

SİVAS UNIVERSITY OF SCIENCE AND TECHNOLOGY

COMPUTER ENGINEERING

GRADUATION PROJECT REPORT

[Student Name]

AdvIsor

[AdvIsor Name]

APRIL 2025

[Project Name]

(Graduation Project)

[Student Name]

SİVAS UNIVERSITY OF SCIENCE AND TECHNOLOGY

COMPUTER ENGINEERING

APRIL 2025

ABSTRACT

Abstract in English [Maximum 250 words]

ACKNOWLEDGEMENT

This page may include additional information about the study that would disrupt the narrative integrity if written within the thesis text, but that the thesis author wishes to provide. Positive and negative situations encountered during the study may also be mentioned. In the final sections of the page, thanks are given to those who directly contributed to the preparation and reporting of the thesis, as well as to those who contributed indirectly, even though they were not assigned to the study. If the thesis study was carried out within the scope of a project, the name of the project and the relevant institution are also stated on this page. The title (if any), name, surname, institution they are assigned to (in quotation marks) of the persons thanked, and their contribution to the study should be stated briefly and concisely. The acknowledgement page should not exceed one page.

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SYMBOLS AND ABBREVIATIONS

The symbols and abbreviations used in this study are presented below, along with their explanations.

**Abbreviations Explanations**

**AB** Explanations should not be longer than one line

**ASHRAE** Abbreviations should be given in alphabetical order

**BRE** ………………………….

**CFD** ……………………….....

# INTRODUCTION

The purpose of this Undergraduate Project Report Writing Guide is to regulate the principles related to the reporting of graduation projects for undergraduate students studying in the Department of Computer Engineering at Sivas University of Science and Technology.

Reports prepared in accordance with the format specified in this Undergraduate Project Report Writing Guide are submitted to the Department of Computer Engineering. The jury may request the candidate to revise, present, and defend the report after making certain corrections, or may consider the candidate's work as unsuccessful.

If there is a need for anything not included in this writing guide, reference may be made to the Publication Manual of the American Psychological Association, 7th Edition (APA 7th Edition).

This writing guide is effective as of its publication date. Reports prepared in previous years differ in terms of format and content and should not be used as examples when preparing a new report.

# LITERATURE REVIEW

a) APA: American Psychological Association

b) Department: Computer Engineering Department of Sivas Science and Technology University

c) Graduation Project: Graduation Project prepared by the student

d) Report: Scientific study report prepared in accordance with the Student's Graduation Project Report preparation guide

e) University: Sivas Science and Technology University

f) YÖK: Council of Higher Education

## Ethical Principles to be Considered in Scientific Publications and Reports

Unethical behaviors in scientific publications are defined in the second section, article 4 of the Scientific Research and Publication Ethics Directive of Higher Education Institutions and article 6 of the Scientific Research and Publication Ethics Board Directive of Sivas Science and Technology University. Accordingly, the behaviors that will be considered unethical are as follows:

a) Plagiarism: Presenting others' original ideas, methods, data or works as one's own work, partially or completely, without citing them in accordance with scientific rules,

b) Forgery: Using data that does not actually exist or has been falsified in scientific research and studies,

c) Distortion: Falsifying research records or obtained data, presenting devices or materials that are not used in the research as if they were used, falsifying or shaping research results in line with the interests of persons and organizations from which support is received,

d) Failing to comply with ethical rules in research conducted on humans and animals, not respecting patient rights in studies,

e) Acting contrary to relevant legislation provisions in biomedical research and other clinical research on humans,

f) Using resources, spaces, facilities and devices provided or allocated for scientific research for purposes other than their intended purpose,

g) Making baseless, unfounded and intentional allegations of ethical violations,

h) Publishing data obtained in surveys and attitude surveys conducted within the scope of a scientific study without obtaining the explicit consent of the participants or, if the research is to be conducted in an institution, without obtaining the permission of the institution,

i) In research and experiments, animal health and harming the ecological balance,

j) Not obtaining written permissions from authorized units before starting research and experiments.

k) Conducting studies in violation of the relevant provisions of the legislation or international agreements to which Türkiye is a party regarding research and experiments.

l) Not complying with the obligation to inform and warn the relevant parties about possible harmful practices related to scientific research conducted by researchers and authorities,

m) Not using data and information obtained from other persons and institutions in scientific studies to the extent and in the manner permitted, not respecting the confidentiality of this information and not ensuring its protection,

Ensuring compliance with ethical principles and principles in Graduation Project studies is the responsibility of the student and advisor.

### General Rules

This guide, prepared to ensure a standard for writing graduation project reports in the Department of Computer Engineering at Sivas University of Science and Technology, briefly and clearly outlines the scientific writing principles related to the report. The reports are reviewed by the department. The student and the advisor(s) are responsible for ensuring that the report is prepared in accordance with the writing guidelines. The purpose of the report checks conducted by the department is to assist with the report and verify its compliance with the specified rules.

### Language and Expressions

The Department Graduation Project Report must be prepared in the language of instruction of the program.

The report should employ a clear and comprehensible style. To enhance clarity, headings and subheadings should be used. A personalized (first-person singular) style should be avoided; instead, a third-person singular narrative should be preferred.

## General Format and Writing Plan

This section explains, with examples, the principles regarding the type of paper and fonts to be used in the report, how the text should be arranged on the page, line spacing, page numbering, chapter and subchapter headings, in-text references, footnotes, and endnotes.

### Paper Quality

Reports must be written on A4 size paper (21 x 29.7 cm), using NAVIGATOR 80-gram first-class white paper.

