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MASTERS IN FACILITY MANAGEMENT AND INTERNATIONAL FACILITY MANAGEMENT ASSOCIATION PROFESSIONAL QUALIFICATION

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ABSTRACT

The Certified Facility Manager (CFM) credential is the most professional certification in the Facility Management (FM) profession as such, the peak aspiration of every Facility Manager is to become certified by a renowned body like the International Facility Management Association (IFMA). This paper investigates the fitness of students to becoming CFM's by assessing the curriculum of Masters in Facility Management (MFM) program in Ahmadu Bello University Nigeria. An evaluation form in form of a data sheet was used to fetch data from MFM students. A desk based study of relevant documents was also conducted to obtain the course contents of the MFM program and FM core competency areas required for CFM certification. A content validity was performed by comparing the courses taught in the MFM program as against those examined for CFM certification. It was found that while the students presently enrolled in the MFM program come from eight distinct professions in the construction industry, they will all have a minimum of three years working experience upon graduation. Furthermore, all the courses taught in the MFM program are in line with the nine core competency areas required for CFM certification examination (as was validated by a Certified Facility Manager with over two decades of facility experience). It was concluded that all the MFM students are eligible for the CFM certification since they will all poses the three years minimum of working experience required to register for certification upon graduation from MFM. Furthermore, results show that all the courses taught in the MFM program will amply give the students an edge during their preparation for CFM certification. It was recommended that the MFM program should be continuously improved upon so its students will possess scholarship that will not only make easy their CFM certification, but will keep them abreast with world's best practice in FM.

KEYWORDS: Certified Facility Manager, Masters in Facility Management, Students, University

INTRODUCTION

Over the years, Facility Management (FM) has addressed several crosscutting issues required to continually improve the efficiency of the built environment. Such improvements were witnessed from the Facility Managers role in synergising the several parties and professionals having increasing number of specializations (Dodo, 2012). The practice of FM requires knowledge in a broad range of disciplines due to the assertion of Teicholz (2004) that FM is a multidisciplinary or trans-disciplinary profession drawing on theories and principles of engineering, architecture, design, accounting, finance, management, and behavioural science. According to Culley and Pascoe (2009) also, The British Institute of Facilities Management (BIFM) defines FM as the integration of multi-disciplinary activities within the built environment and the management of their impact on people, the workplace and technology. The work of Dodo (2012) also established that FM is indeed not only multidisciplinary but harnesses several core competencies. These authors clearly illustrate the holistic nature of the discipline and interdependence of multiple factors in its success. Such success only

comes about by factors like a sound education in FM mounted in reputable institutions and a robust regulation of the FM profession by a renowned body like the International Facility Management Association (IFMA).

Shah (2007) asserts that FM has the potential to deal competently with the issues that are involved in the built environment. The importance of investigating the fitness for certification of would-be Facility Managers undergoing educational training cannot be overemphasised because such institutions are the cradle to the determinants of success in the roles Facility Managers stand to play in addressing all issues that will drive the efficiency of the built environment.

As succinctly put by then (2009), while education is key, a major challenge facing Managers is their reluctance in associating with professional bodies. Such will not only boost their proficiency in practice but will serve as a ground of being continually informed in today's ever changing business environment. This work investigates the fitness of students to acquiring membership with the International Facility Management Association (IFMA). The study however only covers Certified Facility Manager (CFM) certification and Ahmadu Bello University (ABU) Zaria. Such is due to the fact that it is only the CFM that has clearly spelt out minimum requirements for certification which from the onset provided a valuable source of reference for this research. Furthermore, ABU was opted due to time constraints in sourcing information from other universities that run such program like the University of Lagos.

Certification by IFMA as the most sought out credential sets the industry standard for measuring the knowledge and competence of practicing Facility Managers(IFMA's CFM Credential, 2012). Achieving such certification not only lie in the effective practice of the Facility Manager nor his/her experience acquired but mostly on the rigour of education he/she passes through since certification is granted to those who are able to pass a comprehensive exam covering all FM core domain areas.

Perspectives of Facility Management

Most buildings represent substantial investments to organisations taking into account competing needs in running them. As such an integrated approach to managing such investments needed to be devised. Facility Management has traditionally been seen in the old-fashioned sense of caretaking, cleaning, repairs and maintenance of buildings (Atkin and Bjork, 2007; Atkin and Brooks, 2009). It now however vastly covers real estate management, financial management, change management, human resources management, health and safety and contract management, in addition to building and engineering services maintenance, domestic services and utilities supplies.

