

# “Necessary of Hi-Technology Training to Protect the Originality of Iranian Architectural Heritage”

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## Abstract:

Iranian Ancient architectural heritage of the importance to have competent international prestige and respect that this is important with regard to proper conservation methods based on non-destructive evaluation methods and non-contact testing; provide enough accuracy and speed to bring performance to stabilize while correct location and time value of valuable architectural aspect of quantification; quality and originality of these valuable cultural point of view, maintenance, protection and restoration in principle be enough and if intervention measures in the field of strengthening and improvement of seismic in this important historic monuments; reassessment actions shall be effective with accuracy, speed and lack of unnecessary destruction in order to maintain these buildings may be accompanied by gentility. Therefore, you should transfer technical knowledge through appropriate training and non-destructive and non-contact methods in the field of architecture and architectural restoration of ancient works of these objectives will be achieved; up based on any particular monument, rules and technical measures appropriate to its historic monuments based on the need to be used. This paper tries to ask while doing it is specialized training and evaluating the existing technology in architecture, the importance of attitude in non-destructive observing methods, assessment, measurement and diagnostic engineering features of monuments; methods of documentation, studies, classify scheme, explain the profile of engineering methods of pathology, evaluation, analysis and formulation process of expanding the structural weakness of monuments and finally race precision appropriate intervention measures, modeling, strengthening and durability of the architectural heritage of Iran through the training of new consideration.

## Key words:

Modern university education, High-technology, non-destructive and non-contact testing, protection of originality in architectural heritage of Iran

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## 1 - Introduction:

Effectiveness of protection actions, maintenance and intervention in the repair and retrofitting of monuments need of being a system identification procedures, assessment analysis, pathology diagnosis of weaknesses and planning appropriate intervention actions of field is; software, hardware and logical tools. In other words, from the standpoint of adequate technical knowledge in the field of software applications and equipment with modern equipment providing specialized facilities and tools necessary to evaluate non-contact non-destructive from the standpoint of hardware; that is necessary from the standpoint of management and logic programming software in compliance with appropriate measures intervention in the behavior of building structural form of monuments and venerable reliability safety protection and maintenance of the buildings against the destructive environmental factors and fatigue during the work strengthening and durability of resistance and restore historic buildings against cracking and deformation inappropriate historical structures and finally to the process of building sustainability and quality improvement in terms of historic structures, operations or future conditions appropriate rehabilitation and development programs while maintaining originality and cultural identity of valuable historical formally integrated to find others to maintain . Therefore, training of new academic knowledge transfer and technical expertise to professionals in architecture, using non-destructive technology when building monuments to form a system and access special importance will be digital.

## 2 – High-technology in technical documents preparing and computer documentation of engineering heritage buildings:

Methods of harvesting and surveying, measuring, measuring excessive features system engineering monuments today are interested. Therefore, to determine the geographic coordinates of the position location of the GIS and technical equipment to help determine the size, thickness and angles and internal communications as a three-dimensional virtual spaces with the help of laser and determine the status of three-dimensional solid, porous and layered architecture with the help of the physical influence radar wave GPR and determine the status of diversity and gender composition and distribution of materials in mass components monuments with the help of ultrasound UTS takes place. On the other hand methods and classified documentations and compiling technical specifications of the historic buildings in historic areas, oral, and graphics library for architecture components, structural, facility and a courtyard to a system of computer applications and associated documentation disturbance and environmental contradictions and history and items related to structural interference with the ability of computer utilization are prepared. Within fifty years of Architectural heritage GIS location as the computer world and become computable in the introduction that this issue works to the world with effective and tie with local information and data given treasures global sense of belonging where cultural elements Human comparability with each other and find a local historic architecture of the spiritual quality assessment to be sure [1]. In other words, because the main factor and cultural heritage to future generations transfer documents is accurate and sensitive methods and technologies

