



ÇANKAYA UNIVERSITY

Faculty of Engineering

Department of Materials Science and Engineering

SUMMER TRAINING GUIDELINE

April, 2014

Introduction

The purpose of this guideline is to provide information for the Materials Science and Engineering students on summer trainings. As curriculum requirements, Materials Science and Engineering students must complete two 20-working-days summer trainings: MSE 200 and MSE 300. Summer trainings are the perfect opportunity for students to observe the application of their theoretical knowledge gained during their first two or first three years study, expand their knowledge, explore potential careers and gain valuable job experience. The summer practices will enable students to develop their potentials (learn your strengths and weaknesses), determine your field of interest for your career and create contacts for future networking. This guideline represents a procedure for application, training reports and logs, evaluation and grading. Students are expected to complete their summer trainings in the summer time. The students who are registered to the summer school be careful with the initial and final dates of their summer trainings. The summer training period must not be overlapped with the summer school period.

MSE 200-Summer Practice I

Students should perform their first 20-working-days internship (MSE 200) in the summer of their second year. MSE 201 (Materials Science I) is the only prerequisite course for MSE 200. The students are encouraged to perform their summer trainings in very-well organized companies. The list of recommended companies and factories is available on the web site of the department (<http://mse.cankaya.edu.tr>). During MSE 200, students are expected to observe the production and casting techniques, processing and development of materials.

MSE 300-Summer Practice II

Students should perform their second 20-working-days internship (MSE 300) in the summer of their third year. MSE 200 (Summer Practice I) is the only prerequisite course for MSE 300. The students are encouraged to perform their summer trainings in very-well organized companies. The list of recommended companies and factories is available (<http://mse.cankaya.edu.tr>) as well. During MSE 300, students are expected to get acquainted with by studying various managerial and engineering practices through active participation. The students are expected (but not mandatorily) to recommend and bring a solution to any materials science and engineering type problem asked by the company during their summer practice. Especially the second summer practice will give insight to students for their future career plans after graduation.

Application for the Summer Training

Students are responsible for finding company for their summer practice sites.

The following steps should be done during the application of summer practices:

1. Students should fill in the **Statement of Permission for the Summer Training Form** available on the web site of the department (<http://mse.cankaya.edu.tr>). This form requires the information from students, academic advisors and the summer training coordinator. The student should fill Part I (Student Information) and Part III (Company Information). In Part I, information about eligibility of the student to perform the summer practice is required. The student should submit form in to his/her academic advisor for approval of information given in Part I (Part II (Approval of Student Information)). Then, the student should submit the form to summer training coordinator for final approval (includes approval of the company as well) and decision (Part IV Decision of the Summer Training Committee).
2. Students should download and fill in the **Application Letter** (written by the summer training coordinator) available on the web site of the department (<http://mse.cankaya.edu.tr>). The Application Letter and the Statement of Permission for the Summer Training Form should be submitted together to the summer training coordinator. Upon approval of the company, students should apply to the company for the summer practice with the summer training application letter.
3. Students must have health insurance during their summer training. The University will insure the student for the summer practice period. Students should fill in **Internee Information Form** available on the web site of the department (<http://mse.cankaya.edu.tr>) and email the form to the summer training coordinator at least 30 days prior to the training. The procedures are explained in details in Turkish on the web site of the department (<http://mse.cankaya.edu.tr>).

Summer Training

1. Students must email the **Start of Summer Practice Form** available on the web site of the department (<http://mse.cankaya.edu.tr>) to the summer training coordinator. This form requires the information of the summer practice supervisor's (in the company) contact information as well.
2. Students should submit the **Evaluation Form for the Summer Training** available on the web site of the department (<http://mse.cankaya.edu.tr>) to the summer practice supervisor after filling Part I Student Information. Students are responsible for making

sure that their supervisors fill the form and seal it in an envelope. Evaluation Form for the Summer Training should be either sent by the supervisors to the Materials Science and Engineering Department or given to the students in a sealed envelope for submission to the Materials Science and Engineering Department.

3. Summer training period is uninterrupted and should be at least 20-working-days.
4. Faculty from Materials Science and Engineering Department may call the student's supervisor or visit the student at any time during the summer practice to get feedback about students.
5. Students must obey the regulations set by the company. Disciplinary regulations of the University are applicable during the practice period.

