

IE 102 Fall 2018

Term Paper

In the term paper, you are asked to investigate and write about an article based on Industrial Engineering and related subjects.

The purposes of this exercise are:

- (i) To improve your academic writing skills, hence to improve your professionally oriented written communication skills. We strongly suggest that you follow the suggestions given in “*How to write in a university setting?*” a booklet prepared by Bilkent University (can be found in the following WEB address: <http://www.bilkent.edu.tr/~dabir/booklet.htm>) while preparing your essay. Parts that describe plagiarism (academic dishonesty) are important and should be strictly followed.
- (ii) To make you familiar with more professionally (not necessarily academic) oriented magazines of the field. These periodicals provide state-of-the art information on new developments, as well as routinely cover issues related to the profession.
- (iii) To improve your reading and comprehension skills in IE related topics.
- (iv) To experience of working in a group

Your current IE knowledge and the material you are going to cover for this assignment will be based on IE102 experience. Hence, we are aware that your contribution to what you read will not be extensive. Our expectation from you is to see that you can have a reasonable discussion around an IE topic. Your main contribution will be in terms of understanding what you read, comparing different writings, rewording ideas, and expressing all in written English.

In this assignment, you are going to work in a **group by 2**. We allow you to form your own groups for the term paper assignment. For those of you who cannot find a group member, your groups are randomly formed. You can find your group members and their information in the '**Term Paper Groups**' file.

For each group, an article from *ISE: Industrial & Systems Engineering at Work* or *OR/MS Today* is assigned. You can find the information of the article that is assigned to your group and the assigned student assistant in the '**Article Assignments**' file.

Finding the article

Both journals (*OR/MS Today* or *Industrial Engineer*) are available at the library. For the electronic access to those journals, the access is possible from:

ISE: Industrial & Systems Engineering at Work – A Publication of IIE:

<http://library.bilkent.edu.tr/> → Finding Resources → E-Journals → New Search (top left)
Search for the article name.

OR/MS Today – A Publication of INFORMS:

<https://pubsonline.informs.org/magazine/orms-today/loi> (For recent issues)

<https://www.informs.org/ORMS-Today/Past-Issues> (For past issues)

Note that all the library sources can only be reached using known ports those are identified with the university.

In addition to the article that is assigned to your group, we also ask you to search other article(s) related to your assigned article to discuss different approaches taken in the literature towards the same problem. You need to give a proper reference to these additional article(s) in your essay.

Process to follow

We'll follow the so-called "revise and resubmit" idea in term project. You will submit an initial full version of your essay, which we call First Draft; we will grade and ask for revisions and extensions, and then you will submit the Final Draft of the essay.

The process we would like to follow for Term Paper is detailed below:

SUBMIT FIRST DRAFT

First draft of Term Paper is due November 15, 2018, due-time: 17:00.

RESPONSE TO FIRST DRAFT

A feedback will be given within a reasonable time and it will include some directions for revising your writing assignment, possible discussion or expansion areas that can be used. We may ask you to restructure your work (and make it more realistic for completion) or eliminate topics with close contents. Your mistakes as well as academic dishonesty issues will be specifically mentioned.

SUBMIT FINAL DRAFT

Final draft of Term Paper is due December 24, 2018, due-time: 17:00.

What is expected for the First Draft?

First Draft of the essay for **Term Paper** should contain the following:

- 1- A cover page including group member's information (name, ID number, group number, section), the name of the student assistant (who is assigned to your group), a title for your essay and 2-4 keywords you think represents your content.
- 2- A detailed discussion of the article that is assigned to you. In the discussion, you need to mention about at least the following concepts:
 - a. Problem definition and analysis,
 - b. Approaches proposed to solve this problem,
 - c. Other approaches from the literature (other articles),
 - d. Results and applications.
- 3- *As a part of Appendix:* A Glossary: Definitions of the terms used in the essay should be made available in the appendix as a formal glossary by making sure that you cite the source utilized to define every term. Two such sources are: *Institute of Industrial Engineers, *Industrial engineering terminology*: a revision of ANSI Z94.0-1982: an American national standard approved July 10, 1989; revised 1990. Call #: REF/T56.24 .I53 1990; and *Salvendy, G. *Handbook of industrial engineering*, Institute of Industrial

Engineers, 1992. Call #: T56.23 .H36 1991. This is very important, and will be emphasized in grading.

