

## **STUDY ON THE COMPETENCIES REQUIRED BY EMPLOYERS IN THE PROCESS OF RECRUITING UNIVERSITY GRADUATES**

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### **Abstract**

*The concept of VUCA world (Volatility, Uncertainty, Complexity, Ambiguity) that describes the challenges we must face now, both in private and professional life, has changed in recent years the requirements of employers, due to the need to adapt to new and unforeseen situations. In this context, soft skills tend to become more appreciated in the employment process than professional competencies, conclusion reached by analysing the results of the present study.*

*This paper is the result of investigations conducted during 2018-2020, among the partner companies of the Technical University of Cluj-Napoca (UTCN), aiming to identify the requirements of employers on the skills of graduates and the extent to which these requirements are met. The study is part of a broader action, initiated by the Career Counselling and Guidance Center, which aims to assess the insertion of graduates in the labour market and the correlation of competencies acquired by them during the educational process, with labour market requirements.*

**Keywords:** *competencies, employers' requirements, soft skills*

**JEL classification:** *J24*

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### **1. Introduction**

The competence-based learning system emphasizes learning outcomes, considering the student as a central element of the educational process, and pursuing the development of skills associated with efficiency, performance, flexibility and lifelong learning. The reform of the university education system began in Europe with the Bologna Process (1999), and the

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proposed changes aimed at: transparency and comparability between studies across Europe, increasing mobility in European space for education and work, cooperation for quality.

Competencies are considered general indicators of efficiency and performance in any given field of activity, but the definition of the concept quite vary with different theoretical, methodological, and situational meanings (Deaconu, 2014; Guțu, 2018; Lozano, 2012; Mulder, 2008). Analysing different approaches to the concept, Guțu (2018) explains it in an intuitive way: *“Competence is born and formed at the confluence of the meanings given by the verbs to know, to know how to do, to know how to be, to know how to live together, to know how to become, so it is the result of the educational action not only on the cognitive field, but it is also related to the affective-attitudinal field.”*

Studies conducted in recent years have shown (Hernández-March, 2009) that there are differences between the requirements of companies from the university graduates and the competencies developed during the educational process, at the European level. On the one hand it is the competence-based learning system, and on the other hand it is the recruitment based on the competencies proven by the candidates. Logically, the two concepts must be linked, in order to lead to an adequate entry of graduates on the labour market, to increase efficiency and performance in the workplace. It is the duty of universities to investigate the labour market, to adapt their curricula and educational methods, to meet the requirements of society and companies, to ensure the employability and competitiveness of graduates.

The research presented in this paper started from the following three questions: What are the skills most required by companies in the recruitment process? At what extend are the recruiters satisfied with the competencies proven by the graduates of a technical university in Romania? and How can be improved the fit between educational study programs and the real needs of the business environment?

## **2. The context of the study**

The jobs currently available on the labour market are very dynamic and require openness to lifelong learning, adaptability and social interaction, which involves the development of skills that complement the theoretical and practical knowledge specific to the profession (Hernández-March, 2009). The entire current context in which we live, known as VUCA world,

uncontrollable and full of questions, is putting its mark on the global higher education and on the future of jobs (Waller, 2019). The concept of VUCA world, described by the attributes: **v**olatility, **u**ncertainty, **c**omplexity, **a**mbiguity, is closely related to the exponential progress of computing power (Laukkonen, 2018), artificial intelligence, robotic technologies, growing automation and global connectivity. A lot of events are impacting the behaviour of the labour market, the most recent of these being the COVID-19 pandemic. In this context, the challenge is to understand the VUCA world, to find and to use the opportunities it offers, thus changing the negative perception in a positive one. And, as the authors of paper (Laukkonen, 2018) explain: *“one of the key goals of education ought to be to prepare students to be adaptable learners equipped with meta-learning skills, so that when inevitable changes occur, people and communities are robust enough to adopt new skills and practices, and effectively transfer learning across situations”*.

