

**DEPARTMENT OF INDUSTRIAL MANAGEMENT AND TECHNOLOGY**

**SCHOOL OF MARITIME AND INDUSTRY**

**UNIVERSITY OF PIRAEUS**

**ABSORPTION OF THE GRADUATES OF THE  
DEPARTMENT OF INDUSTRIAL  
MANAGEMENT AND TECHNOLOGY BY THE  
LABOUR MARKET**

**EXECUTIVE SUMMARY**

**2009-2017**

**REPORT BY THE INTERNAL ASSESSMENT TEAM**

**APRIL 2019**

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### Scope and Objectives

The purpose of this survey was to study the status and type of employment as well as ways to integrate the graduates into the labor market. It concerns graduates of the academic year 2009-10 and onwards. Topics covered concern the occupational sectors and jobs of the graduates of the Department, the continuation of graduate studies at the master's or doctoral level, the degree and quality of graduates' integration into the labor market.

The study began in February 2018, in the context of the requirements of the accreditation of the undergraduate study program. Until now, the Department maintained an *ad hoc* communication with its graduates (through the Department's events and through the personal contacts of its faculty members) without any systematic recording and monitoring of their progress. The study was coordinated by the Department's Internal Assessment Team, which cooperates with the Liaison Office of the University of Piraeus.

The study will be a useful tool for evaluating the Department's curriculum and is expected to assist graduates in their career orientation and integration.

### Study Details

The study includes the following actions:

#### **Study carried out by the Liaison Office of the University of Piraeus for the absorption of the University graduates**

This survey was conducted by the Liaison Office of the University of Piraeus. It was launched on 16/2/2018 and is expected to be completed in 2020. The aim of this study is to collect data from the 2009-10 graduates and thereafter in order to: (a) draw credible conclusions about the degree and quality of graduates' absorption, their occupational and geographical mobility and the relationship between supply and demand in the various occupational areas, (b) gain a better insight of the characteristics of the transition process (from studying to working) and the problems of professional integration of graduates, (c) develop an information mechanism and (d) enrich the liaison alumni database.

The following methods were used to communicate the survey:

- Email alumni who have a registered address in the Liaison Office Database.
- Announcement on the website of the Liaison Office and the Social Media where the Liaison Office maintains a web page.
- Informing the Secretariats of all the Departments, so that each Department can use its own databases.

A specific questionnaire of 65 closed-ended questions was designed to conduct the survey. The online questionnaire was designed and implemented in a modern graphical web application environment and is available online at <https://www.surveymonkey.com/r/careerofficeunipi>.

### **Study carried out by the Department of Industrial Management and Technology for the absorption of its graduates**

This survey was conducted by the Department of Industrial Management and Technology. It was launched on 28/2/2018 and expected to be completed in 2021 with a view to collecting data from the 2009-10 graduates and thereafter in order to: (a) draw credible conclusions about the degree and quality of the graduates' absorption, their professional and geographical mobility and the relationship of supply and demand in the various occupational areas, (b) obtain an insight of the characteristics of the transition process (from studying to working) and the problems of professional integration of the graduates of the Department, (c) develop a mechanism for collecting information and providing support for the Department's students from its alumni members and (d) enrich the Department's alumni database.

The following methods were used to communicate the survey:

- Email alumni who have a registered address at the Secretariat of the Department and the Industrial Training office.
- Announcement on the Department's website and social media (eg, linkedin).

A special questionnaire of 15 closed and open-ended questions was designed for the survey. The online questionnaire was designed and implemented in a modern graphical web application environment and is available at <https://goo.gl/forms/DMR6yzHd0iZYh3AM2>.

### **Other actions**

At the same time, the alumni of the Department, which is expected to be completed in 2020, is continuously enriched. The project is expected to facilitate the enlargement of the Department's database and data collection in a systematic and standardized way. In addition, events are organized in the framework of which free exchange of views between faculty members and alumni can take place. Notwithstanding, a nationwide survey of the graduates' absorption by professional and research bodies is planned to take place in order to record the views of employers about the skills and competences of the graduates of the Department. It is noted that the initiative of the Department to establish an industrial training evaluation process with the participation of the employers to collect data on the quality of the curriculum and the level of knowledge and competences of the Department's students has greatly contributed to the Department's procedures and functions.

The aim of the Department is to establish systematic and two-way communication with its graduates and the labor market, both in Greece and abroad.

### **Data and Data collection**

The average annual number of graduates in the Department of Industrial Management and Technology is 60-75 (cumulative data since 2002). Therefore, the target population for the study period (from 2010 onwards) is 540-585 graduates. The representative sample size required is 83 graduates (95% confidence level).

At present, the Liaison Office study collected 18 questionnaires from the Department's graduates, while the Department's study collected 32.

In addition to the questionnaires data were collected from personal interviews with alumni, and from the postgraduate alumni of the Department.

## Results

### Study carried out by the Liaison Office of the University of Piraeus for the absorption of the University graduates

The results referring to the graduates of the Department of Industrial Management and Technology involved, in total, 18 valid questionnaires (7 women and 11 men); The respondents graduated from the Department within the period 2011-2017. The percentage of the Department's graduates that participated in the survey is extremely small (about 2.6%).

Most of the graduates in the sample (about 67%) had a "Very Good" total grade and the 5.55% of the participants had an total grade of "Excellent".

Concerning the graduates of the Department that continued their studies, 44% responded that they continued to obtain a postgraduate degree, 25% of which in the Department's program.