What is expected for the Final Draft?

Final Draft of the essay for **Term Paper** should contain the following:

- 1- Revised version of 1-3 from the First Draft
- 2- Your opinion on the article including suggestions and improvements (Do not include in the first draft)
- 3- Your personal view of the significance of the article topic, including its relation with IE102 course work. (Do not include in the first draft)

For both drafts, in addition to the essay, you **must submit a hard “proper” copy of the article** that is assigned to you group. Also, if you read any other related articles and you refer them in your essay, you need to submit a hard “proper” copy of those articles, as well. Please, refer to **Frequently Asked Questions** for the meaning of “proper”.

Grading and other pertinent information

Grading both drafts of the **Term Paper** will be based on the same expectations, summarized as follows:

- 1- The contents of the essay,
- 2- The contents of the Appendix (Glossary),
- 3- Quality of the written material (English, organization, etc),
- 4- Quality of the references used,
- 5- Usage of the other sources (Additional articles)

A 2-4 pages (loosely: single-spaced A4, with 12 point characters, like this one) essay seems a very reasonable length for the part excluding the Appendix. However, this is not a requirement; you can have it longer.

Student Assistant Information

Student Assistants (SA's) are available to assist your term paper assignment. You are expected to contact them, and get an appointment from them. The name and e-mail address of the student assistants are as follows:

Derya Erkan - derya.erkantug.bilkent.edu.tr

Eda Öksüz - eda.oksuzug.bilkent.edu.tr

Ege Öndeş - egeondes@gmail.com

Furkan Taksim - yasintaksimug.bilkent.edu.tr

Mustafa Özkök - mustafa.ozkokug.bilkent.edu.tr

Sıla Aksoy - sila.aksoyug.bilkent.edu.tr

Frequently asked questions on Term Paper:

- 1) **Question:** What is the meaning of “Quality of references used”, one of the items listed for grading. **Answer:** Library sources are usually reliable sources of information, as most books, journal articles (academic ones) are only published following a thorough review process. On the contrary, most of the WEB sources are not reliable, as there is no such review process before publication. Nevertheless, there are some WEB sources that only publish quality material, either reviewed or prepared by experts; these sources would identify themselves by stating their publication review procedure. “Quality of references used” will reflect the reliability of the information sources you have used.
- 2) **Question:** Can I utilize articles from other journals, especially academically more advanced journals? **Answer:** Of course, as long as what you find is relevant for IE and your background is sufficient to understand it.
- 3) **Question:** Can I use more than one article? **Answer:** Yes, and this is what we are looking for. The more you read, the better it will be in terms of what you can come-up with.
- 4) **Question:** How can I be sure that I have used references properly and not fall into plagiarism situation? **Answer:** Read “*How to write in a university setting?*” booklet carefully. Discuss the questions you have in mind with your Student Assistant. Note that any failure may result in the violation of **Academic Dishonesty** policy mentioned in the course information.
- 5) **Question:** Is consulting with the student assistant a must? **Answer:** Of course, it is not a must. They are only going to support you if you need them. But do not forget: They will, probably, be not available if you ask them in the last minute (and weekends). So, if you plan to consult, try to communicate earlier than a due-date.
- 6) **Question:** What should be my style of writing? **Answer:** This is a very difficult question to reply. Note that writing very general sentences and slogans are easy. Most of the articles will contain such parts. In your report, make sure that you do not have such biases. This is the reason why you should read more, and possibly find counter arguments to your initial article. ***The initial article should be used as an impetus to form a theme for the term paper.***
- 7) **Question:** What is a “proper” copy an article? **Answer:** When you are submitting a copy of an article, make sure that you use a format that will show the actual pages of the article (such as pdf). Other formats (such as html) would usually not contain information on the source of the article, as well as other details such as date, title, journal name, page number, etc.
- 8) **Question:** What citation format should I use? **Answer:** Any format (among the ones mentioned in “*How to write in a university setting?*” booklet) is accepted, as long as you stick to the same format consistently throughout your assignment.
- 9) **Question:** How am I going to submit my assignment? **Answer:** An assignment submission box will be placed in front of office EA325 one day before submission deadline and will be removed at the time of the deadline. You need to put your assignment in the designated box before the submission deadline.
Submission via e-mail is NOT accepted.