

Content analysis of real estate valuation courses taught in geomatics engineering departments in Turkey

Nuri Erdem *¹ 

¹*Osmaniye Korkut Ata University, Department of Geomatics Engineering, Türkiye, nurierdem@osmaniye.edu.tr*

Cite this study: Erdem, N. (2021). Content analysis of real estate valuation courses taught in geomatics engineering departments in Turkey. *Advanced Land Management*, 1 (1), 1-6.

Keywords

Geomatics Engineering
Real Estate Valuation
Course Content Analysis

Research Article

Received: 10.10.2021

Revised: 10.11.2021

Accepted: 16.11.2021

Published: 15.12.2021

Abstract

In many applications in economic life, the values of immovable property are needed. Experts must also determine the value of these applications. Experts should also be selected from among people who are trained in the field of Geomatics Engineering, Civil Engineering, City/Regional Planning, Architecture related to the world of real estate. In this study, a detailed study was carried out about the real estate valuation courses taught in the Geomatics Engineering Departments of our universities. The features of these courses, such as Hours, content, mandatory or optional, were examined and content analyses were made. In this context, the importance of determining the content of the course in parallel with current developments in this field and its contribution to the training of appraisers was revealed. In particular, the importance of Geomatics Engineering education in the field of real estate valuation was emphasized.

1. Introduction

The value of real estate is needed in many applications related to the world of real estate. For example, taxation, nationalization, privatization, easements, property, banking, lending, insurance, such as private and public sector applications with the sale, donation, exchange, mortgage, contract to look to death, such as transfer, construction servitude, floor ownership, detached and permanent easement, usufruct right, right of fidelity, right of construction, it must be measured on the basis of such registration transactions immovable in the upper right. Experts must determine the value of these applications. Experts should also be selected from among people who are trained in the field of Geomatics Engineering, Civil Engineering, City/Regional Planning, Architecture related to the world of real estate. In this context, the real estate valuation course taught in the Departments of Geomatics Engineering is of great importance in addressing this need and educating new Real Estate Appraisers.

In general, real estate valuation can be defined as "estimation of the possible value of a real estate, real estate project or rights and benefits related to the real estate on the valuation day based on independent, impartial and objective criteria" [1-3]. An assessment of real estate can be defined as the expression of a real estate partially or completely in terms of quality and quantity [4]. Hire an expert valuation of immovable property; they are people employed full-time by real estate valuation companies who will assess a real estate, real estate project or rights and benefits associated with a real estate.

The functioning of the real estate valuation system in our country is at a low level compared to other countries developed in this area. In most European countries, street-based value maps have been created and value data for all real estate has been transferred to an information system. In our country, similar positional studies can only be carried out by Geomatics Engineers who have received adequate training in this field. For this reason, the importance of the trainings given in the Departments of Geomatics Engineering is increasing.

Basic concepts of valuation, legislation, analysis of data and methods of valuation with theoretical and practical applications constitute the basis of the education of undergraduate students in the field of real estate valuation [5]. The development of the country's economies is only increasing with the participation of real estate in the use of finance as liquidity, and therefore the need for Real Estate Appraisers is also increasing.

2. Method

One of the most important elements necessary to create a sustainable real estate valuation system is real estate appraisers. In the training of a real estate appraiser; current, knowing the needs of the sector, prepared in accordance with international development and standards, the contribution of real estate valuation training is great [6-7]. Today, the education needed in this field is mostly met by the real estate valuation course given in the Departments of Geomatics Engineering [7].

For the first time in Turkey, academic training in the field of valuation was started in 1978 at Yıldız Technical University under the name "Land Valuation". In 1988, the name of the course was changed to "Real Estate Valuation" [8]. Looking at the present day, it is seen that the real estate valuation course is given elective or compulsory in almost all cartographic engineering departments. Theoretical education comes to the fore. In addition, there are differences in the name, content, course time, mandatory or optional courses and semesters in which they are taught (Table 1 and Table 2).