Over the years, several authorities have coined out their definition of FM. As against the backdrop, Culley and Pascoe (2009), assert that The British Institute of Facility Management (BIFM) defines FM as the integration of multi-disciplinary activities within the built environment and the management of their impact on people, the workplace and technology. Barrett and Baldry (2003) see FM as an integrated approach to operating, maintaining, improving and adapting the buildings and infrastructure of an organisation in order to create an environment that strongly supports the primary objectives of that organisation. The International Facility Management Association (IFMA) defines Facilities Management as 'a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology' (Atkin and Brooks, 2009). Atkin and Brooks (2009) are of the opinion that whatever is adopted as the definition of FM, it should stress the importance of integrative, interdependent discipline whose overall purpose is to support an organisation in the pursuit of its (business) objectives.

It may be deduced from all such that FM can thus be seen as a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology. It must however be

emphasised that such multidisciplinary nature of the FM discipline is key to this research owning to the fact that the students are pulled together from various backgrounds.

Masters in Facility Management in Ahmadu Bello University Nigeria

Dodo (2012) assets that in recognition of current trends in the construction industry and the increasing demand for efficient maintenance and management systems for small and large facilities, the Department of Building, Ahmadu Bello University Nigeria pioneered the introduction of the Master's degree in Facility Management (MFM) in Nigeria in 2006. The need for this programme became obvious due to new concepts and practices in the running/maintenance management of built spaces and the installed facilities therein (Academic Brief of the Department of Building, 2006). The objectives of the MFM programme according to Dodo (2012) are to:

- Understand the science/technology of buildings and the various installations they contain;
- Understand a facilities users' behaviour;
- Understand health problems that may arise during the usage of the facility;
- Understand how to gather, analyse and manage information on defects/problems arising from the facility managed;
- Proffer informed solution to the defects/problems of the facility;
- Be able to provide sound financial advice on how the defects/problems of the facility are to be remedied;
- Be able to effect/supervise the necessary repairs/maintenance of the affected facility using the right technology so that it functions optimally;
- Be familiar with relevant issues on laws and ethics in connection with buildings and facilities.

The MFM programme has a minimum duration of two academic sessions. The students are taught on a part-time basis during the week end. The first two semesters are involved with course work. The last two semesters are used by the candidate to prepare a project on any aspect of the taught courses as may be approved by the Department. Table 1 depicts the courses taught in the MFM program in Ahmadu Bello University Zaria Nigeria:

Table 1: Courses Taught in MFM Program

S/No	Course Title
First Semester	
Core Courses	
1	Environmental & Risk Assessment
2	Business Finance
3	Information Management
4	The Built Estate: Developing & Implementing Strategies
5	Research Methodology & Statistics
6	Information Technology in Construction
7	Construction Material Studies I
Elective Courses (Optional: At Least One)	
1	Environmental Design & Utility Services
2	Advanced Maintenance Management
3	Temporary Works
Second Semester	
Core Courses	
1	Facility Management Systems
2	Property Portfolio Management

Table1: Contd.,

3	Health: the Individual and the Workplace
4	Space Planning & Project Management
5	Organizational Behaviour
6	Operational Research
7	Construction Material Studies II
Elective Courses (Optional: At Least One)	
1	Contract Administration & Supervision
2	Legal Aspects of Construction
3	Telecommunication Services in Buildings

Source: Academic brief of the Department of Building ABU Zaria Nigeria (2013)

The MFM program provides a professional qualification to would-be Facility Managers who want to enter a new and challenging field where advancements demands new approaches to the efficient running of buildings and the facilities they contain.

Certified Facility Manager Credential

Since the Facility Manager must be proficient in a wide range of competencies as Alexander (2006) opines, the Nigerian Chapter of IFMA (2012) asserts that the Certified Facility Manager (CFM) tests what a person can do compared to standards that define the practice of FM. As the most prestigious and sought-after credential in FM, the CFM issued by IFMA sets the standard for measuring the knowledge and competence of practicing Facility Managers (IFMA's CFM Credential, 2012). The CFM remains the most prestigious global certification for the FM profession. The goals of CFM certification according to IFMAs CFM Credential (2012) are to:

- Assure professional excellence;
- Establish standards for global professional practice;
- Promote the added value of the profession; and
- Influence the future direction of the profession.

The certification process basically aims to assess competency in Facility Managers through work experience, education and the ability to pass a comprehensive exam. As such, the CFM certification demands not only a high level of FM experience and skill but most importantly education. Certification is granted to those who are able to pass a comprehensive exam covering all FM core domain areas which are:

- Planning and Project Management;
- Operations and Maintenance;
- Real Estate;
- Quality Assessment and Innovation ;
- Leadership and Management;
- Human and Environmental Factors;
- Finance;
- Communication; and
- Technology.

