



MIDDLE EAST TECHNICAL UNIVERSITY
NORTHERN CYPRUS CAMPUS

Summer Practice Guideline
for
Computer Engineering Program

February 2012

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I. OBJECTIVE and EXPECTATIONS

CNG 300-400 courses are required to be completed for an engineering degree in order to help students observe the application of their theoretical knowledge, enhance their occupational experience, do engineering practice, get familiar with the industry and work conditions, and do a conscious career decision after graduation.

Summer Practice Goals and Expectations

Even though the summer practice heavily involves observing computer engineering in practice, the student is expected to get hands-on with different IT activities (programming, testing, documentation, etc.), and exercise technical writing skills in reporting these activities clearly. Any active work involving design, programming and testing should also be explained in the report. The expected outcome of this internship consists of the skills and observations gained by the student during the summer practice period. In order for your internship to be accepted, it has to involve one of the following primary activities:

- System analysis
- System design
- Software design
- Software development
- Software testing
- Software maintenance

You could be involved in secondary activities such as:

- Sales/Customer Support
- Hardware instalment and setup
- Software setup
- Software/Hardware documentation (without software development)
- Web page design

However, doing only secondary activities during your summer internship will not be accepted. Students should mainly involved in primary activities. Student should be active during the internship, not passive, during the summer practice. It is therefore critical for the intern to work one-on-one with an computer engineer (mentor), who can answer the technical questions. While performing different types of IT tasks, the context of how these contribute to the engineering project, and the goals of this engineering project should be understood. The appreciation of details should be reflected to the summer practice report.

CNG 300 Summer Practice Expectations

This summer practice is applicable to students who have successfully completed 4 Semesters (second year students). We encourage second year students to take on programming and testing tasks, and try to learn new programming languages and development tools if possible.

CNG 400 Summer Practice Expectations

This summer practice is for students who have successfully completed 6 semesters (third year students). We encourage third year students to take on design and development tasks, and try to provide end-to-end solutions for real-life problems.

It is mandatory that the Summer Practice report is written according to the following writing guidelines. In the report, the main goal is to describe/report the professional dimensions of the company and what you professionally did there as a student. The summer practice report is NOT a personal diary. The emphasis is on the technical/professional aspects and other matters should not be included unless there is a relation to the technical part. Keep in mind that the reports are not evaluated according to the number of pages, so don't include any irrelevant information to make it longer. You should keep the guidelines taught in ENGL 102 in mind while writing the report.

In this guideline, the following terms will be used hereafter:

- University: Middle East Technical University Northern Cyprus Campus
- Program: METU NCC Computer Engineering Program
- Coordinator: Academic staff administering the summer practice affairs of the program
- Company: The establishment where the summer practice will be carried out.
- Supervisor/Mentor: The engineer of the company who is responsible from the student

II. GENERAL GUIDELINES

- Each summer practice shall be at least 30 working days. Students are not allowed to have time gaps during the summer practice.
- Summer practice cannot be done while attending the summer school. Summer practice is supposed to be a full-time occupation.
- Students have to register to CNG300 and CNG400 in the FALL semester following their internship.
- It is the student's responsibility to find an appropriate company for the summer practice. The student must take a letter of acceptance from the company (see Appendix 1: Summer Practice Acceptance Form) and provide it to the Coordinator within the specified deadline. Students shall commence the practice after the approval of the Coordinator. Summer practices in research centers like TUBITAK is also accepted.
- Summer practice shall be done at an institution employing at least two full-time professional engineers of the field of practice.
- During the entire period of practice, the student shall obey the rules and regulations of the company and also those of the University.
- Due to inevitable reasons, if the student will not able to attend the practice for few days with the permission of the supervisor, the Coordinator should be informed via e-mail and these days should be compensated later.
- The student shall submit two documents to the Coordinator for the evaluation of the summer practice: (i) Summer Practice Report, (ii) Summer Practice Company Evaluation Form.
- The evaluation form given in Appendix 4 shall be given to the company by the student. It is expected to be filled by a full time professional engineer, considering the performance, attendance, enthusiasm, interest and general involvement of the student. This form is expected to be mailed to the Program directly or hand-delivered by the student in a signed and sealed envelope. It is the student's responsibility to make sure that the Coordinator receives the form before the deadline. If the form is not received

or if the supervising engineer's evaluation is not satisfactory, the student may be found unsatisfactory and will be requested to repeat the practice.