Table 1 is examined; real estate valuation course is given under different names such as real estate valuation, real estate valuation, real estate valuation, GIS and real estate valuation. Although the course name is different, it is 80% similar in terms of content. As a resource, they often use similar resources.

Table 1. Universities where real estate valuation courses are given at undergraduate level

University Name	Course Name*	Course Time*
AKÜ	Application Of Real Estate Valuation	3
Aksaray	Real Estate Valuation with GIS	3
Artvin	Non-Carry Valuation	2
Avrasya	Real Estate Valuation	3
Bülent Ecevit	Real Estate Valuation	3
Cumhuriyet	Real Estate Valuation	3
Gaziosmanpaşa	Real Estate Valuation Applications	3
Gümüşhane	SPL real estate valuation principles	3
Hacettepe	SPL narrow scope Capital Market legislation	3
Harran	Real Estate Valuation Application of Real Estate Valuation	3
İTÜ	Real Estate Valuation	3
KTÜ	Real Estate Valuation	2
Kâtip Çelebi	Real Estate Valuation	2
Kocaeli	Application Of Real Estate Valuation	3
Konya Technical	Real Estate Valuation	3
Korkut Ata	Real Estate Valuation	2
NEÜ	Real Estate Valuation	3
Okan	Real Estate Valuation	3
Ondokuz Mayıs	Real Estate Valuation	3
Onsekiz Mart	Real Estate Valuation	2
Ömer Halisdemir	Real Estate Valuation	2
Mersin	Real estate development and valuation	-
YTÜ	Real Estate Valuation	2
Uşak	Real Estate Valuation	2

* References: Universities' own websites

Credits, ECTS, compulsory/elective (C/E), theoretical, practical and in which semester they are taught are given in Table 2. Accordingly, it was observed that courses were generally 2 and 3 credits, mostly given theoretically, and that 3 or 4 ECTS were suitable for real estate valuation courses in most universities. On the other hand, given the fact that the course is compulsory/elective, it was determined that half of the universities usually gives this course as an elective course. Examining the semester column in the table, it is seen that the related course is generally taught in 6. or 7. semesters.

Table 2. Course Information

University*	Credit	Theory	Appl.	ECTS	C/E	Semester
Afyon Kocatepe	2	2	1	3	E	6
Aksaray	3	3	0	4	E	8
Artvin Çoruh	3	3	0	4	C	6
Çanakkale 18 Mart	2	2	0	4	C	7
Kayseri Erciyes	3	3	0	3	C	5
Gümüşhane	2	2	0	2	C	7
Şanlıurfa Harran	3	3	0	3	C	5
İzmir Kâtip Çelebi	6	3	0	6	E	6
Karadeniz Teknik	2	2	0	3	C	8
Konya Teknik	2	2	0	3	E	7
Necmettin Erbakan	2	2	0	5	E	5
Niğde Ömer Halisdemir	2	2	0	5	E	8
Samsun Ondokuz Mayıs	3	3	0	4	C	7
Osmaniye Korkut Ata	3	2	0	4	E	6
	2			4		6
Sivas Cumhuriyet	2	2	0	5	E	7
				3		
Tokat Gaziosmanpaşa	3	3	0	4	E	4
				4		
Uşak	2	2	0	4	C	5
Yıldız Teknik	2	2	0	2	C	7
Avrasya	2	2	0	4	E	8
İstanbul Okan	3	3	0	5	C	4
Hacettepe	3	3	0	5	E	6
Zonguldak Bülent Ecevit	3	3	0	4	E	7
İstanbul Teknik	1.5	1	1	2	C	6
Mersin	-	-	-	-	-	-

* References: Universities' own websites

The percentage values of the grades based on the homework, midterm exam and final exams of the exams conducted in the real estate valuation course are given in Table 3. Accordingly, visa and final exams are held throughout the universities, and the effect of these exams on the success rate is 40% of the visa, 60% of the final. In addition, it is seen that some universities practice in the form of a short exam (homework), except for the midterm exam. The effect of these assignments varies according to the examination regulations of universities.

Information about the content of The Real Estate Valuation course at some universities is summarized in Table 4.