One of the European initiatives related to the strategy for higher education is the monitoring of the professional career path of graduates. It was promoted in order to respond to the following needs, notified at the level of European Union: to strengthen the professional insertion capacity of graduates by correlating the competencies acquired during the educational process with those required by employers; to increase the relevance and quality of higher education; to identify new competencies that should be developed in the future, associated with the job market trends, especially in the context of extreme changes in the last years. In Romania, such a study has been implemented at national level (Raport, 2013). Currently, the counselling and career guidance centers in the universities follow the professional path of the young people immediately after graduation.

Preparing the process of transition to the labour market, the Career Counselling and Guidance Center of UTCN permanently organizes activities that facilitate communication and knowledge between students and employers. The largest project of this type is the Career Days, which in 2021 reached its eighth edition. The program of the event includes activities such as: presentation of products, technologies and services, simulation of interviews, information and counselling activities, workshops on personal development and improvement of software skills, but also a round table that allows a constructive exchange of ideas between the academic community, employers and students. The topic of the discussions held at the 2018-th edition of the round table: "Correlation of the university's educational programs with the

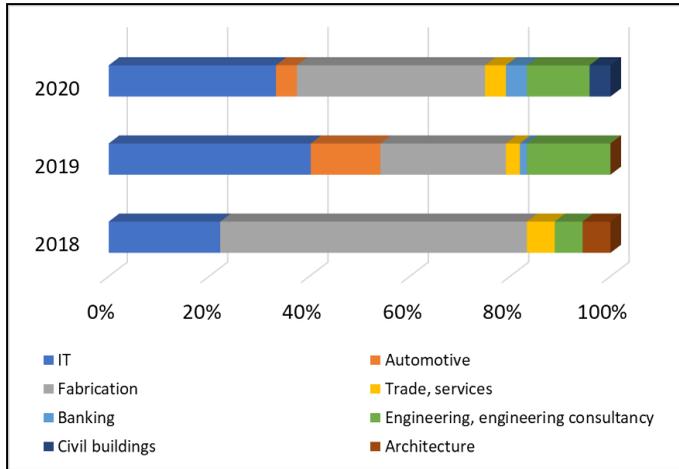
demands of the Romanian labour market" was based on a first questionnaire sent to participants, which was the starting point of this study. Both the answers received to the questionnaire and the whole exchange of ideas between employers, students and university representatives, showed the need to adapt the educational process to the dynamic and unpredictable requirements of the context in which we live, also known as VUCA world (Waller, 2019).

### **3. The methodology of study**

Data collection in the present study was done through opinion questionnaires. When formulating the questions, the ideas discussed at the meetings with the companies were considered, as well as similar studies presented in the literature (Deaconu, 2014).

The first stage of the study is associated with 2018, when a preliminary questionnaire was applied, containing 26 items. The questions addressed to the companies were formulated as indicative landmarks regarding their position in relation to the analysed subject, wishing to surprise aspects such as: the interest for hiring the UTCN graduates; the opinion on the competencies of the graduates and vulnerable points that need to be improved; recruitment methods and criteria; difficulties encountered in the recruitment process; the existence of internship programs or other practical activities dedicated to students; availability of involvement in the elaboration of diploma works; willingness to participate in regular consultations within the university community (workshops, official meetings, round tables) in order to improve the content of the study curricula. Open and closed questions were used, including matrix-type questions, allowing the evaluation of the existing situation and the analysis of the possible future evolution, from the employers' perspective. The questionnaire was sent by email to 203 companies from various fields of activity, aiming to cover all areas of study programs offered by the university. Responses were received from 18 companies, which meant a response rate of 8.8%.

**Figure 1: Responses grouped by activity sectors of companies [%]**



For the next stages of the study, conducted in 2019 and 2020 on the Career Days events, the questionnaire was revised and reduced, keeping a group of ten core questions. In 2019 it was sent to 222 companies and 72 responses were returned and analysed. The career event was cancelled in 2020 due to the state of emergency caused by the COVID-19 pandemic, but the prepared questionnaire was sent by email to 227 companies, receiving 24 responses. The respondent companies were grouped for analysis in 8 sectors of activity: IT, automotive, fabrication, trade and services, banking, engineering and consultancy, civil buildings and architecture. As shown in Figure 1, most responses were received from the sectors IT and fabrication.

