has as a main mission to:

- Build a multidimensional technological model within the University between students and teachers, between teachers and various academic departments, as well as between the Islamic virtual university and contracting universities and institutes.
- Select the optimum educational and academic capacities from universities across the Islamic world as well as from contracting universities.
- Set up a living electronic structure within the University based on communication to prepare courses and to incorporate curricula in the network of programmes linked to universities across the Islamic world.
- Collect and store educational documents.
- Arrange well-articulated courses and make lecture content available in the most appropriate form.
- Provide courses through the Learning Management System (LMS).

9. The Scientific Research Centre:

In order for the Islamic virtual university to develop it needs to create, under its various programmes and structures, an adequate environment to promote scientific research in various knowledge fields. For there exists an organic, dynamic interaction between university institutions and scientific research, and this translates in the structure, findings and radiance of scientific research. For this reason, it is necessary to set up a centre for scientific research under the supervision of the Chancellor of the University.

The Virtual University offers an interactive environment for scientific research whereby teachers combine teaching, lecture content, supervision and animation. Better than that, by supplying well planned Master's and doctoral studies the University only gains further impetus.

This means that it is important to have a well-articulated vision of scientific research and to set up a specialised body to harness scientific research activities at the University and other interested institutions and organs. This is all the more important as it would help overcome the shortage of capacities and equipment as well as rationalise expenditure.

The characteristics of the virtual university as an open platform for online studies and research will give it impetus in developing scientific research at the level of the Islamic university as a whole. For the same reason, action should be made to encourage collective instead of individual research works. This would entail enlarging scope for communication, exchange, as well as cooperation agreements among Muslim countries in the fields of exchange of scientific documents and reference works, participation in specialised scientific symposia, conducting joint research works and benefiting collectively from funding resources.

Coordinating scientific research activities across Muslim countries hinges on activating exchange mechanisms through such means as designing cross-referenced indexes of existing scientific research institutes which highlight their objectives and mission, in addition to developing relevant digital repositories, as well as networking researchers and fostering joint collaboration.

Conclusion

Strategic mission of the administration of the Islamic virtual university

The delivery of distance education requires highly qualified teachers, compared to the conventional classroom setting. This is explained by the fact that distance learning is endowed with a well-articulated instructional design which allows students and teachers to interact. Distance education may, in addition to virtual universities, virtual faculties, and virtual lecture rooms, also provide digital libraries, as well as email facilities and discussion boards. Therefore, the administrative structure that needs to be put in place must combine a management system based on strategic general planning, as well as development of basic goals and strategies. A number of measures can be taken towards this end, including:

1. Laying down a detailed and well-planned general strategy for education and training at the Islamic virtual university.
2. Designing a phased, procedural plan for the implementation of targeted objectives.
3. Preparing a detailed plan regarding the human resources in charge of a given mission.
4. Preparing a detailed plan of financial resources needed to manage various university affairs and expenditure fields.
5. Laying down firm bases for both internal cooperation among the various constituent units of the University and external cooperation with other university institutions and organs, in addition to developing partnership.
6. Developing a coordinated, integrated strategic plan to follow up and enhance service quality, and to evaluate general performance at the University, through a generalised self-evaluation of various administrative and academic facilities.
7. Setting up a scientific body to control and evaluate the quality of the course content offered at the University.

TECHNICAL PLAN

Project Introduction

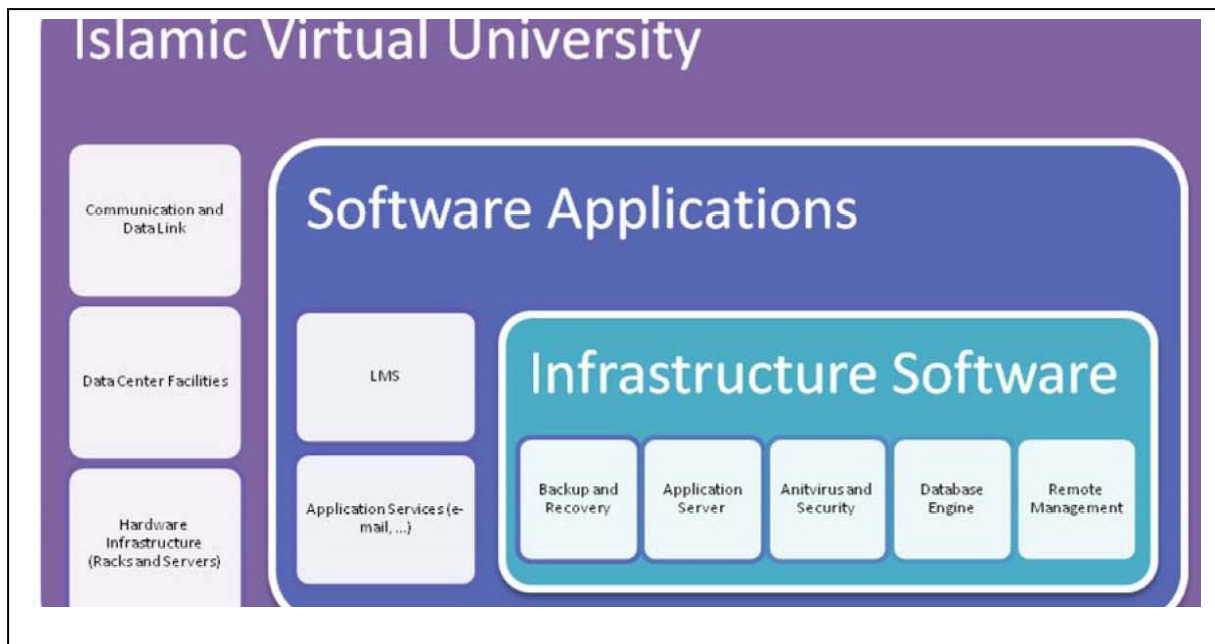
Based on the proposal on establishing Islamic Virtual University (IVU), preliminary steps have been taken and the survey has been conducted since 2002 in association between the FUIW and the Islamic Azad University. According to the enactments of General Conference of the FUIW and the Executive Council, the Islamic Virtual University and the FUIW's Digital Library are to be established in Dubai, to set up the technical and administrative tools for serving all the member universities with the online services including online learning management system, collaboration tools and digital library. The goal of this project is to pave the ground for cooperation among the member universities to achieve the ISESCO and the Federation's objectives using latest trends of technology and e-learning tools.

This document seeks to provide a clear picture of all required components of the system which will be adopted in launching and running the online service for IVU project.

It is worth mentioning that all suggestions stipulated in this document, are based upon the five year plan offered in IVU financial plan, and focus on such facilities as quality services. They have been organized with an eye on the development plan indicated in the financial plan.