### Margins and Page Layout

In writing, there should be a margin of 2 cm on the bottom, 3 cm on the top edge, 2.75 cm on the left edges and 2.75 cm on the right edges.

3 cm

2,75 cm

WRITING AREA FOR SINGLE PAGES

2,75 cm

2 cm

### Paper Surface Usage

Reports should be written using a computer. A single side of the paper should be used for the section from the beginning of the report to the INTRODUCTION, and two sides of the paper should be used from the INTRODUCTION to the end of the REFERENCES. Section headings, including the INTRODUCTION, should always appear on the front page (with a single page number).

### Font Type and Size

Times New Roman (12) and the font size given in parentheses should be used in report writing. However, 10 point size should be used in footnote writing, and smaller font sizes (minimum 8 point) can be used in wide and/or long tables, provided that they are easily readable. A maximum of 12 and a minimum of 8 points can be used when writing inside tables. Font sizes other than these values should not be used. A smaller font size should be used in writing subscripts and superscripts (the “superscript, subscript” features provided automatically in MS Word can be used). A one-character space should be given after the comma and period in writing.

### Writing Numbers

1) Only periods should be used when writing Decimal Numbers. Consecutive decimal numbers should be separated with a semicolon (;).

|  |  |  |  |
| --- | --- | --- | --- |
| True | False | True | False |
| 5.2 | 5,2 | 1.032,97134 | 1032.97134 |

2) When writing large numbers (thousand and above), groups of three can be made starting from the last digit of the number and a one-stroke space can be left between these groups of three. However, periods or commas should not be placed in these spaces.

|  |  |  |
| --- | --- | --- |
| True | False | False |
| 1.000.000 | 1 000 000 | 1,000,000 |
| 1.000 | 1 000 | 1,000 |

## Line and Paragraph Spacing

The text of the report should be written in 1.5 line spacing. The summary, quotation, footnote and reference list should be written in single line spacing.

Figure, Picture, Map captions and Table captions should be written with single line spacing. When bullet points are placed or numbered within the text, single line spacing should be used between two items/numbers.

Section headings and subsection headings and the first paragraph following them should be left with 1.5 line spacing.

There should also be 1.5 line spacing between two paragraphs. The main sections should always be written on a new and odd numbered page.



## Page Numbering

Page numbers should be written in Times New Roman (12 point) font at the bottom of the page, in the middle. All pages (including References) except the Outer Cover and Inner Cover should be numbered. The Table of Contents, Abbreviations and Symbols, Table Index, Figure Index, Abstract sections up to the introduction should be numbered with lower case Roman numerals (I, II, III, IV, V, VI ...) and the introduction and the report text after it should be numbered with numbers (1, 2, 3). Characters such as separators and dashes should not be used next to page numbers.

## Chapter and Subchapters

|  |  |  |
| --- | --- | --- |
| **Text Type** | **Features** | **Example** |
| Special Page Title | Capital letter, bold, 12 point and centered | **ABSTRACT** |
| First-degree section titles | Capital letter, bold and 14 point | **1. INTRODUCTION** |
| Second-degree sub-section titles | The first letter of each word is capitalized, all in bold and 12 point size(Conjunctions such as “and”, “or”, “ile” are written in lower case if there is one.) | **4.2. Preliminary Studies on Electro dissolution - Deposition Using Copper Matrix Sockets and Water-Based Electrolytes** |
| Third-degree sub-section titles | Only the first letter of the first word is capitalized, all bold and 12 point font | **4.2.1. Effect of current density applied in copper based sockets on electro-dissolution and powder metal production processes** |
| 4th-degree and later sub-section titles | Italic and underlined 12 point font (These subheadings should never be written in bold.) | *Effect of process parameters on Dv10 particle size* |

## Numbering of Chapters and Subchapters

In the report, the main sections are numbered 1, 2, 3, ... In some reports with a lot of detail, the subsections can also be numbered with a double numbering system. For this purpose, each subsection also takes the number of the section and subsections in which it is located.

**Example**

1.1., the first subsection of the first section; 1.1.1, means the first subsection of the first subsection of the first section.

## In-Text Citations

In the report, literature review is done especially in the stages of defining the problem, determining the research method and interpreting the findings. In these reviews, the work of other researchers and thinkers is used. In the citations made in the report, the researcher must state what, where and how he/she got it. Scientific ethical rules must be observed in the report and plagiarism must not be done. When citations that are not made in accordance with the rules are noticed, it leads to the rejection of the report.

References to sources in the report can be made;

1- By number,

2- By the author's surname.

### Citation by Number in Text

In numbered references, square brackets are used. The source number is given directly.

a. “As palpm viscosity increases, fluidity decreases” [1].

b. Yekeler states that “as palpm viscosity increases, fluidity decreases” [2].

In numbering; the first source is given the number [1] in square brackets, and the dot is placed outside the brackets. The following sources are continued by giving the next number.

If the source numbers follow each other, the numbers of the first and last are written with a dash [-] between them. For example; if sources 3 to 8 are a continuation of each other and also a quotation from the 13th source, this situation is shown in the text as follows.

**Example**

Antioxidants neutralize free radicals, which are toxic byproducts of normal cell metabolism, strengthen the body's defense system and reduce cell damage and disease risk [3-8, 13].

### Citation by Author’s Surname in Text

Citing sources within the report should be written in accordance with the examples given below. Each source shown within the report text must be included in the SOURCES section of the report in accordance with the principles specified in section 6.2 of this guide.