83% similarity was found when examining the content of the course (Figure 1). It can be said that this is due to the fact that the courses are given mainly in theory or practice, and in some departments, there are applications for the content of the SPL valuation expertise exam.

The results of the analysis of real estate valuation courses for the course hours as credit, ECTS, theory and practice according to the sections are given in Figure 2. Accordingly, 12 universities give 2 credits, 9 universities give 3 credits, and 2 universities give with different credits. When we look at ECTS, 2 universities 2 ECTS, 6 universities 3, 9 universities 4 and 5 universities offer courses with different ECTS. When we look at the theoretical course time, 12 universities 2 Course hours, 10 universities 3 Course hours were sufficient, while 1 university considered a different course time appropriate. It has been explained earlier that the number of universities providing practical education is small. Only 2 universities offer practical training (Figure 2).

In the percentage in which semester this course was given, it is compared in Figure 3. 29% of universities give this course in 7 semesters, 24% in 6 semesters, 19% in 4 and 8 semesters, while 9% give this course in 4 semesters.

Courses on real estate valuation are elective in 52% of the Geomatics Engineering departments and compulsory in 48% (Figure 4).

Table 3. Effect of universities on homework, midterm exam, final grade percentile

University*	Homework	Midterm exam	Final
Afyon Kocatepe	%0	%40	%60
Aksaray	%20	%30	%50
Artvin Çoruh	%20	%30	%50
Çanakkale Onsekiz Mart	%0	%40	%60
Kayseri Erciyes	%0	%40	%60
Gümüşhane	%0	%40	%60
Şanlıurfa Harran	%10	%40	%50
İzmir Kâtip Çelebi	%0	%40	%60
Karadeniz Technical	%0	%40	%60
Konya Technical	%20	%40	%40
Necmettin Erbakan	%0	%40	%60
Niğde Ömer Halis Demir	%20	%30	%50
Samsun 19 Mayıs	%0	%40	%60
Osmaniye Korkut Ata	%0	%40	%60
Sivas Cumhuriyet	%0	%40	%60
Tokat Gaziosmanpaşa	%0	%40	%60
Uşak	%0	%40	%60
Yıldız Teknik	%30	%30	%40
Avrasya	%20	%20	%60
İstanbul Okan	%0	%40	%60
Hacettepe	%20	%30	%50
İstanbul Technical	%0	%40	%60
Zonguldak Bülent Ecevit	%0	%40	%60
Mersin	-	-	-

* References: Universities' own websites

Table 4. General characteristics of Real Estate Valuation courses given in some universities*

University	Course Objectives	Course Content	Learning Outcomes
YTÜ	Basic concepts of real estate valuation, legislation on Real Estate Valuation Analysis of valuation data valuation methods	Taxation, capital market, land regulations and real estate valuation applications for expropriation; valuation data; valuation methods; reporting techniques.	Students know the basic concepts related to real estate valuation. Students use methods related to real estate valuation. Students evaluate real estate for public and private sector requirements using appropriate data and methods.
BEÜ	Teaching students the methods of urban transformation, zoning practices and assessment of land for credit purposes and in rural areas, ensuring that they have an idea on this issue, ensuring that they have an idea on the production of GIS-based valuation maps for valuation.	Concepts of value and immovable value. Assessment of urban and rural real estate. Parameters affecting evaluation and their relationships. Real estate legislation and assessment of real estate in terms of expropriation. Methods of evaluating real estate. Statistical analysis on a survey basis for the assessment of real estate. Generating valuation maps	Have knowledge about the concepts of Real Estate, Property and value, understand the importance of real estate valuation in Land Management, learn valuation methods, compare, learn valuation elements in expropriation legislation, learn expert functions and edit Real Estate Valuation Report, produce real estate value maps in 2 and 3 dimensions.
KTÜ	Providing students with an idea of land assessment methods using GIS for land valuation and producing valuation maps.	It will be able to learn the concepts of Real Estate, Property and value, understand the importance of real estate valuation in Land Management.	It will be able to learn methods of real estate valuation, elements of valuation in expropriation legislation. It will be able to learn the functions of an expert, organize an expert report, calculate the value of real estate. It will be able to calculate the real estate value according to the Nominal method, produce a 2- and 3-dimensional real estate value map.