Virtual University System

The VU system consists of many different components including hardware, software and communication platform to provide e-learning management tools and services to universities and IVU beneficiaries. The core components of the system are shown in following diagram.



Total system requirements are as follows:

1. Communication and internet data link
 - 1.1. Internet link with at least 1Mb bandwidth (upgradeable to 10MB)
2. Data center space and facilities
 - 2.1. Server room
 - 2.2. Air conditioning and temperature control system
3. Hardware and Infrastructure

- 3.1. Server rack cabinets
- 3.2. Traffic Router
- 3.3. Internet firewall system
- 3.4. Servers
- 4. Software and Applications
 - 4.1. Learning management system software
 - 4.2. Service applications
 - 4.2.1. E-mail and web mail
 - 4.2.2. Integrated office automation and CRM
 - 4.2.3. Infrastructure software and middle wares
 - 4.2.3.1. Operating system (MS Windows 2003 Server)
 - 4.2.3.2. Database engine software (MS SQL Server 2005)
 - 4.2.3.3. Antivirus and Security Software (Symantec)
 - 4.2.3.4. Java application server software (Orion / Tomcat)
 - 4.2.3.5. Backup and recovery software (Veritas / Bright store-Etrust)
 - 4.2.3.6. High availability software (Veritas / Bright store-Etrust)
 - 4.2.3.7. Remote management software (VNC Professional edition)

Learning Management System (LMS) Software

Learning Management System (LMS) is a software tool designed to manage user learning interventions which provides many functions and features beyond conventional training records management and reporting like Learner self-service (e.g. self-registration on instructor-led Training), training workflow (e.g. user notification, manager approval, waitlist management), the provision of on-line learning (e.g. Training, Read & Understand), on-line assessment, collaborative learning (e.g. virtual classroom, application and desktop sharing, discussion board and threads), and training resource management (e.g. instructors, library, student groups).

Most LMSs are web-based to facilitate "anytime, anywhere" access to learning content and administration. LMSs are based on a variety of development platforms, from Sun Microsystems J2EE based architectures to Microsoft.NET, and usually employ the use of a robust database back-end.

In addition to managing the administrative functions of online learning, LMS also provides tools to deliver and manage instructor-led synchronous and asynchronous online training based on learning object methodology. These systems are called Learning Content Management Systems or LCMSs.

An LCMS provides tools for authoring and re-using or re-purposing content as well as virtual spaces for learner interaction (such as discussion forums and live chat rooms).

Despite this distinction, the terms LMS is often used to refer to both an LMS and an LCMS, although the LCMS is a further development of the LMS.

In essence, an LMS is a high-level, strategic solution for planning, delivering, and managing most learning events within an organization, including online, virtual classroom, and instructor-led courses.

LMSs can cater to different educational, administrative, and deployment requirements. The virtual learning environment used by universities and colleges allow instructors to manage their courses and exchange information with students for a course that in most cases will last several weeks and will meet several times during those weeks.

The core functions of LMS include:

- Managing users, roles, courses, instructors, and facilities, and generating reports
- Course calendar
- Learner messaging and notifications
- Assessment/testing capable of handling student pre/post testing
- Displaying scores and transcripts
- Grading of course works and roster processing, including wait listing
- Web-based or blended course delivery
- Collaboration tools & virtual class

LMS Software Platform

VU application is developed using state-of-the art Sun Microsystems' Java 2.0 Enterprise Edition (J2EE) technology and standard enterprise level structure and architecture with full object oriented modeling.

It supports world's first choice of database engines ORACLE 9i as well as Microsoft MS SQL Server Enterprise Edition as leading and high-end database engines. Also it can be deployed on many other worlds' best database engines.

The biggest technical point of the system is that it is running on both WINDOWS and UNIX based platforms to become more flexible with respective IT environment of the universities.

LMS Software Features

The LMS delivers complete multi-lingual user interface for working in a highly native environment in English, French, Arabic languages by taking advantage of the Unicode text encoding international standards.

It supports global standards for e-learning (like IMS and SCORM) that provides the ability of data exchange between it and other learning management systems all over the world, and also the ability of sharing a wide range of standard course contents provided by other universities or institutions.

You can transfer all available data like users, course contents, user information, grades, etc. from or to the LMS in very simple steps.

Another outstanding facility provided by LMS, is the multi-institution environment management, in that, various virtual universities can be launched separately on this system including all the LMS facilities, and managed in a centralized and simultaneous manner. Therefore each member can enjoy a separate virtual environment with all facilities.

The LMS is a comprehensive and flexible e-learning software platform that delivers:

- Multi-institution environment management
- Institution-wide management system
- Course management system
- Customizable institution-wide portal
- Online communities for students
- Personal tools and Digital Library
- Live collaborative tools like presentation sharing, voice chat, white-board sharing and text chat.

The LMS contains a role-based user management system that manages all users with different roles, with one user ID.

The LMS brings you useful personal tools for managing your events, tasks, communications, and etc.

All of these tools are available in multi-lingual environment. We give your students and faculties, a VIRTUAL WORK DESK including:

- Announcements
- Calendar
- Task Manager
- Notepad
- Grade Book
- Personal E-mail
- User Directory
- Address Book

LMS Software Requirements

To deploy LMS software system there is some software required to be installed prior to main software installation. The list is as follows:

- J2EE App Server (Orion, Tomcat, SunOne, WebSphere, ...) Tomcat is recommended.
- DB Engine Server (Oracle, MS SQL, MY SQL, ...) MS Sql Server Enterprise Edition is recommended.
- Mail Server (MS Exchange, SmarterMail, MDemon, iMail, ...) Smarter Mail (Enterprise Edition) is recommended.

Hardware

Initial list of hardware requirements to start includes:

- High Performance Server (3 Nos.)
Preferred vendors: HP, Dell, Sun, Fujitsu Siemens
- Storage Server (1 No.)
Preferred vendors: HP, Dell, Sun, Fujitsu Siemens
- Router [Preferred vendors: Cisco, Foundry]
- Firewall [Preferred vendors: Cisco, Foundry]
- UPS
- Battery
- Terminal PC
- KVM Switch
- Rack and Cabling Structure
- Room A/C

- All other requirements of the medium range hosting center like security, insulation, earth connection system, raised access flooring, etc.

The above suggestions offer all equipment and hardware facilities required for IVU to host the program. Meanwhile the quality and quantity of the proposed facilities are determined based on the estimates made in IVU financial plan.

Available Hardware Infrastructure

The following pieces of equipment will be installed based on the technical structure indicated in the previous section and on the estimates made in IVU financial plan and the number of IVU beneficiaries. The said facilities are capable of serving 2.000 candidates and even more if enhanced.

Communication

Communication grand is one of the most important factors in success of the virtual university.

