



Bilkent University
Department of Computer Engineering

SUMMER TRAINING GUIDELINES

1. CRITERIA FOR SELECTING A COMPANY/INSTITUTION FOR SUMMER TRAINING

Students should consider the following when selecting the company/institution for summer training.

Required:

- The company/institution must work on computer engineering applications and/or systems such as software/hardware design/development/testing.
- The supervisor/manager of the summer intern must be a computer engineer.

Strongly Recommended:

- The company/institution should use contemporary tools and techniques.
- The company/institution should follow engineering standards and methods.
- The company/institution should work on projects that have local or global impact.
- The student should be given opportunity to work on real-world problems.
- The student should be able to observe the organization of the company/institution.
- The student should work in a multidisciplinary team.

2. EXPECTATIONS/BENEFITS/RECOMMENDATIONS

2.1 Expectations from and benefits of doing summer training

The following are a partial list of expectations from summer training and benefits of doing summer training. It is important that students should be motivated about the summer training and know what is expected from it.

- Getting familiar with the work environment.
- Getting familiar with modern tools and systems.
- Participating in teamwork, preferably as part of a multi-disciplinary team.
- Getting familiar with the project development cycle: requirement analysis, design, development, and test.
- Improving oral and written communication skills.
- Being able to apply the knowledge and skills gained in engineering curriculum to real-life issues and problems.
- Learning new subjects.
- Learning about contemporary issues.
- Understanding of the professional and ethical responsibilities of an engineer.
- Making contacts for future employment.

2.2 Recommendations to students that will do their summer training

Listed below are some recommendations for students who will do summer training.

Before Training:

- Verify that the company will satisfy all the criteria required by the Department, and as many as possible of the criteria strongly recommended by the Department
- If needed, do not hesitate to contact your Academic Advisor or one of the Summer Training Coordinators.

During Training:

- Be active, enthusiastic, motivated, and energetic.
- Work hard.

- Be pro-active. Do not wait for somebody to tell you what to do.
- Try to plan your time and what you expect from summer training week by week.
- Keep a daily/weekly record of the progress of your training.
- Regularly compare the Performance Criteria (in Section 4.2 below, and in Appendix B: Summer Training Grade Form) with your activities at work, to be sure that you are doing a summer training that will satisfy the evaluation requirements.

3. REPORT WRITING GUIDELINES

The guidelines are classified into two groups:

1. Style and formatting guidelines,
2. Content and logical organization guidelines.

3.1. Style and formatting

Please strictly follow the formatting guidelines and be consistent throughout your document.

Listed below are some style-related guidelines.

- Number each figure/table, add a meaningful caption to each figure/table, and refer to the figures/tables inside the text using their figure/table numbers.
- List references (to papers, documents, manuals, web pages, etc.) at the end of your report (after the conclusion and before the appendix) in a separate section entitled *References*.
- Give citations to each of these references inside the text in a standard way.
- Spell-check your report.
- Number the pages.
- Bind your report.
- Do not include source code in your document unless it is very important. If you decide to put source code, consider putting it into the appendix section.
- Read and edit your report several times before you submit it.
- Refer to the Web-posted document “Technical Writing Style” for more details

The format for the cover page is given at the end of this report, in Appendix A.

3.2 Content and organization

3.2.1 Dividing the report into sections and logical parts

Below are some guidelines describing what sections are expected in a summer training report and what each section should include.

Abstract: Start your report with a brief abstract that describes in a few sentences where you have done your summer training, what you have done, and what you have learned.

Introduction: Have an introductory section that will make a smooth beginning to the document. In the introduction section include the following:

- The name of the company and department where you have done your summer training, the main focus area of the company, and your motivation for choosing this company as the place for your summer training.
- Brief summary of the work you have done, the motivation behind it, and the significance of the work that you have done in the overall project.
- Explanation of the organization of the rest of the report.