The minimum CFM eligibility requirements as set out by IFMA are as shown in Table 2.

Table 2: CFM Eligibility Requirements

Education	Minimum FM Experience (Years)
Facility Management Master's degree or Bachelor's degree	3
Related bachelor's degree (business, architecture, interior design, building construction, construction management, engineering and property management).	4
Non-related bachelor's degree or associate's degree	5
Post-secondary education	8

Source: IFMAs CFM Credential (2013)

The credibility arising from earning the CFM will benefit not only the individuals who achieve certification but their employees alike. According to IFMAs CFM Credential (2012), benefits in earning the CFM include:

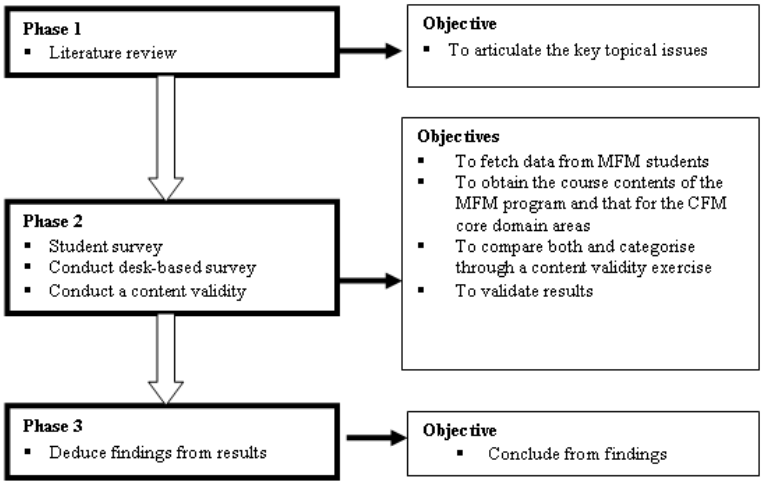
- Assurance of quality and professional standards;
- Increased marketability and competitive advantage; and
- A more focused map of professional development.

All FM practitioners who meet the requirements are encouraged to apply because the CFM credential helps professionals better understand and apply the core elements of the various FM disciplines, challenges their decision-making skills and sets the stage for excellence in FM practice.

RESEARCH METHODS

A convenience/purposive sampling technique was adopted for this study. Such technique is used in quantitative research when one intends to use the entire size of population as his/her sample size and/or when a researcher intends to find out opinions from overall respondents studied as was opined by Krejcie and Morgan (1970). The thrust for such is when a researched decides to select the most readily available people or objects for a study to serve both as study population and sample size. As such, forty eight students enrolled in the MFM class of 2011/2012 academic session served as the sample size for this research. Primary data for this research was fetched using an evaluation form in form of a data sheet distributed to students. Data fetched was basically demographic information relating to students discipline and years of experience.

While the discipline was sought to present the extent of multidisciplinary nature of the program, the years of experience was to correlate eligibility for CFM certification. All questions were open ended. According to Doherty (1994), the approach of using a data sheet in research is useful in obtaining a snapshot of an issue. What were fetched from the students were their respective professions and their years of working experience relating to FM. A desk based study of relevant documents was also conducted to obtain the course contents of the MFM program and FM core competency areas required for CFM certification. Further to such, the course contents and learning outcomes of the MFM program was thoroughly studied through performing a content analysis by comparing the courses taught in the MFM program as against the nine FM core domain areas examined for CFM certification. Such was further validated by a Certified Facility Manager with over two decades of facility experience. The framework for this study is as presented in Figure 1.

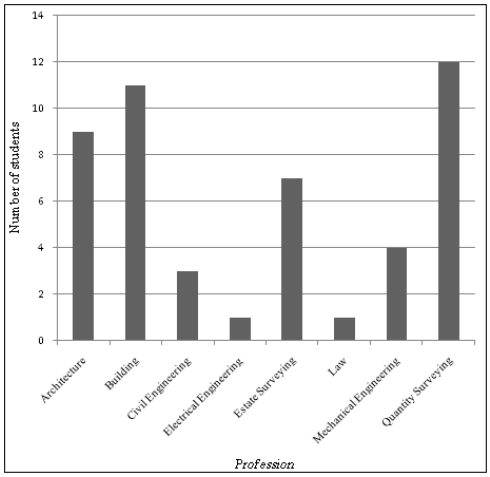


Source: Researchers (2013)

Figure 1: Research Framework

RESULTS

The students belong to eight professions as follows: Architecture; Building; Civil Engineering; Electrical Engineering; Estate Surveying; Law; Mechanical Engineering; and Quantity Surveying. Figure 2 shows the total number of students by their respective professions.