#### **4. Results and discussions**

As already mentioned, the questionnaire applied in 2018 was much more complex than the other two and had the role of preliminary testing. Although the number of respondents was small, the information gathered was substantial and helped a lot in the subsequent stages. The way of addressing was made as to a possible employer of the university graduates, and the questions were grouped in 4 sections, as follows:

- **Sections A and B** in which data were collected about the profile of the employing company: main field of activity, year of establishment, year of starting activity in Romania, company size and type (by form of ownership),

structure by categories of employees. Among the respondents, multinational private companies dominated (61%).

• **Section C** in which the questions referred to the employment of UTCN graduates and facilities offered for students, such as the following:

*Q.C1:* Are our graduates considered an attractive category on the labour market? (72% affirmative answers).

*Q.C5:* Does the company agree with the presence of students in certain work sectors to allow them to become familiar with their field of activity? (received answers: No, never = 0; Yes, rarely =16%; Yes, quite often = 67%; Yes, always = 17%).

*Q.C8:* To what extent do you consider that the results of the educational process (knowledge, skills) correspond to the requirements regarding the employment of graduates? (received answers: To a large extent = 56%; To some extent = 33%; To a small extent = 11%).

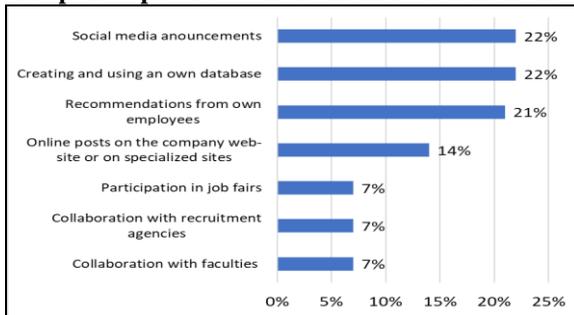
The following two open questions were addressed to the respondents, to find their opinions:

*Q.C9:* Indicate three weaknesses (gaps) and three strengths (qualities) that you have noticed during the recruitment interviews of UTCN graduates in the last five years.

*Q.C10:* Indicate at least three directions (or disciplines) that should be emphasized in preparing UTCN students to meet the employment requirements in your company.

• **Section D** included questions related to staff recruitment practices: the main methods used for recruitment (Figure 2), the assessment criteria considered in job interviews, the importance given to certain skills in the recruitment process.

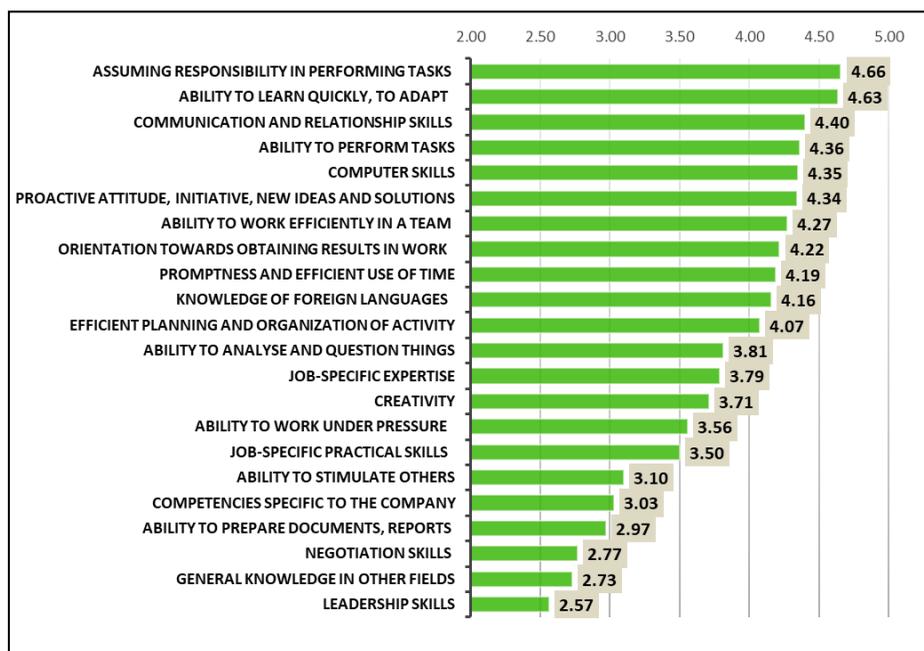
**Figure 2: Responses provided on the main recruitment methods (%)**