developed in such a manner dependent on documentation rapid recent advances in measurement techniques, drawing and identify geometric and physical properties and mechanical condition existing monuments and precise determination of structural disadvantages of three-dimensional computer is today in the protection and maintenance of historic structures with modern methods of photogrammetric close range caused the preparation of indisputable evidence of the reality of the situation has been the world's cultural heritage technical [2]. On the other hand the development of computer documentation of three-dimensional architectural history of the world requires the establishment of a centralized computer database to reveal it to protect the valuable partnership with the global technical community as a challenge to research proposes to create a system reconstruction of non-technical information and prevent the possibility of standardizing the methods of documentation and proper utilization of the documents mentioned in the planning and engineering information management and architectural heritage of computer modeling techniques to improve sanitation structures in world history and we provide finally able to intellectual property rights and computer documents defining the principles to find valuable monuments [3]. Appropriate management information and data, in geometric and structural monuments for conservation and restoration principles and structures and ornamental architectural heritage and full support for technical documents; all stages of intervention and repair actions performed in the monuments recorded by computer frequent evaluation and possible seismic resistance of buildings in this complex, even with 5000 elements in any desired element with the necessary technical accuracy and provides extremely fast and with automatic sensors on the status of the element by building monuments to the administrative centers send technical assessment and control, quality and quantity of engineering monuments to be continually makes and compatible with the situation day to decide the World Bank technical specialist will be done [4]. In order to accurately diagnose technical documents monuments using modern technology to influence and use of radar waves near Photogrammetric method GPR can analyze a structure and pathology and geometry of form and level of assimilation of material and cracking condition as revealed in three-dimensional congratulations also recognizes the risk positions and model structure resistant monument set in [5]. In this connection so far in the world many research fields Three-dimensional laser scanning and 3D LASER SCANNING capture computer as digital protection scheme DIGITAL historic structures in the extinction that took place in order to protect the ancient heritage of Islamic and Iranian architecture, the above value has a great [6]. Nevertheless with the digital world's cultural heritage technical documents and allows access to this collection of computer science and specialized technical level, the main need of professional restoration work of ancient architecture to be fulfilled in this regard in Eastern Europe after the Turkish opened database the preparation digital documents has its architectural heritage and this apart from its importance, can cause metamorphosis to prevent robbery and forgetfulness and lack of local cultural to be reserves in the future [7].

### **3- New experimental technologies of non-destructive evaluation tests in the diagnosis of engineering features of heritage buildings:**

Identify features of historic engineering structures and evaluate positions and development under the structural weakness of the normal and abnormal destructive effects of structures in the form of valuable consideration is a system. Today, with the help of Pathology monuments non-destructive methods of thermal-wave survey to determine the status of TDT and exhausted, sat, cracking and even status interference structure wave method with the help of previous polls UTS and thermal and sound determination of the above process with the destructive effect of factors Help sensors and digital systems and continuous-wave survey are used. Considering the importance of preventing destructive tests in the evaluation of technical features historical structures, according to a credit review of the act specified that the destructive results of technical tests to non-destructive test results in ancient structures; relationship meaningful and acceptable and sure enough, there can be results of nondestructive testing NDT test results to actual bulls [8]. Regarding the exact properties of materials consumed in the ancient buildings with the help of new technologies and the differential porosity burnout components through the control structure of ancient materials and mortar permeability rate by ancient visitors scanning electronic microscope completely professional level consistency and durability of mortar preservative components historic structures are known, and even the quality of refurbished previous cases with very high accuracy will be detected [9]. With damage assessment and critical factor to reduce the capacity of poor structural stability and amount of ancient historical building quality seismic capacity and even by building monuments to detect the position and status of intervention operations and cracking conditions and the possibility of structural collapse-related factors skeletal geometric and physical components of the monument can be non-destructive ultrasonic tests as seismic tomography with longitudinal wave propagation speed analysis of changes in the audio components of the monument took advantage of seismic safety and quality monument and moisture conditions of materials and gathering place for ancient salt operating corrosion and decay of structural elements of the monument can be identified [10,11,12]. In terms of providing clear and detailed images with rapid and inexpensive method of photogrammetric and laser scanning image sensing path closely with extraordinary precision components and space for internal and external views of complex and decayed monuments such action that is the integration of multi-point unidirectional and some visitors of this way satisfy the required accuracy is specialized calculations [13]. On the other hand, the extraordinary buildings that nested quantification and quality assessment of caries status and corrosion problems are structural components; to determine the amount of pores and surface permeability and the type of venation and shape of the potential collapse and destruction of historic buildings with electronic microscope Using X-ray Nano-level advantage that is the exact shape and density and the amount of three-dimensional density and influence atmospheric pollutants in the historical building components with high-resolution earn and success of intervention measures to repair building historic actions can prove [14,15].