- Upon the completion of summer practice, a hard copy of 'Summer Practice Report' must be submitted to the Coordinator by the last day of the add-drop period of the new term. The report must outline the experience and observations gained through practical training, in accordance with the required content and the format described in this guideline. Each report will be evaluated by an academic member of the Program on a satisfactory/unsatisfactory basis.
- If the evaluation of the report is unsatisfactory, it shall be returned to the student for revision and/or rewriting. If the revised report is still unsatisfactory the student shall be requested to repeat the summer practice.
- Every intern needs to have a Summer Practice Notebook. The student should have a work plan for the internship, and should regularly note down the work performed according to this plan. These notes can be taken advantage of when writing the final summer practice report. The summer practice report needs to be submitted at the beginning of the semester following the internship based on the rules and schedules determined by the program summer practice committee. Students, who do not follow the rules, guidelines, and schedules in submitting their report, are not credited for that summer practice. The summer practice reports of the successful students may or may not be returned back based on the program committee decision.
- If you find the engineering content at the company you picked for the summer practice is "weak", or you are not assigned any projects to work on, it is your responsibility to communicate this to the group manager and push for a solution. If the problems are not resolved, it is your responsibility to identify and transfer to another company for summer practice. Not having enough work to do at the interned company does not count for a good excuse to submit a poor summer practice report. The full responsibility of finding a good place to intern, and to execute a successful summer practice belongs to the student.
- Report your summer practice without exaggerations. Do not forget to recognize everybody who contributed to the project you worked on. Exaggerated or misleading reports that include work which was not your personal accomplishment will be returned. They may also be in violation with academic rules of honesty and engineering ethics. Do not worry if the work you accomplished during the summer practice seems simple. Seemingly complex engineering designs consist of many smaller tasks that are simple when considered individually. It is important you understand how your contribution fits into the more complex project, and report it with your conclusions and without any exaggerations.

III. STEPS FOR SUMMER PRACTICE

1. Find an appropriate company that you like to work for. Summer practices in research centers like TUBITAK is also accepted. We have a list of already accepted companies that you can download from department web site. If the company accepted you are not in the list, you should provide the coordinator with a letter from the company explaining and summarizing their hardware, software and software application areas, company contact information, and contacts of person on charge must be provided as well. If the company is approved by the Coordinator, you can go for step 2. Give enough time for company approval, so contact the coordinator as early as possible.
2. Fill *Summer Practice Acceptance Form* (Appendix 1), and submit it to the Coordinator or department secretary. This step has to be finalized before **the last day for courses withdrawal** in SPRING semester.
3. Go to the Registrar's Office to finalize the necessary steps for the insurance application and other formal documentations.
4. Attend your summer practice; then finalize the summer practice evaluation form (appendix 4). No summer practice will be accepted without this form.
5. Register for CNG 300/CNG 400 in the following FALL Semester. You have to follow university calendar for course registration.
6. Submit a hard copy of 'Summer Practice Report' to the Coordinator by **the last day of the add-drop period** of the FALL semester.
7. The Coordinator will distribute the submitted reports to faculty members and the corrected reports will be given back to the students before **the last day for withdrawal** from courses of the new FALL semester.
8. The revised reports along with the corrected reports will be submitted to the Coordinator before **the last day of classes** of the new FALL semester. If revised report is not satisfactory student will be asked to repeat the summer practice.