Summer Training Report

The content, organization, style and format are important during the evaluation of summer training report.

1. Style and Format

- a. The summer training report should be written in English. It is strongly recommended to use dictionary to minimize the syntax and vocabulary mistakes.
- b. Times New Roman should be used with a font size of 12 and 1.5 line spacing. Each page except the cover page should be numbered in the report. All page numbers should be centered at the footer of the page.
- c. The number and the name (and/or the explanation) should be written for each figure and table in the report.
- d. For information referred from other sources, citation must be done.
- e. Each chapter should start on a new page.

2. Content and Organization

Summer training report should include the following parts:

- a. COVER PAGE
- b. TABLE OF CONTENTS
- c. LIST OF TABLES
- d. LIST OF FIGURES
- e. INTRODUCTION
- f. ANALYSIS
 - i. Observations

- ii. Work done
- iii. Lessons learned
- g. CONCLUSIONS**
- h. APPENDICES (if required)**
- i. REFERENCES**

The details related to above parts are given as follows:

- A. COVER PAGE: Use the given cover page template on the website of the department (<http://mse.cankaya.edu.tr>).
- B. TABLE OF CONTENTS: Each chapter should be written in capital letters while the subtopics should be written in small letters. For instance;

2. FAILURE	27
2.1. Ductile Fracture.....	28
- C. LIST OF TABLES: Each table should be numbered and listed in this part.
- D. LIST OF FIGURES: Each figure should be numbered and listed in this part.
- E. INTRODUCTION: Introduction chapter of the report should include the following information about:
 - a. Full name and address of the company
 - b. Summary of the history of the company
 - c. Main activities and main products of the company
 - d. Organization chart and duties of each department
 - e. Employment data (number of materials scientists and engineers, total number of engineers)
 - f. Duties of materials scientists and engineers
 - g. Description of the products
 - h. Description of the production techniques
 - i. Description of the materials processing
 - j. Duties of the laboratories present in the company
 - k. Description of the materials characterization tests performed in the company
 - l. Quality management plan, quality assurance and quality control system, and standards and certificates of the company.
 - m. Maintenance and the calibration procedure of the machines/systems in the company.
 - n. Occupational health and safety practices in the company

- F. ANALYSIS: In the Analysis chapter following parts should be focused:
- a. Observations: Observations on the production and processing techniques of materials, problems and proposed solutions
 - b. Work done: Duties and tasks performed as an internee.
 - c. Lessons learned: Experiences gained and the benefits obtained during summer training.
- G. CONCLUSIONS: General evaluation of the summer training, experiences and benefits of the internee and company from summer training, recommendations for the future.
- H. APPENDICES: Tables, figures and other information that are not included in the main part of the report should be numbered and given in Appendices chapter.
- I. REFERENCES: The ideas and the work of others should be cited in the References chapter. The references should be numbered and given as a list. For instance:
- REFERENCES
- [1] W. D. Calister, D. G. Rethwish, Materials Science and Engineering, 8th edition, John Wiley and Sons, 2011.

Plagiarism and Citation

Plagiarism is defined as “*wrongful appropriation*” and “*stealing and publication*” of another author's “*language, thoughts, ideas, or expressions*” and the representation of them as one's own original work” by wikipedia [[www. http://en.wikipedia.org/](http://en.wikipedia.org/)]. It is strongly advised students to avoid plagiarism and copying in summer training reports. Students should use their own words. In case of using other works or ideas, proper credit and citation should be given to the original source. The student who deleted or changed a few words in an original paragraph or changed the order of the original sentences in a paragraph will also be guilty of plagiarism. Plagiarism is a form of academic dishonesty, and it is evaluated by the University as the violation of the rules and the student will be subjected to a disciplinary penalty. Students are strongly encouraged to speak with their academic advisors and summer training coordinator for clarification of plagiarism.