Some significant issues in this regard are as follows:

1. Reliable high-speed internet connection with high Service Level Agreement (SLA)
2. Redundant Internet connectivity
3. Burstable Internet connection to increase the bandwidth, if necessary
4. 24/7 Service Support to assure the quality of the service

As the IVU equipment and office are located in the UAE-Dubai, Dubai Internet City telecommunications services have been selected for internet service, as it is one of the most reliable centers in the region. The following is a brief description of the services provided by the said center.

Local Area Network:

Dubai Internet City LAN solutions offer a high performance communication platform for data networking. Local Area Networks are implemented using VLAN technology.

A virtual or logical LAN is a local area network with a definition that maps workstations on some other basis than geographic location (by department, type of user, or primary application).

This provides maximum flexibility in LAN configuration. VLANs can have almost any size to accommodate the needs of both small and large networks. By utilizing VLAN technology, business partners will realize the following benefits:

- No investment required for infrastructure
- Reducing overall running costs by outsourcing network components
- Rapid deployment of network “Plug and Play”
- Flexibility in physical and user reconfigurations
- Maintaining the highest standards of networking
- Outsourcing IT functions and focusing on core business

Wide Area Network:

For our Corporate Wide Area Network, Dubai Internet City has the infrastructure needed to deliver any connectivity solution. Their reach extends beyond the UAE to almost every major city in the world. WAN services provided include:

- No investment required for infrastructure
- Reducing overall running costs by outsourcing network components
- Rapid deployment of network “Plug and Play”
- Flexibility in physical and user reconfigurations
- Maintaining the highest standards of networking
- Outsourcing IT functions and focusing on core business

Dubai Internet City has implemented Systimax Solutions, industry leading Systimax structured connectivity solution, for its cabling infrastructure. Designed for modern era Gigabit applications, Systimax Labs have provided the most extensive and comprehensive portfolio of structured connectivity solutions available on the market today. Systimax Solutions is the ideal single cabling solution for Dubai Internet City’s network that integrates video, voice, and data on a single platform. This infrastructure comfortably handles future Gigabit applications such as 1000Base-T while ensuring users get the best from their 100BaseT applications.

For its active network components such as routers, multiplexers, and switches; Dubai Internet City has partnered with the leading networking manufacturers including

Cisco, Lucent, and Alcatel to build its network. Critical network components are redundant with load balancing and fail over systems in place to ensure the highest levels of quality and availability.

The WAN technology supported by Dubai Internet City is as follows:

- Leased Circuits
- MPLS VPN
- ATM
- Frame Relay
- X.25

Internet Connection:

The Internet connectivity backbone plays a strategic role in Virtual University's ability to survive and compete. Gaining a competitive advantage means staying on top of Internet advances and trends.

Internet Services provided by Dubai Internet City include:

- Burst able 2Mbps Internet Access
- Direct connectivity via a 10/100 Mbps Ethernet connection
- FTP services
- Static IP addresses
- Reliable redundant connection
- 24*7 Support

The Internet backbone of Dubai Internet City is redundantly connected to EMIX, the Emirates Internet Exchange. EMIX is the first Network Access Point (NAP), private or public, established in the Middle East & Near East region built on one of the longest STM- 1 circuits worldwide in terrestrial and submarine communication.

This Network Access Point features:

- Diverse and redundant routing options
- Direct connection to NAP's in USA

- Quicker response times
- High speed 155 Mbps link over terrestrial cable routes

Internet bandwidth provided by Dubai Internet City is available at committed bandwidth rates that guarantee speed and performance based on IVU needs.

Infrastructure Software

The components of the total solution include:

- Web/Application Server
- Windows operating system
- Database Server
- DNS
- Mail Server
- Firewall and Antivirus Protection
- Storage Server and Backup Solution

Software facilities being used at present are as follows:

E-learning Content

Creating a course requires putting together a sequence of learning objects. Much effort has been put into the technical reuse of e-learning based teaching materials and contents. A common standard format for e-learning content is SCORM whilst other specifications allow for the transporting of learning objects. These standards themselves are early in the maturity process the oldest being 8 years old. Sharable Content Object Reference Model (SCORM) is a collection of standards and specifications for webbased e-learning. It defines communications between client side content and a host system called the run-time environment (commonly a function of a learning management system (LMS)). SCORM also defines how content may be packaged into a transferable ZIP file.

What is SCORM?

The Sharable Content Object Reference Model (SCORM) defines a Web-based learning "Content Aggregation Model (CAM)" and "Run-Time Environment" (RTE) for learning objects. In essence, the CAM defines how to aggregate, describe and sequence learning objects and the RTE defines the run-time communication and data to be tracked for learning objects. SCORM is a collection of specifications adapted from multiple sources to provide a comprehensive suite of e-learning capabilities that enable interoperability, accessibility and reuse of Web-based learning content.

The work of the ADL Initiative to develop SCORM is also a process to knit together similar groups and interests. This reference model aims to coordinate emerging technologies and commercial and public implementations. The SCORM applies current technology developments to a specific content model by producing recommendations for consistent implementations to the vendor community.

SCORM is built upon the work of the Aviation Industry Computer-Based Training (CBT) Committee (AICC), the IMS Global Learning Consortium, the Institute of Electrical and Electronics Engineers (IEEE), the Alliance for Remote Instructional Authoring and Distribution Networks for Europe (ARIADNE) and others to create one unified "reference model" of interrelated technical specifications and guidelines that meet Department of Defense (DoD) high-level requirements for Web-based learning content.

SCORM Benefits

Reusability of e-learning content across courses and LMSs without proprietary constraints is one of the chief benefits of adopting SCORM standardization. There are other benefits to adopting SCORM standardization as well. For example, the increases in student retention and comprehension and concurrent decreases in cost and time

realized by SCORM standardization would allow instructional designers to focus on creating better e-learning content, in effect creating a force multiplier for e-learning effectiveness. Another benefit of SCORM standardization is that SCORM conformant elearning content can move seamlessly between multiple contexts, such as classroom based and point-of-performance environments. This capability to improve the actual performance of people within their job environment is an invaluable goal.

E-learning content structure

The following is a list of some of the types of information that may be included in an elearning content:

1. General Course Descriptive Data

- 1.1. Course identifiers
- 1.2. Language of content (English, Arabic, French)
- 1.3. Subject area (Math's, Reading, etc.)
- 1.4. Descriptive text
- 1.5. Descriptive keywords

2. Life Cycle

- 2.1. Version
- 2.2. Status

3. Instructional Content

- 3.1. Text
- 3.2. HTML web pages
- 3.3. Images
- 3.4. Sound
- 3.5. Video

4. Glossary of Terms

- 4.1. Terms

- 4.2. Definition
- 4.3. Acronyms
- 5. Quizzes and Assessments
 - 5.1. Questions
 - 5.2. Answers
- 6. Rights
 - 6.1. Cost
 - 6.2. Copyrights
 - 6.3. Restrictions on Use
- 7. Relationships to Other Courses
 - 7.1. Prerequisite courses
- 8. Educational Level
 - 8.1. Grade Level
 - 8.2. Age Range
 - 8.3. Typical Learning Time
 - 8.4. Difficulty

A quick guide to course content development

A systematic process is required for the successful development of online courses. The major steps of this process are described below.