About the assessment and diagnosis of dynamic characteristics and features as well as historic structures before any decision on the repair and retrofitting seismic considering the need to preserve authenticity and physical appearance can be a valuable historical building with the help of radar waves penetrate and longitudinal sections transverse structure of the ancient and important materials, especially earth platform location obtained in the preparation of three-dimensional computer models in the shortest time the most accurate physical and geometric conditions with waves up to hundreds of meters deep impact possible. So with this category of cases weakness and unwanted holes in structural materials and soil bed to be identified accurately and frequently during the repair and retrofitting plan utilization is an ancient monument, and in particular the control method underground water drainage program efficiency and precision under the bed soil structure can be designed [16,17,18,19]. Considering these problems in the assessment and analysis of numerous injuries, monuments, today with the help of radar wave survey wave, optical, ultrasonic, thermal and ... Precisely, quick and easy to maintain and protect the authenticity and identification of mechanical behavior of ancient structures with high complexity and variety of incongruity to do efficiently and possible seismic performance estimation and analysis of mechanical behavior of true and accurate seismic and Pathology correct estimate of the possible development obtained. Therefore, this mention deserves to develop guidelines and criteria provide software assessment and seismic pathology reveals the historical monuments [20]. Regarding the other hand, the fundamental relationship in the development of Architecture in order to improve the quality of historic structures with seismic quality criteria and explain the theoretical principles and practical development of new methods of intervention and improvement of seismic protection of historical monuments, architectural heritage observance of authenticity and identity while taking advantage of new technologies is necessary. Therefore, in relation to knowledge construction monuments the ancient buildings characteristics of engineering features of materials and technology-specific protection of such buildings against the destructive environmental conditions during recent years extensive research has been done and the use of new technologies assessment and diagnostic observations using new materials to reduce earthquake hazards in accordance with UNESCO guidelines have been used, but in major cases, even when using reinforcement nylon fibers FRP structural components of the historical authenticity of such buildings valued is gone. On the other hand made models to assess quality seismic scale monuments with specific and use the same mortar with ancient mortar were taken, although positions and failure rate of seismic capacity of these buildings will automatically determine the potential and renovation and restoration program guides and reveals, but the actual behavior of mechanical originality of monuments does not directly visible [21, 22]. On the other hand to standardization of diagnostic test results to real materials in historic structures; non-destructive test results compared with conventional destructive tests of ancient mortar compressive strength has shown that higher-destructive test results and a strong level of indirect tests non-destructive and in digital imaging and application of modern simulation software as well as

good results compared to finite element method in analyzing the behavior of historical monuments and more particularly the emergence of software enabling more precise analysis of GID can, so this method Common repairs and seismic improvements monuments to transforming. More interesting than the 3000-years teaching experience competition adapting traditional buildings with destructive earthquakes in Central Asia; coil represents a multi-layer scheme, dried and packaged software possible structural vibrations in historic structures is also leading with new technology basin such as the use of natural fibers with protective radius around the scheme, using natural materials and native. In other words, with technical experience new countries such as Afghanistan, Turkey, Armenia and Central Asia and the England and in particular Himalayan region of match while engineering this indigenous knowledge and traditional technologies with new technologies in conservation and retrofitting and construction materials as well as indigenous ancient structures can be classified with the pod on seismic improvements to counter the destructive effects of earthquake protection will act [23, 24].

#### **4 – New technology modeling, simulation, analysis, evaluation and pathology Seismic monuments:**

Modeling and performance analysis of historical monuments under the effect of structural aging and physical and chemical corrosion and corruption of ancient materials, for change and transformation of environmental conditions and interference strengthening, seismic retrofitting and upgrading with the aim of building monuments sustain to help both new technologies because the effects of Nano-science and technology to improve energy performance and behavior of seismic quality historic structures; to pathology to determine appropriate development and structural failures and determining positions worthy of restoration, and management requires a system approach in the field of logic software is operational . In this way the relationship can be simplified in ways such as for the equivalent frame modeling of seismic behavior of structural components of non-linear historical performance and use software to help simulate three-dimensional and dynamic acceleration by applying simulated earthquakes possible analysis of the spectrum response plan; performance seismic quality heritage assessment that the studies detailed the results of these methods equivalent with a small percentage (6%) difference on the actual results, reassuring known [25, 26 ,27]. In more accurate modeling and simulation with finite element analysis of continuous or discrete non-linear behavior of structures by three-dimensional computer modeling using computational dynamic analysis or seismic waves vibration influence and use of radar and reliable response seismic actual historic structures as a nondestructive measure of complexity and certain related structures and we get rid of the old and worn out with ease, speed and accuracy, and ensure adequate structural weaknesses monuments of static and dynamic loadings (static and dynamic) and discover the principles Bearing capacity and appropriate intervention plan seismic improvements to retrofitting the historical structures [28, 29, 30, 31]. In order to analyze earthquake and seismic rate variability monuments to identify weaknesses and possible collapse of destructive earthquake and determine the correct method of repair, new technologies can be non-destructive and non-contact testing with the three-