IV. FORMAT OF SUMMER PRACTICE REPORT

- The report shall comply with the summer practice program principles.
- The report shall be in English, prepared with a PC and printed.
- Main headings are to be centered and written in capital boldface letters. Sub-titles shall be written in small letters and boldface. The typeface shall be Arial font (or an equivalent) with 12pt. All margins shall be 25 mm. The report shall be submitted in printed form and filed. An electronic copy of the report shall be recorded in a CD and enclosed in the report.
- The SI (Metric) system shall be used for units.
- Drawings shall conform to acceptable engineering standards.
- Each report shall be binded in a simple wire vinyl file and contain the following sections
 1. **Cover Page** (See Appendix 2)
 2. **Page of Approval and Grading** (See Appendix 3)
 3. **Abstract page:** An abstract gives the essence of the report (usually less than one page). Abstract is written after the report is completed. It must contain the purpose and scope of practice, the actual work done in the plant, and conclusions arrived at.
 4. **TABLE OF CONTENTS** (with the corresponding page numbers)
 5. **LIST OF FIGURES AND TABLES** (with the corresponding page numbers)
 6. **DECRPTION OF THE COMPANY:** Summarize the work type, administrative structure, number of employees (how many engineers, under which division, etc.), etc. Provide information regarding
 - Location and spread of the company
 - Number of employees, engineers, technicians, administrators in the company
 - Divisions of the company
 - Your group and division
 - Administrative tree (if available)
 - Main functions of the company
 - Customer profile and market shareGive the general picture but don't include the name of the technician and workers unless they are the significant part of the work there.
 7. **INTRODUCTION:** In this section, give the purpose of the summer practice, reasons for choosing the location and company, and general information regarding the nature of work you carried out.
 8. **PROBLEM STATEMENT:** what is the problem you are solving, and what are the reasons and causes of this problem.
 9. **SOLUTION:** In this section, describe what you did and what you observed during the summer practice. It is very important that majority of what you write should be based on what you did and observed that truly belongs to the company in the sense that it can not be obtained from main textbooks, datasheets, etc. If the work is based on some theoretical concept which you did not know before, then it is appropriate to learn it. But it is not right to write the very detail of what you learned from the book (the theory) in the report. Especially DO NOT COPY a chapter, a section or any part from any book or from

the internet resources. Whatever book or document you learned the concept from, please refer to that document and put the source in the list of references! In your report, if you wish you can explain the basics of the concept in your own words and in a short form and refer to where you learned the information from in the references section.

When you write references, use the following notation (or an established citation system such as those taught in ENGL 102):

Example: “The free-draining sands and gravels readily allow the flow of water, and the porewater pressures are able to adjust very rapidly [1]. Therefore, following any change in hydraulic boundary conditions it can be assumed that steady state conditions in sands and gravels are achieved virtually instantaneously.”

Here with [1] we refer to the book or article that we learned the information concerning the porewater pressures in coarse soils. List the references at the end of the report in the order they appear in the document.

Summer Practice typically involves practical engineering work. The main objective is to be involved in a part of such engineering activities and report your activity. Clearly state your role and contributions in the project. If you worked at a construction site, explain the stages involved in the construction. If you worked at a design office, give details of the design procedure and stages you took part during the process. Here, you must give as much detail as possible. Including related photos/figures/graphs is highly recommended. Place the figures and tables as close as possible to the referring text. Number each figure and table and avoid using statements such as “see the figure below” or “see the figure above”.

Example: “As Fig. 2 indicates, the designed board has 7 input terminals and three output terminals with one of them being the shielded ground wire.”

10. **CONCLUSIONS:** In the last section, summarize the summer practice activities. Present your observations, contributions and intellectual benefits. If this is your second summer practice, compare the first and second summer practices and your preferences.
11. **REFERENCES:** List any source you have used in the document including books, articles and web sites in a consistent format.
12. **APPENDICES:** If you have supplementary material (not appropriate for the main body of the report), you can place them here. These could be schematics, computer programs, drawings, etc. If the document is a datasheet and it can be easily accessed from the internet, then you can refer to it with the appropriate internet link and document number. In this manner you don't have to print it and waste tons of paper.
13. **Signed and Sealed Summer Practice Evaluation form** (see appendix 4)