1. Planning and Set Up

Before any actual development takes place, it is important to plan the process and establish the structure of the course. Some of the most important tasks required include:

- a. Obtain course content**
- b. Prepare course content in electronic format.**
- c. Determine roles and responsibilities**
- d. Establish project schedule**
- e. Create design guide**
- f. Create templates**
- g. Determine course navigation, structure, page system**
- h. Set up course content on LMS.**

These tasks are described in more detail below.

a. Obtain Course Content

Obviously course material is needed. Course content should be gathered from paper based formats in the standard forms. If students will be required to pass an exam or quiz in each section, the exam and the answers will also need to be provided.

The instructional designer needs to be provided with all the content to be covered in the course.

The most important course information templates include the following sample:

Guidelines for Course Content

Other than the optional headings the following are considered essential items of information to be clarified through your course content.

University Information

- Mission and Purpose Statement
- Course Legal Contract Information (if pertinent)

- Evaluation/Assessment Rationale for Grade Determination (short statement and/or chart listing factors/percentages/etc., with assignments, and testing and/or projects contributing to course grade)

Course Information

Current year and semester

- Course title, number, and units of credit
- Course description (quoted from university catalog), followed by course summary/rationale/ interpretation (if pertinent). Generally gives short coverage and emphasis of course content and methods of instruction. Course description should also include any prerequisites or other background requirements to clarify intended student, skill and/or university requirements, and general studies requirements (if applicable: skill or integrative core category, plus required/ elective status).

Course Goals and Objectives (Student Learning Focus)

- Course Goals (broad focus, general direction of intended learning in course design), For example, generalized infinitives, such as "To learn..." "To understand..." "To increase skills and competency in...", "To increase awareness of " .
- Course Objectives (visible outcomes, or measurable demonstrations of knowledge, competence and/or critical thinking; may be measured during or at completion of the class);

Instructor Information

- Full name, title, department
- Office location, office phone number, office hours
- Email address
- Emergency phone number

Textbook(s)

- Author/editor, title, edition, publisher, date, ISBN
- Verification that books are in bookstore or digital library

Other Instructional Materials (Optional)

- List any additional required materials, equipment, supplies, disks, study guides, technology, library, etc., students must have.

Assignments: Reading, Writing, Research Papers, Projects, and Presentations

- General required reading of textbook(s), collateral reading, media, technology, writing, library and/or other requirements.
- General description of assignments (Optional detailed description: research paper(s), project(s), and/or presentation(s); describe criteria for writing/ evaluating papers.)

Course Calendar/Schedule

- Daily or weekly schedule of topics: minimum contact hours
- Dates of exams and quizzes
- Due dates for writing assignments, research papers, projects, and presentations

Basis of Evaluation and Grade

Grade Expectation (Combined Performance Option)

A. Outstanding mastery of the subject: excellence evident in preparation for and attendance in class sessions, curious and retentive mind, unusual ability to analyze and synthesize material, with a positive attitude making productive contributions to the learning community in the classroom

- B.** Above average student in terms of attendance, preparation, time management, mostly consistent in test taking, and attitude
- C.** Average or typical student in terms of attendance, preparation, time management, inconsistent test taking, and attitude
- D.** Below average or atypical student in terms of attendance, preparation, time management, inconsistent test taking, and attitude--minimally passing in performance.
- F.** Repeat course. Inadequate/insufficient performance.

b. Prepare Content in Electronic Format

If course content is not already in electronic format, the material should be typed and scanned using appropriate software. In addition to the actual course material, content can include glossary terms and definitions, links to web sites containing related material and additional resources including MS Word and PDF documents or Flash animations and movies.

c. Determine Roles and Responsibilities

The different roles and responsibilities involved in the course development process are described below. One person may have more than one role, but each role is distinct.

Project Manager	Manages the development process. Sets the budget, establishes the schedule and ensures that everyone sticks to it, Is usually the primary contact with the client.
Instructional Designer	Creates the storyboards. Takes the content and breaks it into manageable chunks. Designs interactions, writes test questions and objectives (though these may be provided).
Multimedia Designer	Creates or finds graphics, sounds, movies and animations. Sizes and optimizes multimedia files for online delivery.
Online Course Developer	Takes the storyboard the instructional designer wrote and turns it into electronic course content. Cuts and pastes the text, inserts the graphics, creates the interactions. Also creates the templates before course development begins.

d. Establish Schedule

The project manager is responsible for establishing and managing the project schedule and for ensuring that the course development team sticks to it. Specific beginning and end dates for each stage of the process should be established and people should be held accountable if they do not stick to the schedule. Software programs such as Microsoft Project help facilitate this process.

The simplified schedule below is an example of a stair step process.

e. Write Design Guide

The design guide should include specifications for the overall color scheme, font type and size, color and size of page titles, navigation buttons, etc. This is especially important when creating courses for external clients. The table below indicate the type of information needed.

f. Create Templates

- **Course introduction**

Each course needs to begin with an introduction which summarizes what will be covered, presents the objectives, specifies what the students will learn as a result of the course.

- **Course Menu / Index**

Students need to be able through navigate easily to each lesson, they should not be forced to click through all the course pages to get to where they left off. Thus, a course menu with links to the first page of each lesson should be provided.

- **Lesson Introduction**

An introduction to each lesson is also advised.

- **Content (no interaction / half page or full page)**

Content pages will form the bulk of the course. There may be several types of content pages, but all should have similar looks and feeling. The page titles, the font, the size of the graphics, the title and navigation bars should be consistent throughout the course.

- **Layer Reveal**

Layer reveals are layers which are displayed when the user clicks on an image or text link. They are used to display additional information about a topic. The properties of the layers and links which display the layers should be established and included in the design guide

- **Review Question / Quiz**

Each lesson should contain several review questions covering the material contained in that lesson. The most common question types are:

- True false
- Multiple choice (single correct)
- Multiple choice (many correct)
- Fill in the blank

g. Determine course navigation and structure

A good page naming system will help the course files to be managed more efficiently.

One that works well is:

wd01_0020

wd01_0030

wd01_0040

The letters (wd) indicate the course (Microsoft Word 2000)

The first two numbers (01) indicate the lesson number.

The final four numbers indicate the specific page. Numbers are used in order for all pages to line up in order. Pages are numbered with difference of 10, (e.g. page number 240, is numbered as 2400 and 241 is numbered as 2410). This can provide us with additional space so that materials can be added in between any time in future.