dimensional modeling method Relying on finite element oscillating potential base period historical structures in the face of the ground motion period area historical context and we shall action status cracking and decay of the ancient structures we detect with sufficient speed and accuracy proved monument risk areas identified . Note however that these methods regard to the actual scale historic structures under test, with results contrary to traditional results and analyzing the behavior of common heritage, but completely safe and would be consistent with the fact [32, 33, 34]. Stances in the diagnosis and extent of injury must also apart from the experimental methods and principles of visual inspection as well as fast RVS; before attempting to perform non-contact and non-destructive testing we have to note that cracking and the density of structural components seismic test results highly effective and high quality three-dimensional simulation models of behavior of historical structures and seismic analysis with computer of high quality ancient monuments such as the theoretical analysis also compared the equivalent frame adhered to and ensure greater accuracy in detecting seismic vulnerability of buildings Historical occur [35, 36, 37]. With analysis of overall quality and precision vibration and static strength apart from the historic structures according to technical instructions FEMA, AISC, OPCM in determining the behavior of three-dimensional arches, vaults, walls and horizontal, vertical and circular deformation of production, should make the scale and design earthquake response spectrum analysis and exact dynamic behavior of linear and nonlinear materials carefully to the old practice to be brought regardless of peaks and frequencies applied in all cases proved enough and the risk destructive earthquake waves in the plan and consider the behavior of large parts of the horizontal openings and long and narrow column bases and base connection points with arches, vaults and structural components, such as the vulnerable position of strengthening of worthy attention and improvement be specific [38, 39, 40, 41, 42]. Bearing capacity in the final assessment and vulnerability analysis and definitive destruction of historical structures can also us help with ultrasound waves and new methods of seismic load, and also influence radar waves and three-dimensional models using the finite element method speed and accuracy of discrete aspects of creative new qualitative and quantitative analysis of failure and failure of structural seismic performance, even with complex models do monuments and analysis of such complex non-linear collapse of ancient elements in the range of tensions produced and especially we show the rate of change and failures process and the collapse condition of structures under static and dynamic loads into a simple conversion [43, 44, 45].

## **5 - New technologies in protecting and improving intervention and Seismic retrofitting monuments:**

Executive actions and interventions to maintain and repair protection factor, strength and stabilization of structural stability, quality improvement, mention accountability and increased seismic stability and development of seismic sustainability monuments representation of views and develop programs and methods of intervention and elimination of defects and weaknesses damage Biology and potential historic structures and materials to help new technologies; require special management

is a systemic attention. On the other hand, while measures to improve the behavior of historical structures and reform of weakness related to quality seismic capacity of ancient buildings against destructive earthquakes behavior must be controlled seismic refurbished buildings such principles in order to protect and maintain constant element in the future and prevent future structural weakness is the attention to this point is essential to help three-dimensional computer models of the finite element method consistent with the restoration of historic properties under the structural components of dynamic load test and vibration survey Non-destructive and are located in areas prone to failure like arch support and arch of the dome and positions under tensile stress is more attention [46, 47]. Review process in seismic retrofitting monuments and compare methods of quantitative and qualitative assessment of precision analyzed seismic vulnerability of monuments must be sufficient attention to this issue that we have these buildings based on form or shape and materials and their own physical condition and location historic areas and weak shear buckling inside page and a page out of its walls during the earthquake occurrence; plasticity and predictability are desirable due to the non-assimilation of ancient materials, unspecified behavior in terms of mechanical and dynamic response of these buildings need comprehensive research and analytical methods should not only confine and theoretical methods should be experimental pathology and also to estimate the quality of seismic performance of structures monument action then is based on three-dimensional computer model method finite element analysis and assessment software such as ANSYS, ETABS, STAD, and its action is similar to the exact technical specifications of the minarets and domes and its positions connection with other structural components to turn [48, 49]. With existing methods of earthquake resistant building and qualitative improvement of quality and old monuments as well as the instructions valid FEMA, AISC, OPCM since seismic improvement measures and improve the quality of fittings and add structural components and reinforcing coil scheme and vulnerabilities retrofitting fibers and employing methods protective structures and shear and bending preservatives in addition the original ancient structure has been used repeatedly and quality control of seismic stability and capacity improvements to these buildings and theoretical methods or with test Non-contact non-destructive also reassuring were diagnosed, but to preserve the valuable historical architectural authenticity of identity has been less attention and most ancient monuments in the physical stability was considered, while the use of new energy technologies and innovative nanotechnology to improve the seismic performance must be a greater attention [50, 51, 52].