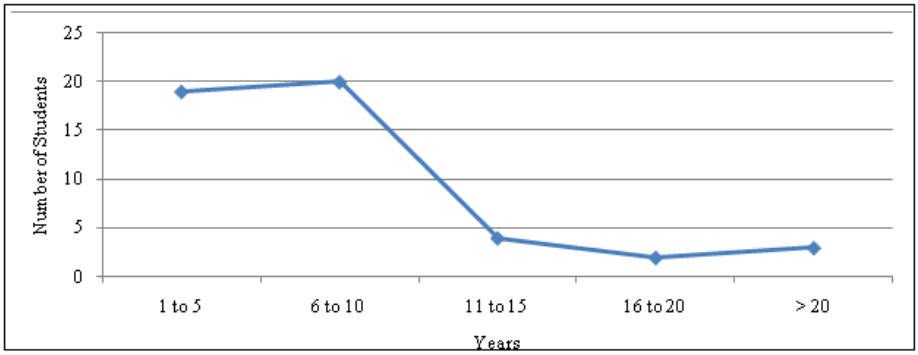


Source: Field Survey (2013)

Figure 2: Number of Students by Profession

Results show that there are nine Architects, eleven Builders, three Civil Engineers, one Electrical Engineer, seven Estate Surveyors, one Lawyer, four Mechanical Engineers and twelve Quantity Surveyors. These results clearly depict the extent of multidisciplinary nature of the MFM program.

Figure 3 depicts the working experience in FM related fields of the MFM students.



Source: Field Survey (2013)

Figure 3: Years of Working Experience of Students Relating to FM

Nineteen students have between 1 to 5 years' working experience, twenty students have between 6 to 10 years, four students have between 11 to 15 years, two students have between 16 to 20 years and three students have over 20 years of working experience This results will aid in correlating the students eligibility for CFM certification.

Table 3 shows the validated categorization of the courses taught in the MFM program into the nine core competency areas of CFM certification.

Table 3: Categorization of MFM Courses into CFM Core Competency Areas

S/No.	CFM Core Competency Areas	MFM Courses
1	Planning and Project Management	Property Portfolio Management; Space Planning and Project Management; *Contract Administration and Supervision.*
2	Operations and Maintenance	Research Methodology & Statistics; Operational Research; *Advanced Maintenance Management.*
3	Real Estate	The Built Estate: Developing and Implementing Strategies.
4	Quality Assessment and Innovation	Construction Materials I; Construction Materials II.
5	Leadership and Management	Organizational Behaviour.
6	Human and Environmental Factors	Environmental and Risk Assessment; Health, the Individual and the Workplace; *Environmental Design & Utility Services;* *Legal Aspects of Construction.*
7	Finance	Business Finance.
8	Communication	Information Management; *Telecommunication Services in Buildings.*
9	Technology	Information Technology in Construction; Facility Management Systems; *Temporary Works.*

Source: Researchers (2013)

The content validity tried to compare the course contents and learning outcomes of the courses taught in the MFM program as against the nine FM core domain areas examined for CFM certification. The categorization was on the basis that each MFM course must substantially cover areas that directly relate to the FM core domain area it is categorised under. After such exercise by the researcher, the results were validated by a Certified Facility Manager with over two decades of facility experience. Further to such, a critique was made on the validated results by two academicians who have taught MFM courses from inception of the program in ABU. Their submissions were no more different from the initial validation only that one of such academic opined that the 'Technology' core competency should feature in all the MFM courses due to the current trend in FM practice globally.

Such were the criterion the content analysis covered and the results of such are as shown in Table 4. It should however be noted that as against Table 1 in the backdrop, the MFM courses italicized denote elective (optional) courses while all others are core to the MFM program.

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This study found that the MFM program in ABU pulls together professionals that all have some working experience. It can be concluded that upon graduation, all the MFM students will be eligible for the CFM certification since they not only belong to professions that are related to FM but will all poses the three years minimum of working experience required to register for certification upon graduation from MFM. Since results also show that all the courses taught in the MFM program are in line with the nine core FM domain areas required for CFM certification examination (as was validated by a FM tutor with over two decades of facility experience and two other academicians that critiqued the validation), the MFM program will amply give the students an edge during their preparation for CFM certification.

It is recommended that the MFM program should be continuously improved upon (especially in the 'Technology' core competency) so its students will possess scholarship that will not only make easy their CFM certification, but will keep students abreast with world's best practice in FM as is available in Arizona State University in USA and University College London in UK.

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