The questionnaire sent to companies on the next two stages focused our interest on two aspects: the importance given to different competencies during the recruitment process and the level of satisfaction with the competencies proved by the UTCN graduates during the recruitment interviews. It was considered, when processing the answers, that the respondent should have at least one-year experience in the recruitment process. The questionnaire proposed 22 competencies, and the assessment could be made for each one using a five points ascending scale (1 = Little importance; 5 = Very important) As the response rate in 2019 was the highest (32.4%), the results of the analysis for this stage are presented as follows.

The requirement was: "Using an ascending scale from 1 to 5, indicate the importance you give in the recruitment process to the following competencies of future employees". The analysis of the answers was done by mediating the scores obtained by assessing each competence. The results are presented in Figure 3. One may observe that soft skills are on the first positions of importance. Professional competencies, such as: computer skills, job-specific expertise, job-specific practical skills are placed in the hierarchy on lower positions. The result was surprising but not singular, being confirmed by other similar studies (Deaconu, 2014; Hernández-March, 2009) and also by the discussions held during the Career Days events with the companies participating at the round tables. In Table 1 the scores are presented by groups of companies, for the different activity sectors, the order of competencies in the table being the same with the one in the questionnaire.

**Figure 3: The hierarchy of the competencies required by companies – average values –**



**Table 1: The importance of competencies in the recruitment process (1 = Little importance; 5 = Very important) – average scores, 2019 (\*)**

Competencies	IT	A	F	T/S	B	E/ C
Assuming responsibility in performing tasks	4.66	4.50	4.89	5.00	5.00	4.25
Efficient planning and organization of activity	4.24	4.22	4.39	5.00	4.00	4.08
Promptness and efficient use of time	4.24	4.33	4.28	4.50	4.00	4.17
Ability to perform tasks	4.52	3.78	4.50	4.50	5.00	3.92
Ability to learn quickly, to adapt	4.72	4.33	4.78	4.50	5.00	4.36
Competencies	IT	A	F	T/S	B	E/ C
Orientation towards obtaining results in work	4.32	4.10	4.39	5.00	5.00	4.25
Job-specific practical skills	3.89	3.11	3.78	4.50	3.00	3.42
Ability to work efficiently in a team	4.41	4.20	4.39	4.50	5.00	4.08

Job-specific expertise	4.00	3.10	3.56	4.50	5.00	4.00
Communication and relationship skills	4.34	4.30	4.22	5.00	5.00	4.17
Proactive attitude, initiative, new ideas and sol.	4.38	4.50	4.67	4.50	5.00	4.17
Computer skills	4.72	4.22	4.17	4.50	5.00	4.33
Ability to work under pressure	3.54	4.11	3.72	4.50	3.00	3.75
Competencies specific to the company	3.48	2.78	2.94	4.00	5.00	2.92
Ability to stimulate others	3.41	3.00	3.33	4.50	3.00	3.08
Ability to prepare documents, reports	2.83	2.78	3.50	3.50	4.00	3.08
Knowledge of foreign languages	4.34	4.10	4.17	2.00	3.00	4.17
Negotiation skills	2.55	2.78	2.67	4.00	4.00	3.08
Leadership skills	2.55	2.89	2.78	4.00	4.00	2.83
Creativity	3.83	3.60	4.00	5.00	5.00	3.64
Ability to analyse and question things	4.00	4.11	3.94	4.00	5.00	3.75
General knowledge in other fields	2.86	2.80	3.06	3.00	4.00	2.50

(\*) Responses are grouped by different activity sectors: IT, A = Automotive, F = Fabrication, T/S = Trade/Services, B = Banking, E/C = Engineering/Consultancy.  
The order of competencies is the same used in the questionnaire

Regarding the fit between the importance given to the different competencies and the appreciation of the competencies proved by the graduates in the recruitment process, the numerical results can be analyzed from columns (1) and (2) of Table 2. It is noted that in column (2) almost all the scores, obtained through mediation of the assessments made by the companies, are below four, except for computer skills. The results are those corresponding to stage 2019. For a better visualization and appreciation of the situation, the difference in score between columns (2) and (1) is presented on the diagram in Figure 4.