## **6 - New technology in education affairs design, seismic retrofitting and upgrading monuments:**

Although considered non-engineering simplicity and alleged that the traditions of ancient architectural heritage in order to say something in design training and construction techniques to protect structural monuments have emerged but during the recent earthquakes formidable in the past with valuable architectural materials and traditional technologies; good seismic behavior and human have shown strong interest before production of concrete and steel building vibration control techniques as well as

destructive earthquakes have learned so relying on the principles of horizontal control scheme and materials about arming the walls of buildings traditional indigenous well be a new engineering principles for architectural design education level of new build, conservation and improvement of existing monuments and correct risk earthquake be developed. In other words, valuable historic buildings, a treasure worthy of specialized scientific and technical discovery and decode this floodlight on the darkness of trained technical engineers and operating life of the current restoration of this architectural heritage visitors in the most basic levels of his career is considered. Therefore, encouraging and supporting cultural heritage organizations, academic centers, as well as structural design architecture can be valuable both environmentally friendly and earthquake created a new restoration with improvement interventions to reduce the possibility of danger presented [53]. On the other hand, the paucity of technical knowledge of ancient buildings and traditional construction courses from these little precious monuments learned; know that the components of traditional architectural monuments to the fundamental role of structural and engineering features of traditional and historic buildings in need of recognition and technical detailed analysis and specialized. In other words, recognize the structural role of architectural components and implications design and geometric configuration and mass of materials distributing, special density, special construction materials and traditional technology to deal with the destructive effects of earthquakes is very informative in the overall design and architecture in the future in accordance with the persistent Situation hard, soft and non-load bearing components due thin load codification regulations require that effective training of new architectural will be design. Present proof of claim with seismic capabilities worn monuments to deal with local destructive earthquake occurs. In addition, classification and develop practical experience craftsmen experienced local construction sites worthy tradition can be new technologies specialized composition and quality of operations maintenance, protection and improvement of seismic provided in monuments [54, 55]. In examining the experimental method, procedural, and linear and nonlinear analysis of seismic behavior of quality naked masonry structures with regard to valid international regulations to this point can be noted that although the regulations such as FEMA, AISC, OPCM heavily in research and improvement of seismic design earthquake resistant buildings have suffered and to prevent criminal damage and catastrophic financial, technical knowledge free to provide engineers involved are traditional buildings to Latest research results and new achievements are familiar with their behavior and design of buildings in seismic earthquake is better, but conventional methods of analysis and evaluation of procedural accountability structures seismic performance based on historical three methods, (Aria model in India, the equivalent of truss or frame and the method of equivalent member rigid wall of a building into the solid and central column and X bracing) are even regulations designed masonry buildings in earthquake-like themes; height to width ratio of masonry wall , armed or unarmed masonry wall being, having or not having vertical or pop-coil scheme on the walls and especially quality and quantity of materials consumed in the masonry walls for seismic performance effective wall

know. So, effectively compiling regulations in the areas of building design buildings earthquake resistant and seismic upgrading monuments principles needed to be seriously considered [56, 57]. About how to design training and gain a better understanding of the performance architect engineers for the building according to latest research carried out by simulation techniques as a powerful design trend in architecture, engineering education has been recognized and engineers trained in this technique by relying performance intelligent software simulations, environmental conditions and design patterns; can design a stable and lasting structures compatible with the environment and saves created and increase the quality of architectural design and the emergence of innovations to provide more comprehensive and integrated plan with speed and accuracy necessary to provide transition training concepts in the process of matching design with variable environmental conditions and time step, this method plans seismic improvement interventions in monuments and prevent waste and reduce spending downtime be unwanted advantage [58].