Determine course navigation

Most course pages will include links to the next and previous pages and a link to the course menu. If additional reference material and/or glossary terms are part of the course, a link to these resources should be provided as well. Links to the next page may not be included on question or layer reveal pages if the instructional designer urges the user to answer the question or display the link.

h. Set up course content on LMS

- Should be simple and easy to use. May select to use one folder for each lesson or just have one folder for the whole course (as the page numbering system should automatically separate web pages by lesson).
- Needs to have separate folders for the original images and some other for images that have been modified and optimized for online delivery.
- Suggests building two sites: A development site and a final site. The lessons are built in the development site and, only when the entire lesson has been completed, moved to the final site.

2. Storyboard

The storyboard, created by the Instructional Designer, is the document that contains everything that is to be included on every page needs to be determined before any page is authored. (This does not include making the templates, which will just be place holders, empty of all content). Each page and each layer (or pop up window) should be on its own page.

Elements available on all pages (such as the title and navigation bars) do not have to be included in the storyboard. Information that should be included in the storyboard includes the following:

- Course content (text)
- Content contained in layers displayed On Click

- Accompanying graphics, sounds, animations and movies
- Specific, non-standard directions for the user (e.g. click on the icon that opens an existing Microsoft Word document).
- Directions for the course developer.
- The type of template used.

A small example is below.

3. Multimedia Content

When all the text content for a lesson has been storyboarded and all the multimedia files found or described, the storyboard can be passed on to the multimedia developer. This person may be the same person as the online course developer, but it is more efficient to size and optimize all graphics, sounds, animations and movies before the course content pages are authored. Multimedia files should be as compact as possible to avoid long download times. The original multimedia files should be kept in separate folders.

4. Course Pages Development

When the lesson has been storyboarded and the multimedia files obtained and optimized, the pages will be authored. Through this stage the bulk of the work has been done. Ideally the storyboard will contain everything the course developer needs to create the lesson pages. A team approach is excellent, but ideally the course developer will not have to contact the instructional designer, everything he/she needs should be in the storyboard. Creating the basic content pages should be a simple process of cutting and pasting the text and inserting the multimedia files. Interactions and questions will be more complicated, but the course developer should have all the information he/she needs.

5. Quality Control

The course is not complete even when the web developer has authored the last page. Before it can be released, it must undergo a quality control process. This means that someone needs to go through the entire course, page by page, looking for anything that is not correct. Every mistake and the page on which it appears should be recorded and then handed over to the web developer for fixing. Quality control includes both

the text (spelling, grammar, etc.) and technical aspects (links not working, layers not displaying, etc.).

The table below is an example of a simple quality control sheet.

Quality Control Sheet	
Page	Comment
wd02_0030	Layer does not display and Next button does not work.
Wd04_0050	Capitalize the first letter of each bulleted item.

FINANCIAL PLAN

Introduction:

The establishment of the Islamic Virtual University (IVU) will provide a framework for distance learning that will contribute to the transfer of science and exchange of expertise and enhance communication among researchers and specialists in real time for a lower cost compared with conventional learning.

A number of technical, economical and financial considerations justify opting for such type of training:

- From the technical point of view, the creation of the IVU will provide an opportunity to benefit from new information and communication technologies and internet facilities, and will provide customized courses that meet the needs of the beneficiaries.
- Economically, distance learning ensures either free or cost-effective services as it does not require much space and uses only a host centre and centralized management organization. Actually, the “virtual environment” provides an infinite space that accommodates a huge number of beneficiaries, especially that the IVU will deliver its services to a maximum number of students across a geographical area as vast as the Islamic World.
- Financially, the expenses of the IVU are low. Actually the University will rely on the contribution of the scientific capabilities of the member universities since these will provide the IVU with the courses and lectures of their teaching staff at a low cost and put their infrastructure and equipment at its disposal.

It would be useful at first to determine the establishment costs as well as the operating costs of the IVU on the one hand, and the necessary means to cover both on the other.

I. Determining The Costs of The IVU

One of the key motives for establishing a virtual university is the pursuit of the economy of scale, the decrease of the marginal cost proportional to the increase in the number of beneficiaries, thanks to the progress made in terms of production capacity. Accordingly, anticipating and assessing the costs has become an essential factor in the success or failure of a given project. Besides, the virtual university’s scientific output with its ‘industrial nature’ requires a management centred on efficiency and cost-effectiveness, and governed by the dynamics of the world of commerce.

There are many reasons for analyzing and assessing the costs:

- The scope investments and its impact on the training;
- The productivity of investments: the cost of services has to be commensurate with the number of beneficiaries, and with the scope and nature of the curricula.

The many curricula requiring advanced material demand a bigger production capacity which accordingly pushes up their cost especially when the number of beneficiaries is limited. This may hinder the development of the IVU and limit its performance.

It is crystal clear that as in other fields, the first time cost of producing e-learning contents are considerably high, but the same content, in later stages, can be used with slight modifications.

This being the case, each activity must be planned and scheduled at the level of the budget as follows:

- Care should be taken while considering the cost of content production as it is directly related to the number of its beneficiaries: As the costs of content production are to be paid in advance, it is necessary to attend to the contents with a large number of users. This will lead to higher efficiency of the program.
- Taking into account the cost incurred as a result of a cancelled project or due to an alternative investment.

The analysis and assessment of the costs will ensure the success of the IVU in fulfilling its mission. To this end, we should distinguish between two types of costs: fixed costs and variable costs.

a) Fixed Costs:

- **Establishing IVU Site** to be used as headquarters of the IVU though experience has shown that virtual universities are often set in actual universities. Consequently, the headquarters cost can be saved if the IVU is hosted by a Member University or an institution having common objectives, located in the UAE, upon the agreements made in Executive Council of FUIW.
- **Installing necessary equipment** and providing grounds for offering courses and coordinating among IVU headquarters, lecturers and students, including software and hardware equipment to offer courses and an interactive Learning Management System (LMS) to ensure a live broad cast and interactive teaching.

It is more than necessary to extend our sincere appreciations to Islamic Azad University and the FUIW for all facilities they provided and every cost and expense they undertook.

- **Establishing and equipping a centre for content development** includes a content production team as well as the equipment required for film production, making narrations and the software required for the technical arrangement and execution of the material.
- **Fast and Reliable Internet connection**
- **Establishing an international learning network**, connecting the IVU to its regional offices, and to the universities and institutions with which it has concluded agreements.

It appears that fixed costs require substantial investments. For example in the Business School of the city of Nice (France), equipping a distance learning room with highly advanced technology in order to train 4.500 students in 900 modules has cost \$300.000.

b) Variable Costs

These costs are associated with the operating expenses.

➤ **Costs ensuing from administrative organisation**

These costs can be calculated taking into account the current needs and the possible development of the University in the future.