* In sources with a single author, the surname of the author of the work should be written (the first letter is capitalized, the others are lower case) and the year of publication. A comma should be placed after the author's surname.

**Example**

Strawberry is an important fruit that is preferred in the Mediterranean diet due to its rich nutrients and beneficial phytochemicals (Giampieri, 2012).

* In sources with two authors, the authors' surnames (the first letter is capitalized, the others are lower case) should be written with the conjunction "and" between them and the year of publication. A comma should be placed after the authors' surnames.

**Example**

It has been determined that some varieties obtained through hybridization breeding in the USA contain more than 100 mg of ascorbic acid in 100 g of fresh fruit (Kargı and Sarıdaş, 2022).

* When publications with more than two authors are cited, the abbreviation "et al." should be used after the surname of the first author and the year of publication should be specified.

**Example**

The seeds are small, dicotyledonous, black in color, and have a triangular cross-section (Al-Sa’aidi et al., 2009).

**Example**

Juglal et al. (2002) reported that essential oils have antifungal activities against mycotoxins produced by fungi.

* Sources without an author (such as a report prepared by an institution, a standard, etc.) are indicated as Anonymous and year if they are in Turkish, or Anonymous and year if they are in English.

**Example**

Raspberries are an important source of quercetin flavonoids (Anonymous, 2002).

* If more than one source is to be cited, they should be listed from the oldest publication to the newest, and a semicolon (;) should be placed after the dates.

**Example**

Proteins, lipids, salts, pH and temperature are the factors affecting the antimicrobial activities of phenolic substances (Sagdic, 2003; Evren and Tekgüler, 2011).

**Example**

Since profitability is important in enterprises, the part required for the survival of ruminant animals is met by forage crops (Açıkgöz et al., 2005; Alçiçek et al., 2010; Özkan and Demirbağ, 2016).

* If publications by the same author in the same year are cited, they should be listed with the letters a, b, c after the publication year.

**Example**

Benchaar et al. (2006a) reported no change in dry matter intake, milk yield and milk components when dairy cows were fed 750 mg or 2 g/day of an essential oil mixture. Benchaar et al. (2006b) investigated the growth performance of cattle fed silage-based feed supplemented with 2 or 4 g/day of a commercial mixture of essential compounds consisting of tuchol, eugenol, vanillin and limonene.

**Example**

Strawberry (Fragaria x ananassa Duch) is consumed as a functional food due to its rich nutritional content, potential health benefits, biological activities, unique color, taste and aroma (Chaves et al., 2017a; 2017b).

* If publications from different years by the same author are cited in the same sentence, the publication dates should be written from oldest to newest, separated by a “;” (semicolon).

**Example**

Ecological changes such as increasing temperature and decreasing precipitation within the scope of global climate change reduce the efficiency of plant production (Çiğdem, 2012; 2015)

* If a picture, figure and/or table from a different publication is to be used, the source must be shown in parentheses at the bottom left of the table, after the description of the figure or picture.

 **Example**

Table 2.1. Fleig calculation table [1] or (Aydın, 2022)

|  |
| --- |
| **Fleig Score = 220 + (2 x % Dry Matter - 15)-40 x pH 81-** |
| 100 | I= Very Good |
| 61-80 | II= Good |
| 41-60 | III= Satisfactory |
| 21-40 | IV= Fair |
| 0-20 | V= Bad |

**Example**

Figure 2.1. Oyster Mushroom [1] or (Çolak, 2019)

### Footnote

Very short and concise explanations that would distract from the subject and prevent continuity in reading if written within the text on any page of the report can be written as footnotes in a few lines at the bottom of the same page. Footnotes should be numbered starting from "1" for each page and should be given as a superscript above the relevant word as in the example below. Footnotes should be written in 10-point font, should not be used for referencing and should only be used for special explanations or definitions.

**Example**

…………...Main text of the report…..........................

They are defined by different names among the public such as mushroom1, mold2, yeast3, capped mushrooms…..........

…………..Continuation of the report text…………...

1*The plant tissue used in bottle coating, obtained from the bark of Quercus suber, is also called cork.*

2 The brown compound formed by the oxidation of iron is also known as rust.

3 The microorganism or enzyme added to the environment for fermentation to occur is called yeast.

### Symbols and Abbreviations

The symbols used in the report should be written one below the other after the left frame space. The left leading edge of the definitions and explanations should be aligned. The SI unit system given in the Turkish Standards numbered TS 294-297 should be taken as basis for units, the same standards should be used for the symbols of the units, and a dot should not be placed at the end of the symbol indicating the unit. Abbreviations can be made using initials for terms that are frequently used in the report and consist of more than one word. Such abbreviations should be given once in the first place and in parentheses. Abbreviations made should be written in alphabetical order in lower case letters under the subheading Abbreviations in the SYMBOLS AND ABBREVIATIONS section, and abbreviations such as the institution name should be written in upper case letters.

### Definitions of Illustrations (Tables and Figures)

The tables and charts to be used in the report are defined as "**Tables**", Photographs, pictures, maps, microscope images such as SEM, computer outputs with images, graphs, histograms, flow charts, organizational charts, etc. are defined as "**Figures**". The formulas to be used in the report are defined as "**Equations**".

Placement of Illustrations

Illustrations covering half a page or less should be included in the text. Figures, pictures or charts covering more than half a page can be given on a separate page. Two or more illustrations can be on the same page.

If they are closely related, they can be given a single illustration number by symbolizing them as "a, b, c, d,..." In this case, each illustration symbolized as a, b, c, d,... should be named and defined separately in the illustration text.