## **7 - Architecture educational problems in maintenance, retrofitting and protection of Iranian originality of architectural heritage:**

Apart from general problems of governing the country's higher education system and vocational technical problems governing engineering education system in Iran, special issues governing education in the field of architectural conservation and restoration of architectural heritage, there are the following major selections and important cases on the basis of its review topics courses approved architectural engineering graduate courses approved by the Ministry of Science, Research and Technology about the country are:

### **7-1 - System of course contents and outline training modules of Architecture education:**

Education in this field as a theoretical text and graphics and professional experience were not enough to enjoy, without the creativity and the ability to create the possibility to enforce the professional works extremely controversial and no opportunity to do research on modern architecture.

### **7-2 - Academic performance operator units of educational contents of Architecture education:**

The main duties of architecture schools to provide the necessary space and facilities for education professionals familiar with the rules in the normal engineering and specialists training for quite skilled and professional commitment in the field of entrepreneurship and creativity to maintain the incidence of identity preservation and traditional architecture, native Iranian participation in the study as well as donor education and modern science and technology is a solution with International formal upgrade and even a unit is considered an optional activity courses.

### **7-3 - the areas of technology training required to Architecture education:**

Main courses focus on technology in the form of courses in this field are gravitational field forces of interaction, understanding materials and manufacturing technology and performance management capabilities that are not attractive and enough manpower training specialist familiar with new technology and even facilities and traditional non-destructive tests and non-contact required for accurate and rapid assessment and identify weaknesses and Architecture heritage was denied only to general and technical familiarity with conventional cases and cases of public domain technical architecture, Architecture heritage restoration is limited.

#### **7-4 - new approaches to teaching and management in the incidence of critical and creative thinking in the Architecture field:**

Engineering education in architecture requires ongoing attention to issues of new educational and enough knowledge and skills matched graduates and promote educational models in the fields of theoretical and practical, and especially new technologies for utilizing skills proved of new equipment and creative ways to use non-destructive control methods in order to protect the valuable heritage of Architecture authenticity and identity and utilization of simulation techniques for teaching methods without error is inexpensive and creative.

#### **7-5 - Comparative evaluation of the technical education system in the Architecture field in Iran:**

International university of Entrepreneurship technical skills in architecture and organization and management principles in the design field of architectural and conservation importance, and consider courses such as organizing discussions of economic, industrial applications, design principles, an automated management system, Sales of professional services and especially regulations and rules and technical standards in order to provide and use new materials and using the latest achievements of modern industrial technologies with the needs and progress since the industrial upgrading must spend a extra attention. While in the field of architecture education technology courses and less important as providing them with some problems such as failure; disproportion educational content needs of technical and administrative up to professionals, non-compliance with cohesion and coherence as a component of educational process targeted, in educational goals ambiguity and difference in the way teaching and effective educational services and non-compliance with the new technology education, training, sufficient to remove the theoretical and practical workshops on technology and especially lack workshops new technologies and new materials Construction of new equipment and are face to non-destructive and non-contact the heart and cause of students scurry through architecture retardation professional efficient of modern technology provides.

#### **7-6 - Suggested solutions to improve the quality of education in the field of Architectural technology:**

Considering the need for graduates and professionals familiar with the architecture and efficient new technologies, particularly in specialized areas and improving conservation and restoration of monuments, while observing concordant making curriculum

contents and methods of educational services and an emphasis on exploiting opportunities new educational assistance and technical courses updating content and promotion and diversity of contents and technology courses in new fields such as construction; tall buildings, intelligent, space structures, pneumatic , and tents, into together shrike, rotator and design of virtual spaces and computer New methods of training and development courses to improve process technology in the field of architecture in all three known (skills to content, content to expertise, skills to skills) with enough knowledge of traditional methods and valuable technical useful past and relying on new technologies and modern technical equipment; process made more efficient architecture education and areas of participation and motivation skills and valuable administrative experience in the field of new technologies with the opportunity to benefit from training, retraining, Hits Specialized workshops and valuable projects, setting up professional workshops and training of professional staff working active groups prepare.