* References: Universities' own websites

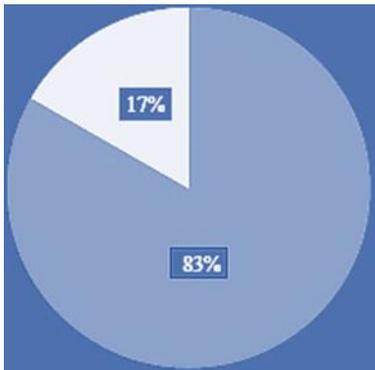


Figure 1. Similarity rate of course content

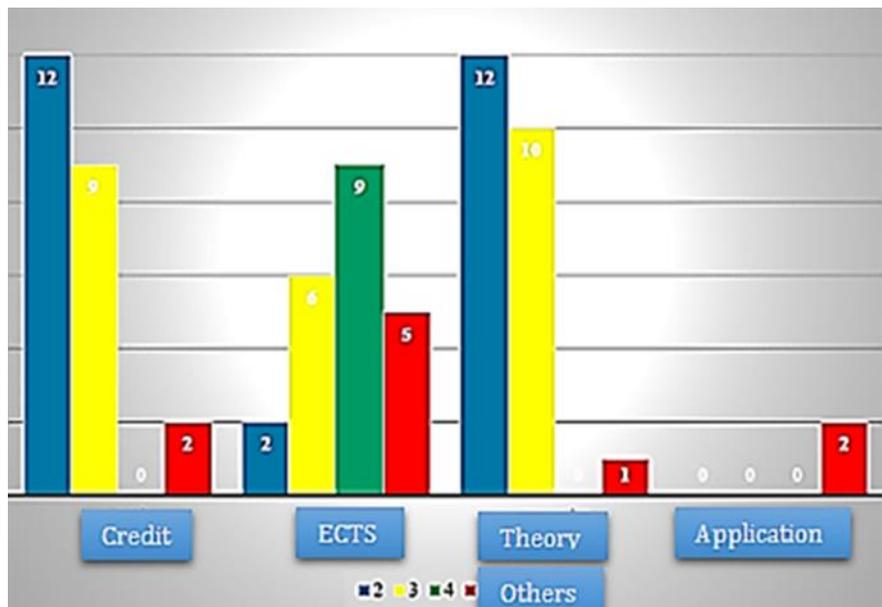


Figure 2. Course hours as credits, ECTS, theory and practice

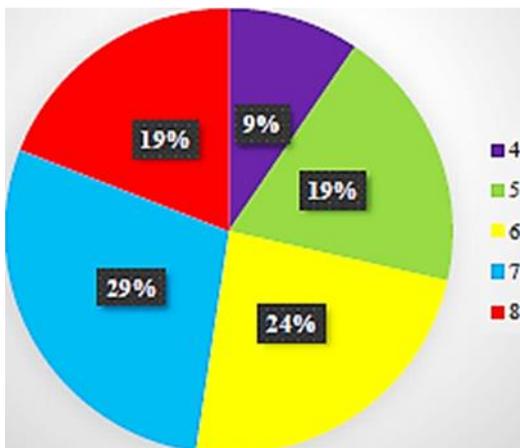


Figure 3. Information about the semester in which the courses are taught

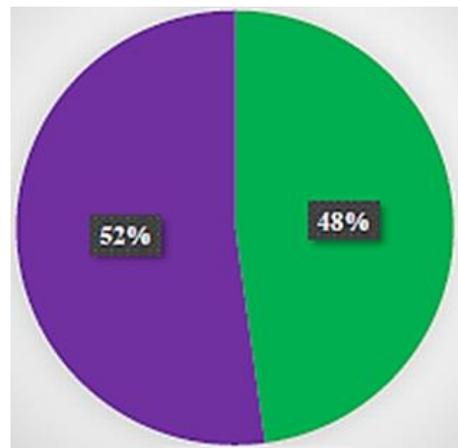


Figure 4. Compulsory or elective courses

3. Conclusion and Recommendations

- In this study, the course content of real estate valuation course in geomatics engineering departments was examined in ECTS, credit, semester, theoretical, practical, compulsory and elective aspects. The study found that the course content of universities was close to each other. It is seen that the real estate valuation course is given in general in the geomatics engineering departments.