Illustrations should be included on the first page referred to in the text or on the following page. When placed, they should never exceed the required margins on the page margins and should be centered. There should be no illustrations with folded pages in the report. If tables/figures longer than one page must be included in the report text, they can be divided according to the page size and given on the next page. In this case, the table/figure title should be given by writing "(continued)" after the number, while the number and title remain the same. A maximum of 12 points should be used when writing the inside of tables, but smaller points (minimum 8 points) can be used in long tables, provided that they can be easily read.

Numbering Illustrations

All illustrations should be numbered independently within each main section. For example, for the first section, they should be numbered as Table 1.1., Table 1.2., Figure 1.1., Figure 1.2., Picture 1.1., Map 1.1., and for the second section, they should be numbered as Table 2.1., Table 2.2., Figure 2.1., Figure 2.2., Picture 2.1., Map 2.1.. The spacing should be done by writing the main section number and the order within the main section.

**Example**

Figure 2.1.1. False

When numbering equations, the word equality should not be used at the beginning of the numbers, and they should be numbered according to their order within the main section. The equation number should be given to the right of the equation, in the last column of the page, and in circular (.) parentheses. However, when referring to the equation within the text, it should be written as in the example "Eq. 2.2".

**Example**

|  |  |  |
| --- | --- | --- |
| True | False | False |
| Eq. 2.2 | Eq. 2.2.1 | “Eq. 2.2” |

Captions of Illustrations

If the text of the explanations consists of more than one line, single line spacing should be used. Table explanations should be written above the table, a space should be left between the last line of the explanation and the top edge of the table, and this space should be single spaced. Figure, picture and map explanations should be written below these images, no period should be placed at the end of the explanation; a single space should be left between the explanation line and the illustration. If the explanations continue on the lower lines, the second and other lines should be aligned starting from the end of the word illustration (table, figure, picture and map) and its number. A space of 1.5 lines should be left between the explanation of the illustration and the text of the report. In writing the explanations of the illustrations, the first letter of the first word should be written in capital letters, the others in lower case letters, and no period or comma should be placed at the end.

|  |  |  |
| --- | --- | --- |
| Figure, Image and Map Subtitles | Only the first letter of the first word is capitalized, single spaced and 12 point font. | Figure 2.1. Discrete Fourier transform example |
| Table Superscript | Only the first letter of the first word is capitalized, single spaced and 12 point font. | Table 2.1. Natural frequencies of the seats, conductive and damping values ​​at these frequencies |

**Examples**

Formula writing;





Figure 2.1. Discrete Fourier transform example.

Table 2.1. Natural frequencies of the seats, conductivity and damping values ​​at these frequencies.

|  |  |  |  |
| --- | --- | --- | --- |
| Seat Name | Damped Natural Frequencies (Hz) | Conductivity (%) | Damping Ratio |
| K1 | 1.95 | 1.95 | 1.94 | 134 | 134 | 134 | 0.41 | 0.40 | 0.40 |

Table 2.1. (continued) Natural frequencies of the seats, conductivity and damping values ​​at these frequencies (when you switch to a new page)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| K2 | 2.38 | 2.25 | 2.27 | 165 | 155 | 160 | 0.33 | 0.35 | 0.34 |
| K3 | 2.38 | 2.25 | 2.27 | 165 | 155 | 160 | 0.33 | 0.35 | 0.34 |

Referencing Illustrations

When referring to illustrations, if the illustration is on the same page or on a subsequent page, the reference should be made in accordance with one of the following examples.

**Examples**

i) First, a 1:20 000 scale topographic map of the region was prepared (Figure 2.5).

ii) The topography of the study area (Figure 2.5) is quite rugged.

iii) The topographic features of the study area are shown in Figure 2.5.

iv) According to the topographic map in Figure 2.5 ...

v) The experimental results were evaluated statistically (Table 4.2).

vi) The statistical evaluation results of the experimental data are summarized in Table 4.2.

vii) The statistical evaluation results of the experimental data (Table 4.2) confirm the relationship in question.

If it is necessary to refer to figures, tables and other illustrations that have been previously mentioned on previous pages on any page of the report, the abbreviation (See) meaning “See” should be used in parentheses as in the examples below.

**Examples:** (See Figure 1.4), (See Table 2.1)

If a figure, table or illustration is taken from another publication, it is referred to at the end of the description in accordance with the above citation rule.

**Example**

Figure 3.11. Ionic liquid residues (blue and green colored particles are ionic liquid wastes) (Kul, 2019)

# MATERIALS and METHODS

## Page Arrangement

The report consists of the following sections:

1) Special pages

2) Report text

3) Resources.

### Report Cover and Special Pages

The guidelines for "report special pages/report front pages" numbered with lowercase Roman numerals are given below.

### Outer Cover

The information to be included on the cover should be written in the following order from top to bottom: Name and Surname, Department, month and year.

The name of the report should be written as briefly and concisely as possible, but should fully reflect the subject and content of the report.

The report title should not contain symbols, mathematical and chemical formulas, or non-standard characters.

### First and Last Pages

Our university emblem (9 × 9 cm) will be placed on the page before the inside cover page.

### Inner Cover Page

The text on the cover should be written in 13-point capital letters, bold, starting 5 cm from the top edge of the page and centered according to the vertical center line of the cover.

### Abstract Page

The ABSTRACT page should be placed before the Table of Contents page. The purpose, scope, method/methods used and the result/results of the graduation project should be stated concisely in the abstract. Keywords should be given at the end of the abstract text. The abstract, together with the keywords, should be written in 12 point font size, single paragraph and single line spacing, not exceeding one page.

