

RESEARCH ARTICLE

Investigating elective courses in architectural education



Mohammed Ghonim, Nehad Eweda*

Department of Architectural Engineering, Faculty of Engineering, Cairo University, Cairo, Egypt

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Abstract

One of the approaches used by educational institutions to ensure that their programs reflect advances and changes in the architectural profession is the inclusion of elective courses. This study aims to establish a basis for integrating elective courses into architectural curricula by investigating the component of elective courses in 30 highly-ranked undergraduate architectural programs around the world. The need for this study arose as a result of the limited literature and lack of scientific foundation with which to support the process of merging elective courses into architectural curricula. This study has raised many questions in terms of direction, amount, subject, and timing of elective courses in architectural education. This study adopts an analytical deductive methodology supported by quantitative research. It is structured into four sections: topic overview, survey and its procedures, findings of the survey, and discussion. The discussion includes a proposal for integrating elective courses into architectural education. This study draws conclusions to its research questions, which broadens its impact on the quality of architectural programs and benefits for those concerned with architectural accreditation.

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1. Introduction

In architecture, a mutually robust relationship exists between education and profession. The qualities of architects and their works in a specific context profoundly depend on their

education. Meanwhile, educational institutions continually seek to keep their programs up to date with advances and changes in the architectural profession. One of the approaches used to achieve this target is the inclusion of elective courses, which can flexibly address new or advanced topics and merge them into a specific program to promote the being up-to-date of its graduates.

The problem of this study is the lack of scientific foundation to support the process of merging elective courses into architectural curricula effectively. The literature about this

*Corresponding author.

E-mail address: nehad_eweda@cu.edu.eg (N. Eweda).

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issue and its impacts is limited. However, in the meantime, several elective courses have emerged and are being offered. Accordingly, this study raises the following questions: Should electives in architectural education be directed toward generalization or specialization? How much flexibility is needed in the programs? Which subjects and competencies should architectural electives address? Finally, when should architectural electives be offered?

This study has a broad impact and may be beneficial for those concerned with architectural accreditation, whether local or international, because program coordinators can use its results and recommendations. This study can also guide the establishment of new curricula and the development of existing ones. In addition, this study contributes to unifying the concepts related to this topic across architectural educational institutions.

This study aims to establish a basis for integrating elective courses into architectural curricula by investigating the component of elective courses in 30 highly ranked undergraduate architectural programs worldwide. This study adopts an analytical deductive methodology supported by quantitative study and categorizes and analyzes elective courses in the investigated sample of programs according to type, quantity, topic, and timing. The paper is organized as follows. [Section 1](#) provides an overview of the topic. [Section 2](#) outlines the survey and its procedures. [Section 3](#) presents the findings of the survey. Finally, [Section 4](#) discusses the findings and proposes a model for integrating elective courses into architectural education.

2. Overview

This section presents an overview of the topic; outlines the emergence, notions, benefits, and realm of elective courses; provides a comprehensive taxonomy of courses in architectural education; and shows the necessity of elective courses in architectural education.

2.1. Elective courses: Emergence, notions, benefits, and realm

The concept of flexibility in a higher education program is relatively old; it emerged in Harvard University during the presidency of Charles William Eliot (1834-1926), who developed a system of “spontaneous diversity of choice.” According to this system, students in undergraduate education were given the chance to select most of their courses, which resulted in an open-ended curriculum. This elective system represented the discontinuity of the typical academic practice of standard courses according to each year of the program. This approach then spread to other universities ([Harvard University, n.d.](#)).

At present, higher educational systems provide students with the opportunity to participate in educational decisions, not only on their specializations but also on the courses they study within a specialization; this degree of flexibility can be provided by elective courses ([Ertas et al., 2014](#)). An elective course is one that students can choose to study from a set of options, which can be inside or outside their main areas of study or from other disciplines or programs ([University of Queensland, 2014](#)). In addition to compulsory

courses, elective courses complement the curriculum. Many equivalent terminologies, such as optional, complementary, and out-of-department courses, have been introduced to describe the elective component of higher education; whereas compulsory courses are oftentimes called core, mandatory, or required courses.

The main benefit of elective courses in higher education is the flexibility achieved, because these courses allow students to study subjects that satisfy their interest, abilities, and career determination. Elective courses seek to develop the individuality of each student. [Movchan and Zarishniak \(2017\)](#) stated that electives allow students to tailor their education according to their aspirations, competencies and personal preferences and consequently enable them to develop their goals. Accordingly, these courses are expected to enhance students’ motivation to perform well in their chosen subjects. Meanwhile, students’ involvement in tailoring their curricula may guide the institutions on developing and directing these curricula ([Movchan and Zarishniak, 2017](#)). Moreover, in the case where students are allowed to take elective courses outside their departments, programs will be able to increase the number and versatility of electives offered to students without affecting the course loads of the departments ([Gordon et al., 2014](#)).

Despite the educational intentions that should govern students’ selection of their elective courses, the realm shows that this privilege is oftentimes mishandled. Reviewing the literature has identified the following factors for selecting elective courses among students in higher education. [Ting and Lee \(2012\)](#) stated that the factors that can affect students’ choices are their interest in the subject, perceived easiness of the course material and its lower workload, comfortable timetabling of elective courses, popularity and personalities of instructors, good and fair grading system, and anticipated class size. [Hedges et al. \(2014\)](#) recommended that programs should seek to improve their knowledge of factors that affect the students’ selection of electives and consequently formulate strategies to enhance students’ learning outcomes, focusing particularly on their various motivations. Moreover, [Schell et al. \(2016\)](#) reported that certain engineering programs depend on students’ selections to offer student-defined electives.

2.2. Taxonomy of courses in architectural education

Architectural programs include a number of theoretical, practical, and studio courses, through which knowledge is transferred and skills are developed. To understand the nature of an architectural program, its components and course structure should be analyzed and categorized. The classifications of these components are versatile and may vary according to the intention and perspective of each study. Perceiving these classifications is important in investigating architectural education in general and elective courses in particular.

The first and most important classification is the competency-based one, which categorizes program courses according to competencies acquired. This classification is based on the perspective of the International Union of

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