At the pilot phase, the cost has to be minimized. The IVU can undertake only the expenses required for the management of the Board of Trustees, along with those of the staff, the president and the vice-president of the University. With a view of minimizing its expenses, the University may be run only by three directorates: a directorate of educational and student affairs and a directorate of administration and finance.

- **President's office:** May operate by the president and one secretary.

- The directorate of educational and student affairs: may operate only with the Director of Academic Affairs, one educational official and one technical official.
- The directorate of administration and finance: may operate only with the Administrative and Financial Director with two officials under his authority: one in charge of administrative and legal affairs, and the other entrusted with financial affairs.

The small organisational structure of the University at the pilot phase is likely to help minimize the costs ensuing from the expenses pertaining to the officials and the tutoring staff whose salary amounts depend on their academic qualifications and the tasks entrusted to them. Such organization will also ensure costeffectiveness in terms of the expenses allocated to the operation activities and maintenance of facilities.

As the next phase will be marked by the extension of the university's scope of activities, the improvement of its products and the diversity of its services (such as the introduction of under-graduate and graduate programs), the University's facilities may be expanded through the creation of new administrative units. These may include a Planning Unit, a Follow-up and Assessment Unit, a Library Unit, a Training Unit and a Documentation Unit. The establishment of these units will be a financial burden as it will definitely increase the costs of the University, especially if it imposes fees in return of its services.

➤ **Costs ensuing from the running of the University's affairs**

These costs concern the expenses pertaining to the management and maintenance of the University's facilities. The most important of these costs are:

- The expenses ensuing from the maintenance of computer equipment and installations
- Consumables needed for the production and the operation of devices and equipment
- Salaries of officials, tutoring staff, administrative staff and technicians
- Salaries of tenured as well as associate teachers
- Travel and mission fees
- Water and electricity consumption

- Security system expenses

➤ **Expenses pertaining to production and services**

Distance learning management requires a meticulous knowledge about the educational functions and mission of the University in order to estimate their costs.

The functions pertaining to training and services are five in number as follows:

- Producing and structuring the material
- Technical execution
- Internet based platform for the courses to be deliver (Learning Management System – LMS)
- Tutoring
- Research

1. Producing and structuring the material

The production and structuring function consists of preparing teachable materials. This operation requires costs to be calculated taking into account the expenses incurred as a result of designing, planning, drafting and filming a finished course. This includes the respective salaries of the teachers, the educational official, the technicians and the employees.

It is worth mentioning that the content produced by every FUIW member or by prominent international universities and institutions will also be used. The costs thereto, are negotiable.

2. Technical execution

This operation consists technical handling of production, including its review in terms of form, graphics, editing and dubbing, and copying. This gives way to expenses including the salaries of technicians and employees along with the cost of equipment and consumables used. Maintenance and updating systems are among the activities of this section.

3. Internet based platform for the courses to be deliver(Learning Management System – LMS)

LMS provides the beneficiaries with the following:

- Educational facilities;
- Electronic content delivery;
- Administrator-Teacher-Student interaction;
- A record of student information and their academic status and progress.

The University will assume the costs of this operation, including all that pertains to the utilization of the production means, infrastructure, software, the media, publicity, the fees paid to technicians and employees, along with the costs of electronic broadcasting and distribution.

4. Tutoring

Some teachers will undertake the tutoring of students and distance learning beneficiaries in terms of instruction and orientation. Their salaries and travel fees will be paid from the budget of the University.

The teachers' salaries are calculated on the basis of the number of working hours. According to the specialists' view, teachers devote 40% of their working hours to the preparation of new courses, 10% to review existing courses, 25% to student tutoring and 25% to scientific research. The cost related to teachers and tutors is calculated on the basis of this ratio.

5. Research

This function concerns the research conducted by teachers, researchers and professionals. The University assumes the cost of research which may represent 25% of the payroll.

It is hard to give a ready-made formula of estimated costs as there are numerous criteria for evaluating the costs of a virtual university. Among these are:

- The number of beneficiaries, especially students
- Internet connection
- Subscription to information and data channels

- The size and type of equipment
- The quality of services
- Number of tutors and technicians
- Resources

The distance learning system is characterized by the importance of its fixed costs compared with the variable ones. It thus allows for an economy of scale as the marginal cost remains relatively limited despite the increase in the number of beneficiaries as stated above.

Next, come suggestions to establish IVU in a five-year business and financial plan.

II. THE IVU FINANTIAL ESTIMATIONS

➤ Personnel Plan

IVU will hire 3 top managers and administration staff and 5 service personnel to assist with the start-up, enrolment of new students, sales and marketing plans. IVU will require a full team of well-trained professionals to keep up with the high standards expected by its beneficiaries.

We foresee the need for 3 top managers for the operations. IVU's organizational structure consists of the Chairman, Director of Education and Student Affair, Director of Administration and Finance Affairs. These 2 units will be all supported and managed by the Chairman and must report their activities to the Chairman.

IVU will count on 5 full-time staff to start its operations. It is forecasted that the administrative personnel will increase to 24 full-time persons by 2012. Monthly personnel cost estimates are included in table 1. It is estimated that the personnel costs based on average salary will show between 10% annual growth in next 5 years for the said positions.

➤ Financial Plan

At present, IVU is attempted to continue operation supported by new assets. We are capable to invest more cash assets on demand. IVU's sales and marketing program will start immediately as of academic year 2008. Forecasted sales for the first five years are shown in the sales forecast as projected numbers. Our sales forecast is based on our target market and estimated our business plan result. Our sales forecast description for each business group is as follows:

➤ **Direct Cost of Sales Forecast**

The number of lecturers for the first year of plan are 2 and we came up with the result that the number of lecturers required for every 50 students of short courses, for every 40 undergraduate students and for 30 graduates will be 1, 1, 1 respectively. The proposed salary will be USD2000. We mentioned 10% as annual raise for lecturers. Also 20% of annual revenue will be considered for licensing and product cost margin for each short course, undergraduate and graduate program. It should be mentioned that, all the mentioned raise amounts will be considered and calculated as of the beginning of the academic year.

➤ **Operational Expenses**

5% of the allocated budget has been devoted to Sales, Marketing and Advertising Campaigns and 1% to all other sales and marketing expenses. As one of UAEbased universities or donors is suppose to provide IVU with a building as its headquarters, therefore rental and utilities costs are considered to be as little as 10,000USD (fix cost). Moreover 1% of the annual revenue will be allocated to unexpected and hidden charges.

➤ **Profit and Loss**

We expect the profit will show up from the fourth year with net earning of USD 149,400 and USD 2,040,572 in the fifth year of operation.