### Table of Content

The table of contents page is the page where all special pages, all section headings in the report text, additional studies, and sources are given, starting from the summary page.

All first, second, and third degree headings used in the report should be included on the "Contents" page without any changes.

The "CONTENTS" heading should be written in bold, centered on the vertical center line of the page, in all capital letters. The entire page should be written with single spacing, and a single line spacing (12 pt) should be left between each section. On this page, the number of the first page on which only that heading is located should be written in line with each heading.

### List of Tables Page

The list of numbered tables should be given in order on this page. The title "LIST OF TABLES" should be written in capital letters and bold, centered on the vertical center line of the page. The entire page should be written in single space, leaving a single space between each table.

### List of Figures Page

The list of numbered figures should be given in order on this page. The title "LIST OF FIGURES" should be written in capital letters and bold, centered on the vertical center line of the page. The entire page should be written in single space, leaving a single space between figures when moving from one figure to another.

### Symbols and Abbreviations Page

The title "SYMBOLS AND ABBREVIATIONS" should be written in all capital letters, centered on the vertical center line of the page.

The symbols used in the report should be given under the subtitle "Symbols", and the information about the symbol should be given under the subtitle "Explanations" in order and with 1.5 line spacing. After the last symbol and its explanation, "Abbreviations" should be given with 2 line spacing. The abbreviations used in the report should be written under the subtitle "Abbreviations", and the information about them should be written under the subtitle "Explanations" in order and with 1.5 line spacing. In addition, the initials of the abbreviations should be written alphabetically.

• Symbols and abbreviations should be written starting from the left margin of the page.

• Symbol and abbreviation explanations should not be longer than one line.

• All symbols should be written in lower case bold under the subtitle symbols, while their explanations should be written in normal letters.

• All abbreviations should be written in upper case bold under the subtitle abbreviations, and their explanations should be written in lower case normal letters, with only the initials capitalized.

# FINDINGS and DISCUSSION

## Final Project Report Text

### Introduction

In the “INTRODUCTION” section of the report, information that will prepare the reader for the subject should be given, such as the subject and problem addressed in the graduation project study, the purpose of the research, the importance of the research, its limitations, and the meanings in which the aforementioned definitions are used, research methods and previous studies. However, subsection headings such as Purpose, Scope, Method should not be used in writing this information. Section numbering begins with INTRODUCTION.

Problem Statement/Definition of the Subject

The scientific problem to be solved should be defined in detail. For this purpose, the literature is scanned by revealing the relationships, similarities and differences between previous studies. Conceptual framework, method, technique and paradigms should also be used.

Purpose of the Research

The purpose of the research means expressing how the problem will be solved with the research or applications conducted, in other words, revealing what is expected as a result. The purpose of the research is expressed at two different levels. At the first level, the general purpose of the research is revealed. At the second level, the questions that need to be answered or the sub-objectives to be tested in order to achieve this general purpose are included. The purpose of the research should be of a nature that will solve the problem presented within the framework of the specified sub-objectives.

Importance of the Research

In this section of the report, the researcher should show that he/she understands the theoretical or conceptual framework on which the research is based. Based on this basis, the researcher must present why the research is necessary and the reasons for its value. For example: The judgment reached during the research process and the lack of information on the subject should be stated.

The purposes of the research should be determined and it should be explained in which theoretical or practical problem the collected data can be used to solve and how. In terms of the importance of the research, the researcher should reveal his/her own purpose in conducting the research. The purpose of the research is both objective and subjective. It should be open to interpretation and discussion.

Assumptions / Conjectures \*

The researcher should not make assumptions for things he/she has done, but should make assumptions for situations that he/she has not done but that affect his/her research. Assumptions / assumptions are judgments or generalizations that are accepted as true in a research. The researcher can determine the basic foundations of his/her study by revealing his/her own personal preference on some issues that may change according to personal opinions and beliefs that are considered difficult or impossible to prove.

NOTE: \*This section should be included in studies deemed necessary.

Limitations

Almost every study has certain limitations. The researcher is required to report all factors (period, trend, technique, material, etc.) that limit his/her study. Limitations can be considered in two groups as conceptual (definitional) and methodological.

Definitions

In this section of the research proposal, ambiguous or unclear expressions should be clarified. It is very useful for the terms to be understandable in expressing ideas correctly in the research. This section should include definitions specific to the researcher, as well as dictionary definitions. Some expressions that will be repeated frequently in the research report should be used in abbreviated form. Symbols and abbreviations in the report are listed on separate pages and in alphabetical order. In such cases, the meanings of the abbreviations should be clearly stated

### Literature Review

Studies and findings published by national and international researchers on the research topic should be examined from past to present, the findings obtained should be re-evaluated around the researched topic and their relationship with the purpose of the graduation project should be expressed.

### Literature Review

Material is the object that is studied or used in the study. Information such as the properties of the material, how it is used, etc. should be included in this section. The method is the technique or techniques used to achieve the purpose of the research. It should be given in a clear and understandable manner. If the method used is an internationally standardized method, it is sufficient to give the name of the method with only the source. However, if any changes have been made to a standard method, it should be given in detail.

### Findings and Discussions

This section should be given as “FINDINGS and DISCUSSION” and with the section number. Here, similarities, parallels and contradictions with previous studies should be discussed with the researcher’s comments. This section can be included according to the necessity of the subject being studied. If not deemed necessary, the Conclusion and recommendations section can be passed directly.