The results obtained in the 2020 stage for the same question, regarding the importance associated with the different competencies by the recruiters, are presented in column (3) of Table 2. Compared to 2019, the scores are quite close. There are small changes in the hierarchy and more average scores over four.

**Table 2: Comparative presentation of the results obtained at stage 2019 and stage 2020 of the study. Scores were mediated (1 = Little importance; 5 = Very important) (\*)**

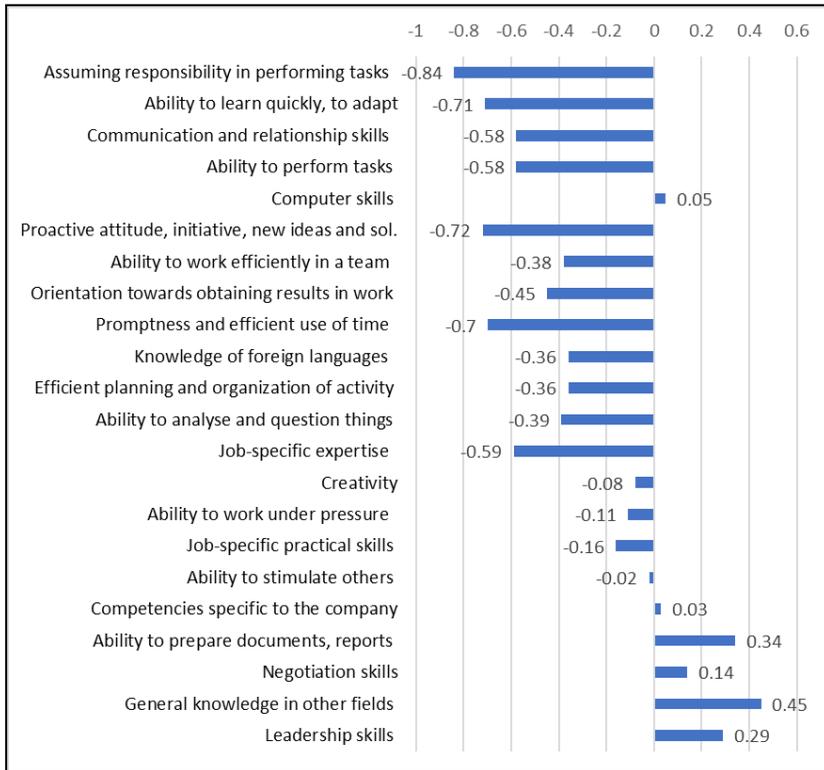
<b>Competencies</b>	<b>2019 (1)</b>	<b>2019 (2)</b>	<b>2020 (3)</b>	<b>2020 (4)</b>
Assuming responsibility in performing tasks	<b>4.66</b>	3.82	<b>4.79</b>	56.8
Ability to learn quickly, to adapt	<b>4.63</b>	3.92	<b>4.75</b>	56.8
Communication and relationship skills	<b>4.40</b>	3.82	<b>4.54</b>	<b>74.2</b>
Ability to perform tasks	<b>4.36</b>	3.78	<b>4.58</b>	52.4
Computer skills	<b>4.35</b>	<b>4.40</b>	<b>4.58</b>	52.4
Proactive attitude, initiative, new ideas and sol.	<b>4.34</b>	3.62	<b>4.38</b>	48.0
Ability to work efficiently in a team	<b>4.27</b>	3.89	<b>4.63</b>	<b>78.6</b>
Orientation towards obtaining results in work	<b>4.22</b>	3.77	<b>4.67</b>	56.8
Promptness and efficient use of time	<b>4.19</b>	3.49	<b>4.58</b>	52.4
Knowledge of foreign languages	<b>4.16</b>	3.8	3.88	17.5
Efficient planning and organization of activity	<b>4.07</b>	3.71	<b>4.42</b>	<b>69.9</b>
Ability to analyse and question things	3.81	3.42	<b>4.04</b>	56.8
Job-specific expertise	3.79	3.20	<b>4.13</b>	43.7
Creativity	3.71	3.63	3.79	34.9
Ability to work under pressure	3.56	3.45	3.79	34.9
Job-specific practical skills	3.50	3.34	3.96	<b>65.5</b>
Ability to stimulate others	3.10	3.08	3.42	17.5
Competencies specific to the company	3.03	3.06	3.46	<b>61.1</b>
Ability to prepare documents, reports	2.97	3.31	3.17	39.3
Negotiation skills	2.77	2.91	3.00	13.1
General knowledge in other fields	2.73	3.18	2.75	8.70
Leadership skills	2.57	2.86	3.00	8.70