Concerning their absorption by the labor market, 67% of the surveyed graduates responded that they were working full-time; 3.92% of the sample stated that they had found employment related the subject of study within one year of the diploma, whereas 70% found employment through public calls (internet). It is worthwhile noting that 75% of the graduates currently in employment responded that their diploma knowledge is sufficient to cover the work needs, while 25% feel that their job requires higher level knowledge.

### Study carried out by the Department of Industrial Management and Technology for the absorption of its graduates

As regards the graduates that participated in the Department's questionnaire, 6.25% of participants are currently unemployed. Table 1 presents the results obtained regarding the time of respondents' integration into the labor market; 65.62% of respondents completed postgraduate studies within one year of receiving the diploma, 19.05% of which selected an institution abroad. Noticeably, 58.82% of the graduates who continued their studies opted for the postgraduate program of the Department.

**Table 1.** Integration of respondents into the labor market after receiving their diploma

| Time             | Job description             | Percentage |
|------------------|-----------------------------|------------|
| Within 6 months  | Relevant to the diploma     | 28.13%     |
|                  | Not relevant to the diploma | 12.5%      |
| Within 12 months | Relevant to the diploma     | 9.38%      |
|                  | Not relevant to the diploma | 28.13%     |
| Within 24 months | Relevant to the diploma     | 6.25%      |
|                  | Not relevant to the diploma | 0.0%       |
| Within 36 months | Relevant to the diploma     | 15.6%      |
|                  | Not relevant to the diploma | 0.0%       |

The study showed that the absorption rate of the Department's graduates in its postgraduate program, which is just as multi-disciplinary as the undergraduate program, is low because (a) graduates of the Department wish to pursue a master's degree in one of the subject areas of the program and (b) graduates, due to the undergraduate program, have the knowledge and skills required to pursue whatever specialization they choose. The Department's postgraduate program attracts more graduates from other departments with a non-interdisciplinary orientation to the undergraduate course (e.g., administration, engineering, finance, etc.).

A significant proportion of graduates surveyed (37.5%) stated that they remain in their first employment sector, while 50% of them stated that postgraduate studies helped their career progress; 46.88% of respondents changed employment after their master's degree. The respondents' employment sectors and the departments in which they work are presented in Tables 2 and 3, respectively; 47.61% of the surveyed that were holders of postgraduate degrees are currently engaged in senior management.

**Table 2.** Sectors of Department's graduates employment

| <b>Sector</b>                                | <b>Percentage</b> |
|--|-------------------|
| <b>Primary production</b>                    | 6.25%             |
| <b>Services</b>                              | 50.0%             |
| <i>Accounting</i>                            | 18.75%            |
| <i>Warehouse</i>                             | 18.75%            |
| <i>Tourism</i>                               | 6.25%             |
| <i>Logistics</i>                             | 18.75%            |
| <i>Bank</i>                                  | 12.5%             |
| <i>Insurance</i>                             | 6.25%             |
| <i>Consultancy</i>                           | 18.75%            |
| <b>Industry</b>                              | 31.25%            |
| <i>Food and Beverages</i>                    | 30%               |
| <i>Chemicals/Plastics</i>                    | 10%               |
| <i>Drugs</i>                                 | 10%               |
| <i>Mechanical components and accessories</i> | 40%               |
| <i>Minerals and Oils</i>                     | 10%               |
| <b>Shipping</b>                              | 3.13%             |
| <b>Information Technology</b>                | 3.13%             |
| <b>Telecommunications</b>                    | 3.13%             |
| <b>Public Administration</b>                 | 3.13%             |

**Table 3.** Job positions of Department's graduates

| <b>Department</b>         | <b>Percentage</b> |
|---------------------------|-------------------|
| <b>marketing</b>          | 12.5%             |
| <b>production</b>         | 6.25%             |
| <b>finance</b>            | 9.38%             |
| <b>sales</b>              | 25%               |
| <b>accounting</b>         | 18.75%            |
| <b>human resources</b>    | 6.25%             |
| <b>warehouse-supplies</b> | 18.75%            |
| <b>R&amp;D</b>            | 3.13%             |

Although the study is not yet complete, the preliminary conclusions drawn with a satisfactory degree of reliability are the following:

- A large proportion of graduates, immediately or shortly after receiving the diploma, continue their studies at the postgraduate level.
- The range of subjects related to the curriculum is wide, enabling graduates of the Department to make the most of the knowledge and skills acquired through their studies.

The Department considers that the employment of its graduates in industry should be strengthened and actions will be planned and launched in the near future.

## Conclusions

The analysis of the findings from both studies shows a positive picture of the job market for graduates of the Department of Industrial Management and Technology. Although the sample of graduates involved both studies is very small and the results must be taken into account with caution, it seems that the employability rate and even the field of study are significant, with the overwhelming majority managed to find a job relevant to its field of expertise within one year of graduation.

Suggestions and further actions that could be discussed are:

- The creation of working awareness among the graduates of the Department through actions aimed at their financial independence and enhancement of entrepreneurship courses.
- The strengthening of students' involvement in the Industrial Training program so that more students have the opportunity to work in industry jobs that later might have the opportunity to be absorbed by them as employees.
- The enhancement of scientific collaborations (participation in research programs, co-organization of conferences/workshops with business entities, etc.).
- The improvement of students' scientific, communication, organizational and collaborative skills during their studies.