### Conclusion and Recommendations

This section should be given as “CONCLUSION” or “CONCLUSION AND RECOMMENDATIONS” and with the section number. This section, which is created in the last section of the report, includes a brief summary of the research problem, method, interpretation of each result, limitations of the study and future applications of the findings. The last section title is given to “CONCLUSION AND RECOMMENDATIONS”.

What is important in this section is to determine and interpret the most important statistical results related to the research. While examining each important result;

• Is this result really important? Why?

• Is the result consistent with previous studies? If not, why?

• Can the result be expressed from different perspectives?

• Are there alternative forms of expression that take precedence?

• Is the result important in terms of conducting research at more advanced levels and in different environments?

• If the result leads to further research, what could these studies be? Answers should be given to the following questions.

The answers to the questions above are very important for those who will read the research and apply the results.

The similarities and differences between the results and the ideas put forward should be clarified and reinforced by taking into account the studies conducted by others. The points previously mentioned should not be emphasized again and again. Each statement should strengthen the results presented by the researcher and broaden the reader's horizon about the problem. Some basic questions about the research can be raised, but not every problem should be addressed and negative results should be accepted without being ignored.

Polemics and simple discussions should not be included. The theoretical and practical results of the research can be presented and suggestions for its development can be made or new research can be recommended.

These explanations should be short and the following questions should be taken into consideration.

1. What contribution did the research make to science?

2. How did the study contribute to solving an original problem?

3. What conclusions can be drawn from the research in terms of theory and practice?

The answers to these questions will reveal the basic contributions of the researcher to science.

The suggestions made should be based on the research. The purpose and sub-purposes of the research, hypotheses, etc. should be taken into consideration. Suggestions should not be made about issues that are not directly related to the research. When making recommendations, the program can be classified in terms of teachers, students, families, etc.

# CONCLUSION and RECOMMENDATIONS

## References

The title “REFERENCES” should be written in capital letters, centered on the vertical center line of the page.

References is a section where all publications related to the researched topic are listed either numbered or alphabetically. This order is made according to the type of reference in the text. It has different formats depending on the type of source. When listing sources according to the author’s surname, the first line of each source starts from the left edge of the text area and continues to the right edge. The second and subsequent lines start 1 cm inward with single line spacing. A single line spacing is left between the sources. Thus, each source is listed in a way that can be easily noticed by the author’s surname.

When listing sources with the numbering system, a 0.7 cm indentation should be left between each source and the number.

Three types of information are given in the introduction of a written source. These are, in order, “author’s name”, “work title” and “publication information (edition number, volume and issue numbers, place of publication, publishing house and publication date)”. Titles indicating “Prof. Dr.” and “Eng.” Abbreviations such as are not given with the author's name as introductory information. Because the reader's attention should be directed to what is being said rather than to the speaker. In books with separate section authors, the author of the section used first, the section author and the compiler (editor) are used together. Similarly, if the work is a translation, the author's name is given first, and the translator's name is given after the work's title.

### General Rules

1) When giving the title of the article, the first letters of the main nouns and adjectives will be capitalized, and the first letters of the conjunctions and articles will be lowercase, in accordance with the title format.

2) Articles with one or two authors will be given in the text by mentioning the surnames of both authors. Lowercase letters will be used in the references to be given in the text. Articles with more than two authors will be given in the text as (surname of the first author and others, year), but the names of all authors will be stated in full in the “References” list.

3) If the same author or authors have more than one article in the same year, they will be listed as (a), (b), etc.

4) In the reference list, “and” will be placed between the last two authors in English articles and “and” will be placed in Turkish articles. However, “and” will be used in both when given in the text.

5) For articles in the press phase, it will be written (in press) in English and (in press) in Turkish.

6) When giving the journal name in the reference list, absolutely no abbreviations will be used (For example; Edu. instead of Education, Sci. instead of Science or J. instead of Journal). 7) International rules have been taken into account in the reference indication. APA spelling rules apply for matters not specified in the graduation project report writing guide regarding the indication of sources. APA spelling rules can be accessed at http://www.apastyle.org.

### Citing References in Reference List

The list of sources at the end of a study documents the work and provides the information necessary to find and identify each source. Authors should select sources in a clear manner and this list should only include sources used in the research and preparation of the study. Sources are listed alphabetically by author surname in the list of sources in a way that is compatible with the citation style used in the text, or numbered according to the order of citation in the text. In alphabetical citation, source information starts at the top of the page. In references that do not fit on one line, the second line is started with a 1 cm indentation. In references with numbers, each source is started at the top of the line, and a 0.7 cm indentation is left between each source and the number. In references that do not fit on one line, the second line is not started with an indentation, and all sources are written in the same alignment. Book and journal names should be written in italics.

### Examples of Reference Citations

* References of Articles Published in Academic Journals

Author's Surname, Initials of Name. (Date). Title of the article. Name of the Journal, Volume (issue), Page No.

**Example:**

Mustafa, Z. (2020). Distribution of Septoria tritici blotch disease agent Zymoseptoria tritici mating type idiomorphs in Turkey. Plant Protection Bulletin, 60(3), 33-38.

**Example:**

Asım, M., Umer, E.M., Karim, A. (2008). Değişik ekim modelleri kullanılarak birlikte ekilen pamuğun (Gossypium hirsutum L.) verim ve rekabet endeksleri. Tarım Bilimleri Dergisi, 5(2), 326-333.

**Example:**

Ghouri F., Zhu, J., Yu, H., Wu, J., Baloch, F.S., Liu, X., Shahid, M.Q. (2019). Deciphering global DNA variations and embryo sac fertility in autotetraploid rice line. Turkish Journal of Agriculture and Forestry, 10(4), 554- 568.