#### **8 - Assessment and expertise need to ask new technologies in Architecture education:**

Current issue of efficiency in the field of technology education and entrepreneurship skills, particularly in terms of equipment used to make administrative and institutional assessment methods in administrative operations and the need to learn new technologies in the construction and control of the technical characteristics of the particular architectural design; will be in the process of training workshops that will search the specialist fields of architecture, after several periods of qualitative evaluation of the educational process as a common action to perform random sampling asked of 60 professional graduated practical courses people and the results have been extremely strategic to the following Description (Table-1) are presented:

**Table 1 - Results ask specialized training necessary new technologies in architecture**

Excellent%	Perfect %	Almost%	Never%	Questions text and the percentage response of graduates in architecture field practical training courses (%)	Row
23	30	45	2	Can lessons from practical skills workshop for architect engineers be essential to creation?	1
8	33	52	7	Are compatible workshop curriculum contents with your educational goals in architectural engineering training?	2
3	27	58	12	Are educational purposes provided with the specialized needs and your future career matches in Architectural engineering training?	3
3	17	72	8	Whether the specialized skills and employment factors will be needs	4

				presented an architect to meet?	
3	23	56	18	Whether has been available scientific and technical subjects and documents required courses in your workshop?	5
7	22	40	32	Is necessary adding the research projects as practical courses in the field of architecture?	6
3	17	55	25	Whether equipment, tools and facilities required training workshop has been consistent with the educational objectives?	7
2	27	62	10	Whether has been consistent the materials consumed during the training workshop with educational objectives?	8
38	43	17	2	Is necessary the specialized training equipment to help you with new practical workshop courses?	9
43	45	10	2	Are effective the using new materials to improve practical skills training workshop lessons?	10
30	45	23	2	How much is necessary the utilizing modern methods of quality control in the workshop lessons?	11
23	27	27	23	Is effective the benefiting from students in skills training instead of expert craftsmen work performance?	12
23	40	30	7	How much is necessary the utilization of facilities operations by simulation training workshop?	13
18	27	33	22	How much is required the utilizing software methods in a virtual training courses practical workshop?	14
8	30	47	15	How much will be extent the quality of education boosts with using of educational multimedia facilities?	15
27	43	27	3	How are quite so effective individual field researches in practical professional skills?	16
43	42	13	2	What is effective teaching practice the performance	17

				specialized camps and group visits in a factories?	
33	48	28	7	How much effective Hits perform specialized operations executive workshop on entrepreneurship technical skills?	18
20	38	40	2	What have been effective in skills training the sample size models of separate and combined simple geometric?	19
20	42	38	0	How much have been needed the providing of specialized technical models full administrative complex project features?	20

Thus, the results produced by specialized ask; emphasize the need to strengthen and improve training methods and workshop use new technologies in educational process, modern facilities and modern, new materials, performance of individual operations workshop for practical skills , taking advantage of virtual learning methods and educational support facilities and efficient utilization of inspection and research and training, making prototype models and abstract concepts are essential to diagnose. Please note the use of modern technologies, new materials and modern equipments apart from the effect of architecture on improving training procedures; very useful and necessary in maintenance, repair and upgrading monuments that has been detected.

### 9- Conclusion:

Based on the analysis mentioned and ask professional results presented in relation to the need to create change in the current training procedures and training programs to achieve development based on practical skills useful for professionals working in the field of architecture and modern technology Non-destructive testing and non-contact in the field of protection of heritage architecture originality; is required in accordance with the comprehensive process of retrospection and central, being native, systematic, controversial partnerships, the orbital patterns, and particularly to assure protection of innovations and opportunities to make creativity in theoretical perspectives and practical measures to improve the process of improving architectural education is necessary. Therefore, an encounter specialist in the field of studying new technologies and adapt global technologies and traditional indigenous valuable monuments recorded in Iran, attempts to teach basic training and experienced professionals in the field of restoration and improvement of local seismic monuments at risk of destructive Iran's earthquakes so we can also provide construction materials testing new equipments as new non-destructive non-contact; with regard to the necessity of development of technical standards, safety and environmental conditions consistent with the whole country; of accountability and we would have gain the familiar engineers with the originality and conservation maintenance and improvement of architecture principles valuable heritage.







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