APPENDICES

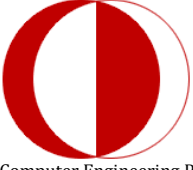
Appendix 1: Summer Practice Acceptance Form

Appendix 2: Cover Page

Appendix 3: Summer Practice Approval Page (Faculty Member)

Appendix 4: Summer Practice Evaluation Form (Company)

Appendix 1: Summer Practice Acceptance Form



Computer Engineering Program
Middle East Technical University
Northern Cyprus Campus

YAZ STAJI ONAY FORMU / SUMMER PRACTICE ACCEPTANCE FORM

Stajyer Bilgileri / Trainee Information

Soyad / Surname: _____

İsim / Name: _____

ID No: _____

Sınıf / Academic Year: _____

CNG 300 / CNG400: _____

Öğrencinin Staj İş Tanımı (firma yetkilileri tarafından doldurulacak) / Job Description of the Trainee (to be filled by the firm): _____

Firma Bilgileri / Company Information

İsim / Name: _____

Adres / Address : _____

Tel : _____

Faks / Fax: _____

Stajyerden Sorumlu Kişi / Trainee Consultant

İsim, Soyad / Name, Surname: _____

Tel: _____

Faks / Fax : _____

Verilecek İmkanlar (yemek, ücret, kalacak yer, ulaşım, sigorta v.s.) Benefits and Facilities Provided by the Company (food, salary, accomodation, transportation, insurance etc):

Staj Tarihleri / Dates of Practice:

Başlama/Start: _ / _ / _

Bitiş/ Finish: _ / _ / _

FİRMA / COMPANY
İMZA / SIGNATURE - MÜHÜR / SEAL

Appendix 2: Cover Page



**MIDDLE EAST TECHNICAL UNIVERSITY
NORTHERN CYPRUS CAMPUS**

Computer Engineering Program

CNG 300

(or CNG 400)

SUMMER PRACTICE REPORT

Name of Student :

ID Number :

Name of Company :

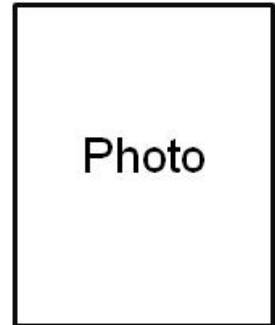
Project Title :

Date of Submission :

**Appendix 3: Summer Practice Approval Page
(Filled by Evaluating Faculty Member)**

STUDENT' s

Name :
ID Number :
Signature :



PRACTICE (300/400) : CNG

NAME AND ADDRESS

OF COMPANY :
.....

Starting Date :/...../.....

Completion Date :/...../.....

Total Working Days : days

**ACADEMIC STAFF WHO
EVALUATED THE PRACTICE**

Name :

Grade (S/U) :



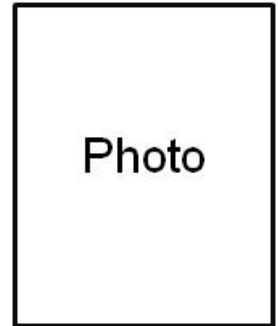
Signature :

Date :/...../.....

Appendix 4: Summer Practice Evaluation Form (Filled by Company Supervisor)



MIDDLE EAST TECHNICAL UNIVERSITY
NORTHERN CYPRUS CAMPUS
Computer Engineering Program



CONFIDENTIAL

Summer Practice Evaluation Form

Student Name :
Company Name :
Company Address :
Company Phone # :
Starting Date :/...../.....
Completion Date :/...../.....
of workdays : days

EVALUATION

	Excellent (Please comment)	Good	Satisfactory	Unsatisfactory (Please comment)
Attendance				
Diligence and enthusiasm				
Contribution to work environment				
Overall performance				

Comments:

Supervisor's Name:

Title:
Date:

*Signature and
Company Seal*

Student's advisor in the company must fill this evaluation form, and the student must add the signed and sealed evaluation form to the end of his/her report and submit the report to the Summer Practice Coordinator. Any report with no evaluation form at the end will be rejected.