Company information: Have a section providing detailed information about the company and department where you did your training, its hardware/software systems and resources, its focus and project area, its organization, etc. The name, address, telephone number, email address, and information about the education of your supervisor must be given (including the name of the university and department from which he/she graduated, and the year of graduation). Additionally, you must list the names of your team members and their backgrounds.

Work Done: This is the most important part of your report. The number of sections in this part, their titles, and their contents depend on the work that you have done and the information you would like to provide.

- This part should include at least the following:
 - Information about the main project, if the work you have done is part of such a project.
 - The significance of the work you have done.
 - The motivation behind the particular work that you have done and why it is required.
 - Detailed description of the work done, including for example:
 - The algorithms/pseudo-code developed.
 - Hardware/software environment used.
 - Software tools used.
 - Design methods used and learned.
 - Testing methods and tools used and learned.
 - Project management methods and processes followed or observed.
 - Any engineering standards that are followed or observed.
 - Design, development, documentation and testing participated in or observed.
 - Any training received, including seminars attended.
 - Any configuration and/or maintenance tasks performed.
 - Detailed description of your own contribution and clearly identification of the distinctions from others' work.
 - A section in which you explain in detail what knowledge and skills learned in school you were able to apply to real-world problems during your summer training, and specifically where and how the knowledge or skills were useful.
 - A section in which you explain in detail engineering problems related to computer systems and applications that you solved.
 - A section in which you explain in detail the teamwork you were involved in during the summer training, including (for each team you participated in) the team role or function of each team member, the training in their background and current work area, and some information about the team dynamics as you worked together. You should clearly explain how you related to the others on the team. If you were not involved in a formal team, the definition of the term could be interpreted loosely to mean working together with others on a shared task.
 - A section in which you explain in detail which professional issues and work-related ethical issues you saw or became aware of during your summer training, and how the issue was handled or managed at your company or institution.
 - A section in which you explain specifically what you learned or understood about the economic, environmental, societal and global impact of the engineering solutions in the projects developed at your company or institution. You should also write in general about the contemporary issues that are related with computer engineering, as you understand them from, and related to, your summer training.
 - A section in which you explain the self-learning that you did during your summer training. You should mention any sources that you located and how you found them (this would include Web sites, books, journals, experts, etc),

and what part of your summer training task you needed them for. Also, mention any that you made regular use of, and any that you are continuing to use.

- A section in which you explain in detail any new tools or technologies that you encountered and used during your summer training, how you learned to use them, and what level of proficiency you came to by the end of your summer training.
- When writing this section, do not forget that the reader may not be familiar with the topic of the work that you have done. Therefore, explaining too much is better than not enough.

Conclusion: Have a conclusion section where you summarize the work you have done. Clearly re-state your contribution, what you have learned, experienced and acquired. Be specific in relating these to what you have learned at Bilkent.

3.2.2 Other content-related and language-related guidelines

- Use correct English syntax and vocabulary. Pay attention to sentence structure, verb tense, plurality endings, articles, spelling, capitalization of proper nouns, etc.
- Be consistent with the use of your abbreviations and state their long form when they are used for the first time.
- Do not copy and paste information from other documents. Always write in your own words.
- If you need to include information from other sources, properly quote or paraphrase, and make sure to give citations.
- Be correct, consistent, and complete.

4. CRITERIA FOR EVALUATION OF SUMMER TRAINING AND REPORT

4.1 Faculty members evaluating the summer training and reports will use the Summer Training Grade Form (Appendix B) and apply the following criteria:

- The Required Criteria given in Section 1 (about the company/institution doing computer engineering work, and the supervisor/manager being a computer engineer) will be checked. If these criteria are not met, the summer training is unsuccessful (grade is U) and must be repeated.
- The average of the grades given in the “Staj Değerlendirme Formu” by the supervisor at the summer training company must average 7.0 or higher. If this criteria is not met, the staj is unsuccessful (grade is U) and must be repeated.
- The Summer Training Report must be of a high standard in terms of its content, organization, style and language. If the Performance Criteria grade for the report is not 7 or higher, the report will be rejected and returned to the student for revision, until the standard is met.