III. FINANCING SOURCES OF THE IVU

For the IVU to be able to cover its expenses, it shall establish a network of ties with Islamic countries, organizations and personalities to secure support, particularly at the pilot phase. Moreover, it has to work towards developing its financial autonomy in the next phases.

a) External sources of financing

The pilot phase requires a financial contribution by the Federation of the Universities of the Islamic World (FUIW) through establishment of a fund to be dedicated to the funding of the Islamic Virtual University Project.

The contributions of Islamic and Arab countries along with the support of international bodies and organizations, and Islamic personalities may constitute the most important external sources of financing. Among these sources of financing are:

- Membership fees in addition to the contributions of the IVU Member Universities. In-kind contributions such as real estates, machinery and equipment are accepted in the pilot phase
- The resources stipulated in the cooperation agreements between the IVU and other universities
- Resources ensuing from partnership agreements between the IVU and associations
- Contributions of international organisations
- Aids, donations and grants provided by the Arab and Islamic organisations, universities and Islamic personalities

b) Sources of self-financing

The development of the IVU together with the expansion of its scope of functions and the enhancement of its capacities, mainly in the subsequent phases, will require the development of its own financial means in order to boost its autonomy and to secure its viability in a world context marked by fierce competition.

Key sources of self-financing of the University may include:

- Revenues secured from IVU publications such as documents and research papers/articles edited and published by the University
- Research projects carried out under partnership agreements
- Training and counselling revenues
- Income resulting from continued training provided for the public and private sectors
- Developing partnership with different sectors
- Developing *waqf* as a source of self-financing; such as instituting commercial industrial or real-estate capitals, or fixed assets as endowments dedicated to the IVU
- Students' share in assuming a part of the university's expenses through payment of enrolment fees and modules costs taking into consideration the income standards in each country.

In view of what is stated above, it appears that the financial design of the Islamic Virtual University stands on strategic choices taking into account the available means and their interconnection with a set of rapidly changing technical factors.

Financial Regulations
Of the Islamic Virtual University

DEFINITIONS

In these regulations, the following terms are referred to as with the given meanings:

The FUIW: the Federation of the Universities of the Islamic World

The General Secretariat: the General Secretariat of the FUIW

The Member Universities: the Member Universities of the FUIW

The IVU: the Islamic Virtual University

The Statute: the statute of the IVU

The Executive Council: the Executive Council of the IVU

The Board of Trustees: the Board of Trustees of the IVU

The Chairman of the Board: the chairman of the Board of Trustees

The Financial Plan: the general Five-year Financial Plan of the IVU

The Budget: the financial program for the implementation of the Financial Plan

The financial year: the period from 1st January to 31st December

SECTION I

Laying down the Budget

Article 1:

The budget is the two-year financial program of the Islamic Virtual University called IVU. It shall be drawn up in three annual sections for the implementation of the items of the budget adopted by the Board of Trustees.

Article 2:

The budget shall include all expenditures and receipts related to the various activities of the IVU.

As for expenditure, budget estimates shall be set in the light of the needs to be fulfilled within the framework of those activities.

As for receipts, the budget shall show all expected income.

Article 3:

In laying down the budget, due consideration shall be taken regarding the administrative and technical structures of the IVU and the specific nature of its programs.

Article 4:

Budget estimates shall be apportioned into entries, headings, articles, items and, if necessary, sub-items.

Article 5:

Receipt and expenditure estimates shall be in US dollars.

Article 6:

In addition to receipts, expenditures and any related annexes and explanatory documents, the budget shall include an explanatory memorandum which may be presented by the chairman with regard to collection of Member Universities' contributions and, if necessary, the reasons which may have prevented the implementation of the plan of action.

Article 7:

The Chancellor shall draw up the draft budget and submit it to the executive council for consideration, prior to referring it to the board of trustees for adoption.

Article 8:

Following consideration of the draft budget by the executive council, the Chairman shall send it out to Member of the board one months before the meeting of the board of trustees, along with the supporting documents and the relevant analytical studies.

SECTION II

Resources

Article 9:

The budget shall be financed from:

- Student Tuitions
- Revenues from the University's publications, activities, research projects, training courses and academic programs
- Subscription fees and contributions of Member Universities. The Executive Council of the FUIW shall set up the amount of fees and contributions pursuant to the recommendations of the Board of Trustees
- Resources secured from cooperation agreements concluded between the Islamic Virtual University and other parties
- Grants, donations and endowments (waqf) provided by Arab, Islamic and international organizations, Member Universities, non-member Universities, institutions and individuals or any other resources
- Donations for no specific purposes shall be deposited in an account called "Account of Miscellaneous Receipts"

Article 10:

When a new University joins the IVU after commencement of the financial year, it shall pay its full contribution for the same financial year. This contribution shall be deposited in the "Account of Miscellaneous Receipts".

SECTION III

Special Accounts

Article 11:

A reserve account, whose capital and financing means shall be determined by the FUIW General Secretariat, may be opened so as to enable the Board of Trustees to use the necessary funds for expenditures which fall due before the collection of the estimated incomes.

In this case, the funds withdrawn shall be considered as a loan which will be paid back into the reserve account when the Account of Miscellaneous Receipts has been replenished with available funds.

Article 12:

The Chancellor may suggest to the Board of Trustees. that funds specifically aimed at financing particular projects be set up.

Article 13:

The Account of Miscellaneous Receipts, the reserve accounts and the funds for specific projects shall be managed according to the provisions of the present Financial Regulations.

SECTION IV

Expenditures

Article 14:

The expenditures of the IVU shall be governed by the provisions of Article 13 of the Statute.

SECTION V

Execution of the Budget

Article 15:

Upon its adoption by the Board of trustees, the budget shall come into force, with backdated effect if necessary, for a period of two consecutive years. Each year shall start on the 1st of January and end on the 31st of December.

Article 16:

Should the Board of Trustees fail to adopt the budget before the beginning of the new two-year period, the Executive Council shall issue instructions for expenditures to be made within the limit of 3/12 of budget appropriations for the previous financial year (except for the amounts due for payment) until the adoption of the budget by Board of Trustees at its following meeting. The said meeting shall take place at the end of March of the first year of the new two-year period, at the latest. The following two-year budget shall be backdated to the 1st of January, in accordance with Article 11 of the statute.

Article 17:

Upon its adoption, the budget shall be notified to Member Universities in detail, along with the contributions that Member Universities must settle within three months from the notification date.

Article 18:

Adoption of the budget by the Board of Trustees shall empower the chancellor to use the allocated credits for the achievement of the objectives and programs approved by the Board of Trustees.

SECTION VI

Role of the Chancellor

Article 19:

The chancellor shall take the necessary measures for the purpose of book-keeping and preparing the annual accounts, showing: expenditures and receipts, whatever their sources, situation of approved credits and assets and liabilities.

The Chancellor shall submit the annual report on the budget to the Board of Trustees for consideration at the first session of the Board following the end of the financial year.