(\*) Significance of columns:

- (1) = Importance of competence in the recruitment process – 2019 (average scores)
- (2) = Satisfaction with the competencies of UTCN graduates - 2019 (average scores)
- (3) = Importance of competence in the recruitment process -2020 (average scores)
- (4) = Competencies developed by companies, during internships [%]

The hierarchy in the presentation of competencies is the one obtained in 2019.

**Figure 4: Difference between the average scores obtained for: satisfaction with the competencies of UTCN graduates (column (2) Table 2) and importance given to competence in the recruitment process (column (1) Table 2)**



The companies that participated in this study are partners of the Technical University of Cluj-Napoca in various sectors of activity, which have hired university graduates in recent years and want to get involved in activities with students. The experience of recent years has shown a growing interest of companies in recruiting young people, not only after graduation but even during university studies. Although they appreciate the university's contribution to the professional training of its graduates, many companies offer young people training courses, for example during internships or immediately after employment, to train them in various soft skills and familiarize them with the specificity of working in the company. In this

context, the 2020 questionnaire included a question related to the competencies that companies develop during the internship period. The answers, expressed as a percentage of the number of respondents, are presented in column (4) of Table 2. Most responses (over 60%) were associated with the development of the following competencies through trainings provided by companies: ability to work efficiently in a team (78.6%), communication and relationship skills (74.2%), efficient planning and organization of activity (69.9%), job-specific practical skills (65.5%), competencies specific to the company (61.1%). The results in column (4) of the table prove that companies are also concerned with the development of some other skills.

## **5. Conclusions**

Higher education has a great responsibility to constantly adapt the training content and strategy to the requirements of the labour market. Currently, more attention is being paid to the concept of competence-based learning. The professional and transversal competencies acquired during the university studies must help young people to find a job shortly after graduation, to integrate quickly and become efficient and performant at work.

The job market is constantly changing, and the VUCA environment brings a new component, which must be considered when establishing future strategies in higher education. Both universities and companies are currently facing unique situations, which will lead to a change in the profile of the ideal employee. The current context requires higher education institutions to anticipate changes and to adapt quickly but also to stay connected to the global higher education area.

The present study shows that, in the recruitment process, the companies focus on competencies, but especially on soft skills and not on professional competencies, a fact demonstrated by other similar studies. This is in total disagreement with the education system, in which the emphasis is still on the development of professional skills. The challenge is to change the approach in educating young people and focus on learning by developing new knowledge and experiences, to the detriment of exposing specific solutions. Current students are very accustomed to technology, fast communication and get most of the information from online. They prefer to work part-time during their studies, having access to an expanded labour market, already formed in

the spirit of the new generation, so they have high expectations from the higher education system.

Recruiters are looking to hire young people who have mainly developed the following skills: assuming responsibility in performing tasks, ability to learn quickly, adaptability and flexibility, communication skills, proactive attitude and initiative, efficient use of time, ability to organize and prioritize. A good thing is that companies are willing to get involved in developing the skills of young people during their university studies and to get in touch with them as much as possible.

Along with the rapid changes that are taking place in society, the recruitment process will soon undergo radical changes, which deserve to be addressed and studied. It is about a new recruitment strategy that is already present in Romania starting with 2014: recruitment based on a gamification mechanism (human-focused design). If this is the future of recruitment, it means that the emphasis will be more and more on soft skills as well as on other components that will highlight the profile of each candidate.

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