4.2 The Performance Criteria are:

1. Able to apply knowledge and skills learned in school to real-world problems
2. Able to solve engineering problems related to computer systems and applications
3. Able to function in a team work
4. Able to work with teammates from other disciplines
5. Aware of professional and ethical issues in the work environment
6. Able to explain the impact of engineering solutions, developed in a project, in a global, economic, environmental, and societal context
7. Finds relevant sources (e.g. library, Internet, experts) and gathers information

8. Demonstrates knowledge of contemporary issues related with computer engineering in general
9. Able to use new tools and technologies
10. Able to prepare reports with high standards in terms of content, organization, style and language (the Summer Training report itself is to be evaluated)

Appendices

Appendix A: Sample cover page for Summer Training Report (1 page)

Appendix B: Summer Training Grade Form (2 pages)

**BILKENT UNIVERSITY
ENGINEERING FACULTY
DEPARTMENT OF COMPUTER ENGINEERING**

CS X99 (write “299” or “399”)

**SUMMER TRAINING
REPORT**

Name Last Name

ID Number

Performed at

Name of the Firm

Beginning and End dates



BILKENT UNIVERSITY
Engineering Faculty
Computer Engineering Department

Summer Training Grade Form

Confidential

Name, Surname :

Company name and department:

Course : CS 299 CS 399

Part-A: Work place

Average of the grades on the Summer Training Evaluation Form
 (Staj Değerlendirme Formu) filled by the employer : _____

To be satisfactory, average of the grades on the "Staj Değerlendirme Formu" must be at least 7.

Is the work done related to computer engineering? [Y/N] : _____

Is the supervisor a computer engineer or
 has a similar engineering background? [Y/N] : _____

..... If all conditions in Part-A are satisfied, continue to Part-B, else mark Unsatisfactory in Overall Evaluation

Part-B: Report Satisfactory Revision required

If revision is required, changes needed must be stated on the report. The report is returned to the student until satisfactory.

Due date for resubmission:/...../20....

Student is given two weeks for each revision.

To be set by the department secretary

..... If the report in Part-B is Satisfactory, continue to Part-C, else return it to the student for Revision

Part-C: Final version of the report

Based on the final version of the report, as evaluated on the back side of this form:

Sum of the Assessment/quality scores of Evaluation of the Work : _____

To be satisfactory, the sum must be at least 50.

The Assessment/quality score of Evaluation of the Report : _____

To be satisfactory, the score must be at least 7.

Overall Evaluation

Satisfactory¹

Unsatisfactory²

Evaluator:

Name, Surname:

Signature

Date

...../...../20.....

Evaluation of the Company/Department

- I strongly recommend this place for future students
 I am satisfied with this place
 I recommend this place not be allowed for future students.

¹ In order for the Summer Training be satisfactory, all the conditions in Part-A, Part-B and Part-C must be satisfied.

² In this case, the Summer Training has to be repeated.

Evaluation of the Work	On what page(s) of the report is the evidence of this found? ³	Assessment/quality score (from 0=missing to 10=full)
1. Able to apply knowledge and skills learned in school to real-world problems		
2. Able to solve engineering problems related to computer systems and applications		
3. Able to function in a team work		
4. Able to work with teammates from other disciplines		
5. Aware of professional and ethical issues in the work environment		
6. Able to explain the impact of engineering solutions, developed in a project, in a global, economic, environmental, and societal context		
7. Finds relevant sources (e.g. library, Internet, experts) and gathers information		
8. Demonstrates knowledge of contemporary issues related with computer engineering in general		
9. Able to use new tools and technologies		

Evaluation of Report	On what page(s) of the report is the counter evidence of this found?	Assessment/quality score (from 0=missing to 10=full)
Able to prepare reports with high standards in terms of content, organization, style and language (the Summer Training report itself is to be evaluated)		

³ If you think that a question does not apply to this particular summer training, please write NA (not applicable).