* Article in press

**Example:**

Demir, H., Güllü, A. (Baskıda). Taş sertliği ve işleme parametrelerinin yüzey pürüzlülüğü ve taşlama kuvvetlerine etkilerinin incelenmesi. Gazi, Mühendislik Mimarlık Fakültesi Dergisi, 114-116.

* Source Related to the Book

Author's Surname, Initials of Name. (Year). Title of the book. (Number of editions). Place of Publication: Publisher, Page number.

**Example:**

Biçer, E., Mazman, M., Kaypmaz, C., Uzun, D. (2021). Li-iyon Piller ve Uygulamaları (İkinci Baskı). Türkiye: Nobel Yayınevi, s. 38-39.

* Book Chapter

**Examples:**

Bjork, R.A. (1989). An adaptive mechanism in human memory. In H.L. Roediger and F.I.M. Craik (Eds.), Varieties of memory and consciousness. Hillsdale, NJ: Erlbaum, pp. 309- 330.

Gülmez, M. (2006). Kesintisiz insan hakları öğretimi ve eğitimi. F. Sayılan ve A. Yıldız. (Editörler). Yaşam boyu öğrenme. İkinci Baskı. Ankara. Eğitim Bilimleri Enstitüsü, s. 84-105.

NOTE:

• The author of the article or chapter is given first.

• For works that are still in print, instead of the year of publication, the word “in press” is written.

• If there is an editor, the word “In” is written before the editor, if there is no editor, the word “In” is written before the name of the book (for an English work)

• A book that is authored and published by an institution

**Examples:**

Australian Bureau of Statistics. (1991). Estimated resident population by age in statistical local areas. New South Wales, June 1990 (No.3209.1). Conberra, Australian Capital Territory: Mary Peters, pp. 187.

Devlet Planlama Teşkilatı. (2005). Ekonomik ve sosyal göstergeler (1950-2004). Ankara: Devlet Planlama Teşkilatı, s. 312-314.

* Translation book

**Examples:**

Hollingsworth, R.S. İlköğretimde öğretim yöntemleri (çev. S. Gürkan, E. Gökçen ve M.N. Güler). Gazi Rektörlüğü Yayınları No 214. (Eserin orijinali 1991’de yayımlandı), s. 87- 92.

Freire, P. (1991). Ezilenlerin pedagojisi. (Çev. D. Hattatoğlu ve Erol Özbek). İstanbul: Ayrıntı Yayınevi. (Eserin orijinali 1982’de yayımlandı), s. 12-18.

NOTE: When quotations from translated books are shown in the text, the original date and translation date are given after the author's surname, respectively.

* Conversation / Interview / Direct communication

**Examples:**

Güllü, A. (2012, 19 Aralık). Ferruh Bozbeyli ile demokrasi üzerine söyleşi. Ferruh Bozbeyli’nin Evi, Ankara.

* Published Doctoral or Master's Theses

**Examples:**

Kirazoğlu, F. (2010). Metal-Yalıtkan-Yarıiletken Yapıların Elektrik Özelliklerinin Frekans ve Sıcaklığa Bağlı İncelenmesi. Yüksek Lisans Tezi, Gazi Fen Bilimleri Enstitüsü, Ankara.

Çilesiz, Y. (2023). Türkiye'nin Farklı Yörelerinden Toplanan Fasulye Gen Kaynaklarında, A Vitamini ile İlişkili Genotipik Çeşitliliğin ve DArTseq Markörlerinin Belirlenmesi. Doktora Tezi, Hatay Mustafa Kemal Üniversitesi, Hatay.

NOTE: Although it is sufficient to give the city name, if the thesis was made in another country and the city is not widely known, the country name can also be given.

* Encyclopedia or dictionary

**Example:**

Türk Dil Kurumu. (1969). Türkçe sözlük (genişletilmiş baskı). Ankara: TDK.

Sadie, S. (Ed). (1980). The New Grove dictionary of music and musicians. (6th ed. Vols. 1- 20). London: Macmillan.

* Paper presented at a Congress or Symposium

**Examples:**

Çilesiz, Y., Yüce, İ., Karaköy, T. (2022). Evaluation of The Performance of Some Sainga (Onobrychis sativa) Varieties in Terms of Agro-Morphological Properties in Sivas Ecological Conditions. 2. Baskent International Conference On Multidisciplinary Studies, 24-25 February, Ankara, pp. 720-735.

Kara, E., Çilesiz, Y., Karaköy, T., Baktemur, G. (2022). Türkiye’de Pleurotus Mantar Türlerinin Yetiştiricilik Durumu. Ispec 10. Uluslararası Tarım, Hayvancılık ve Kırsal Kalkınma Kongresi, 18-19 Temmuz, Sivas, s. 580-593.

* Report

Author's surname, initials of name (name of the organization if the legal entity preparing the report). (year). Name of the report; Short name of the organization preparing the report and report number. Place of publication (bold and italic or only italic), Page range.

**Example:**

Baran, I., Kasparek, M. (1989). Marine turtles of Turkey; Status survey 1988 and recommendations for conversation and management, WWF Report, Heidelberg, 123- 130.

* Source for Information Obtained from the Internet (Web Pages)

Sources with unknown authors should be stated as Anonymous if they are foreign, or Anonymous and year if they are Turkish.