- Many elements of this profession, which require professional experience and expertise, try to eliminate their shortcomings through trial and error, which damages the reputation of the profession. For this reason, education needs to be institutionalized. It is not enough for some of our universities to include undergraduate and graduate level valuations.

- Considering the importance of the valuation profession on behalf of our country in social and economic terms, CMB, BRSA, TDUB and other related institutions and organizations should conduct studies to open this department at universities or to provide courses on valuation in departments related to Real Estate.

- The research showed that universities mostly teach real estate valuation courses in 6 and 7 semesters. This indicates that universities believe that it would be more useful for undergraduate students to have basic professional literature in this field in advance before giving this course.

- Important in the profession is the work done in the field. A person can succeed in the exams by working on modules in the CMB licensing exams, even if they have not received training in valuation expertise. This should

not mean that the person has the ability to become an appraiser. SEC licensing exams should be questions about the problems that people experience in the field. In addition, an examination system should be introduced in which the experience periods of appraisers can be measured.

- SPK, real estate (real estate) not related to the world (nursing, Public Administration, international relations... etc.) 4-year university graduates should not open the doors of this profession, should prevent them from applying for exams.
- Today, the issue of real estate valuation has become even more important with the developing country's economy. Universities should take this into account in the education they will give at the undergraduate level.
- Given the lack of experts in the field of real estate valuation, it can be said that universities should update their course content and put practical education at the forefront, as well as the theoretical part. Because only theoretical courses are offered in all but 2 universities.
- In order to conduct practical training, existing lesson hours should be increased, real-life sample applications should be made, and current resources in this field should be included.

Acknowledgement

This article is an extended version of the same name presented at the 2nd Intercontinental Geoinformation Days (IGD) – 5-6 May 2021 – Mersin, Turkey event [9].

Conflicts of interest

The authors declare no conflicts of interest.

References

1. SPK (2001). Declaration on rules about companies to deliver real estate appraisal service in compliance with capital market legislation; and addition of those companies to the list by the board. Volume: VIII, No: 35, Turkish Official Gazette: August, No. 24491.
2. Aclar, A., & Çağdaş, V. (2008). Real estate valuation, Ankara: Union of Chambers of Turkish Engineers and Architects, Chamber of Surveyors and Cadastre Engineers Publication, ISBN: 975-395-551-0, 500 pages.
3. AI Appraisal Institute (2013). The appraisal of real estate. 14th ed. Chicago. ISBN: 978-1-935328-38-4.
4. Yalpir, Ş. (2007). Developing, and implementing real estate appraisal model through fuzzy logic modelling: case of Konya. Doctoral Thesis, Selçuk University, Institute of Sciences, Konya, 248 p.
5. Erdem, N. (2016). The Real Estate Appraisers and Geomatics Vocational Training in Turkey. International Symposium on Post-Secondary Vocational Education and Training, Çorum, Turkey, 64-73.
6. McParland, C., Adair, A., & McGreal, S. (2002). Valuation standards: A comparison of four European countries. *Journal of Property Investment & Finance*, 20(2).
7. Polat, Z. A., & Alkan, M. (2021). Evaluation of real estate valuation given in graduate and postgraduate level within the scope of the valuation license exam. *Journal of Geomatics*, 6(1), 15-30.
8. Ertaş, M. (2019). Education for Real Estate Valuation in Turkey. *International Journal of Engineering and Geosciences*, 4(1), 8-15.
9. Nuri, E. (2021). Content analysis of real estate valuation courses taught in geomatics engineering departments in Turkey. *Intercontinental Geoinformation Days (IGD)*, 2, 88-91



© Author(s) 2021. This work is distributed under <https://creativecommons.org/licenses/by-sa/4.0/>