Article 20:

There shall be no transfer of credits from one entry to another, or from one heading to another, nor any overspending of the credits allocated to any entry or heading, nor any expenditure incurred outside budget appropriations, except with the consent of the Board of Trustees. However, the Chancellor may, should the need arise, transfer credits within the same heading:

- From one article to another, up to 50% of the funds available

- From one item to another, without any set limitation.

This transfer shall not, however, exceed the general framework, nor shall it have conflict with the objectives of the Plan of Action adopted by the Board of Trustees.

The Board of Trustees shall be informed of the transfer at the first meeting following the transfer decision.

Article 21:

Subject to the approval of the Board of Trustees, the chancellor may undertake the following within the framework of the provisions of the statute and the Plan of Action:

- incur loans in the name of the IVU
- conclude financial liability contracts which would necessitate the incurring of expenditures after the end of the financial period.

Article 22:

Subject to the approval of the Board of Trustees, the chancellor may postpone or suspend the implementation of any items of the budget.

The credits concerned shall be frozen and the relevant reasons shall be listed in a memorandum to be presented to the Board of Trustees in due time. Those reasons shall also be included in the memorandum on the closing accounts of the year for which the credits were allocated.

SECTION VII

Closing Accounts

Article 23:

The chancellor shall prepare an annual report on the closing accounts, indicating the receipts and expenditures of the financial year concerned, and illustrating the financial situation of IVU.

The closing accounts, together with the decisions of the Executive Council, shall be submitted to the Board of Trustees along with the report of the chancellor on the implementation of the budget.

SECTION VIII

General Provisions

Article 24:

The present Regulations shall come into force upon their adoption by the Board of trustees.

Article 25:

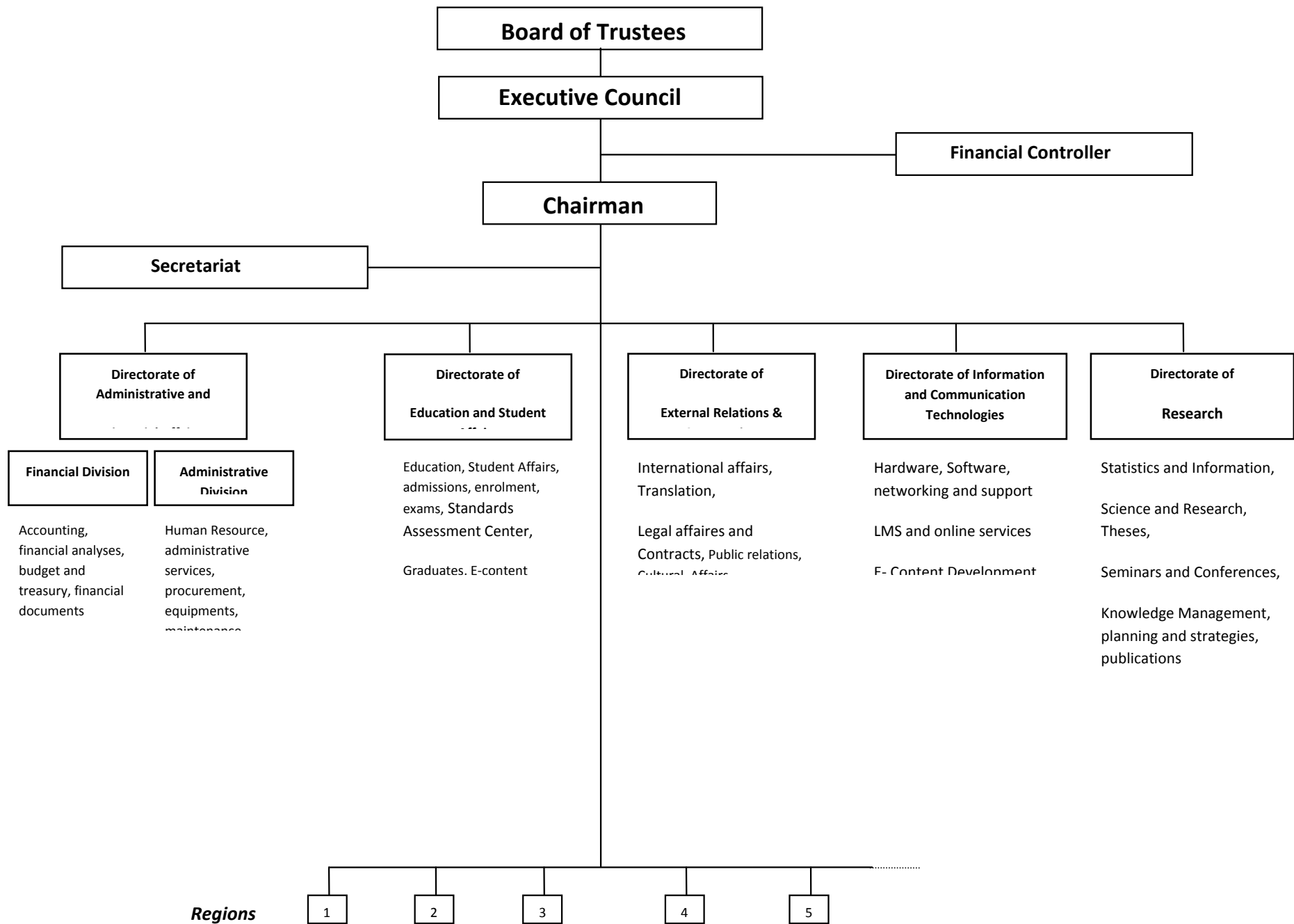
The Board of Trustees may amend these Regulations in accordance with the statute.

**Supervisory Body
of the Islamic Virtual University**

Supervisory Body
of the Islamic Virtual University

<i>Proposed text</i>	<i>Suggestions</i>
Permanent Members (5)	<ol style="list-style-type: none"> 1. FUIW General Secretariat 2. Islamic Azad University 3. University of Sharjah 4. Islamic University in Uganda 5. Imam Muhammad Bin Saud Islamic University
Arab Universities (1)	<ol style="list-style-type: none"> 1. Kuwait University
Asian Universities (2)	<ol style="list-style-type: none"> 1. Azerbaijan State Economic University 2. International Islamic University Malaysia
African Universities (1)	University of Sheikh Anta Diop – Senegal
Western Universities (1)	Cordoba University (USA)
Donor Institutions (3)	<ol style="list-style-type: none"> 1. Islamic Development Bank 2. International Islamic Charitable Organization 3. Islamic Solidarity Fund
Specialized Institutions (2)	<ol style="list-style-type: none"> 1. Abdel Malek Essaadi University 2. Alquds Open University

ORGANIZATIONAL CHART



** Vice Chairman would be nominated by the chairman from among the heads of units.*