Anonim, (2010a). TübitakAraştırma ve Yayın Etiği Kurulu Yönetmeliği. URL: http://www.webcitation.org/query?url=http%3A%2F%2Fwww.tubitak.gov.tr%2Ftub itak\_content\_files%2Fmevzuat%2Fyonetmelik%2FYONETMELIK\_III\_9.pdf+&dat e=2014-03-28, Erişim Tarihi: 29.11.2023.

### Example Reference Index 1 (Alphabetical Order)

**REFERENCES**

Anonim, (2010). Tübitak Araştırma ve Yayın Etiği Kurulu Yönetmeliği. URL: [http://www.webcitation.org/query?url=http%3A%2F%2Fwww.tubitak.gov.tr%2Ftub](http://www.webcitation.org/query?url=http%3A%2F%2Fwww.tubitak.gov.tr%2Ftubitak_content_files%2Fmevzuat%2Fyonetmelik%2FYONETMELIK_III_9.pdf%2B&date=2014-03-28) [itak\_content\_files%2Fmevzuat%2Fyonetmelik%2FYONETMELIK\_III\_9.pdf+&dat](http://www.webcitation.org/query?url=http%3A%2F%2Fwww.tubitak.gov.tr%2Ftubitak_content_files%2Fmevzuat%2Fyonetmelik%2FYONETMELIK_III_9.pdf%2B&date=2014-03-28) [e=2014-03-28,](http://www.webcitation.org/query?url=http%3A%2F%2Fwww.tubitak.gov.tr%2Ftubitak_content_files%2Fmevzuat%2Fyonetmelik%2FYONETMELIK_III_9.pdf%2B&date=2014-03-28) Erişim Tarihi: 29.11.2023 .

Biçer, E., Mazman, M., Kaypmaz, C., Uzun, D. (2021). *Li-iyon Piller ve Uygulamaları (İkinci Baskı)*. Türkiye: Nobel Yayınevi, 38-39.

Bjork, R.A. (1989). An adaptive mechanism in human memory. In H.L. Roediger and F.I.M. Craik (Eds.), *Varieties of memory and consciousness*. Hillsdale, NJ: Erlbaum, pp. 309- 330.

Çakır, M.T. (2015). Alimüna içeren nanoakışkan kullanılarak ısı borularının performanslarının iyileştirilmesi. *Gazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi*, 30(4), 547-556.

Çilesiz, Y. (2023). Türkiye'nin Farklı Yörelerinden Toplanan Fasulye Gen Kaynaklarında, A Vitamini ile İlişkili Genotipik Çeşitliliğin ve DArTseq Markörlerinin Belirlenmesi. Doktora Tezi, Hatay Mustafa Kemal Üniversitesi, Hatay.

Çilesiz, Y., Yüce, İ., Karaköy, T. (2022). Evaluation of The Performance of Some Sainga (*Onobrychis sativa*) Varieties in Terms of Agro-Morphological Properties in Sivas Ecological Conditions. *2. Baskent International Conference On Multidisciplinary Studies*, 24-25 February, Ankara, pp. 720-735.

Demir, H., Güllü, A. (Baskıda). Taş sertliği ve işleme parametrelerinin yüzey pürüzlülüğü ve taşlama kuvvetlerine etkilerinin incelenmesi. *Gazi, Mühendislik Mimarlık Fakültesi Dergisi*, 114-116.

Freire, P. (1991). *Ezilenlerin pedagojisi.* (Çev. D. Hattatoğlu ve Erol Özbek). İstanbul: Ayrıntı Yayınevi. (Eserin orijinali 1982’de yayımlandı), 12-18.

Ghouri F., Zhu, J., Yu, H., Wu, J., Baloch, F.S., Liu, X., Shahid, M.Q. (2019). Deciphering global DNA variations and embryo sac fertility in autotetraploid rice line. *Turkish Journal of Agriculture and Forestry*, 10(4), 554- 568.

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Kara, E., Çilesiz, Y., Karaköy, T., Baktemur, G. (2022). Türkiye’de Pleurotus Mantar Türlerinin Yetiştiricilik Durumu. *Ispec 10. Uluslararası Tarım, Hayvancılık ve Kırsal Kalkınma Kongresi,* 18-19 Temmuz, Sivas, s. 580-593.

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Mustafa, Z. (2020). Distribution of Septoria tritici blotch disease agent Zymoseptoria tritici mating type idiomorphs in Turkey. *Plant Protection Bulletin*, 60(3), 33-38.

Yurtkuran, E. (2011). Investigation of Wedm Machinability of Aluminium Based P/M Materials Depending Upon Alloying Elements and Reinforcement Phase. Unpublished Master’s Thesis, Karabük University, Karabük.

### Example Reference Index 1 (Numerical Order)

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[2] A. Brock, J. Donahue, and K. Simonyan, “Large Scale GAN Training for High Fidelity Natural Image Synthesis,” Feb. 25, 2019, *arXiv*: arXiv:1809.11096. doi: 10.48550/arXiv.1809.11096.

[3] F. H. K. dos S. Tanaka and C. Aranha, “Data Augmentation Using GANs,” Apr. 19, 2019, *arXiv*: arXiv:1904.09135. doi: 10.48550/arXiv.1904.09135.

[4] R. Kitchin, *The data revolution: big data, open data, data infrastructures and their consequences*. Los Angeles, Calif: Sage, 2014.

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[8] H. Zhang, Z. Zhang, A. Odena, and H. Lee, “Consistency Regularization for Generative Adversarial Networks,” Feb. 18, 2020, *arXiv*: arXiv:1910.12027. doi: 10.48550/arXiv.1910.12027.

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