Submission and Evaluation of the Reports

1. Summer training reports should be submitted as soft copy and hard copy within the first 2 weeks of the fall semester following the summer training to summer training coordinator. A soft copy of the report should be saved as a single “doc” document. The figures and the tables should not be given as separate documents.
2. Transcript should be handed with the summer training report.
3. Evaluation Form for the Summer Training should be either sent by the supervisors in the company to the Materials Science and Engineering Department or given to the students in a sealed envelope for submission to the Materials Science and Engineering Department. Students are responsible for making sure that their supervisors filled the form, sealed it in an envelope and sent it to the Department.
4. All reports are checked for plagiarism using plagiarism-checking tools. In case any attempt is detected, the report will not be evaluated and graded as “Unsatisfactory”.
5. The report is directed to the evaluator by the summer practice coordinator. The evaluator fills the **Summer Practice Grade Form** available on the web site of the department (<http://mse.cankaya.edu.tr>) after evaluation. If the minimum requirements noted in the Grading Form are met, the summer training will be graded as S (Satisfactory). Otherwise the grade will be U (Unsatisfactory). For unsatisfactory grade, the report may return to students for recommended revisions (just for once). The student should resubmit the revised copy of the report until given deadline.
6. Final grades are sent to the summer practice coordinator.
7. Grades will be announced by the coordinator on the web site of the department (<http://mse.cankaya.edu.tr>).



ÇANKAYA UNIVERSITY
Faculty of Engineering
Department of Materials Science and Engineering
Statement of Permission for the Summer Training



1. Students should fill out related parts of this form, and submit the form to their Academic Advisor.
2. Academic Advisors should check the form, make a decision, and give the approved form to the student.
3. Students should submit the approved form to the Summer Training Coordinator.
4. Students should get the Letter of Application written by the Department.

Part I. Student Information [To be filled by the Student]

Student Name and Surname		Student Number	
Type of Summer Training	<input type="checkbox"/> MSE 200 <input type="checkbox"/> MSE 300	Student's Signature	
PREREQUISITES The following prerequisites should be applied			
MSE 200		MSE 300	
Pre-requisites: To be successful in the following course		Pre-requisites: To be successful in MSE 200 Summer Training I	
Course	MSE 201	Course	MSE 200
Letter Grade		Letter Grade	

Part II. Approval of the Academic Advisor

Academic Advisor's Decision	<input type="checkbox"/> Eligible to take the Summer Training <input type="checkbox"/> Eligible to take Summer Training after satisfying the pre-requisites
Notes, if any	
Academic Advisor	Signature _____ Date ____/____/____

Part III. Company Information [To be filled by the Student]

Company Name			
Address			
City	Postal code	Internet Address	
Phone	Fax		
Number of Engineers Employed by the Company			
Total Number of Employees in the Company			
Year of Establishment			
Main Products/Services			
Are the company owners and the top managers (Member of the Board of Directors, CEO, General Manager, Assistant General Manager, Factory/Plant Manager, etc.) are your relatives by blood or marriage?			
Student's Declaration	I hereby declare that the information I have supplied in this form is true, and I will abide by the rules and regulations of Çankaya University.		
Student's Signature		Declaration Date	____/____/____

Part IV. Decision of the Summer Training Committee [To be filled by the Summer Training Coordinator]

Decision	<input type="checkbox"/> Approved <input type="checkbox"/> Not Approved
Notes, if any	
Summer Training Coordinator	Signature _____ Date ____/____/____

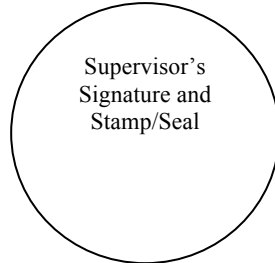


ÇANKAYA UNIVERSITY
Faculty of Engineering
Department of Materials Science and Engineering
(Çankaya Üniversitesi
Mühendislik Fakültesi/ Malzeme Bilimi ve Mühendisliği Bölümü)
Evaluation Form for the Summer Training
(Yaz Stajı Değerlendirme Formu)



Part I. Student (Trainee) Information [To be filled by the Student]
Öğrenci (Stajyer) Bilgileri [Öğrenci tarafından doldurulacaktır]

Student Name and Surname <i>Öğrencinin adı ve soyadı</i>		Student Number <i>Öğrenci Numarası</i>	
Type of Summer Training <i>Staj Türü</i>	<input type="checkbox"/> MSE 200 <input type="checkbox"/> MSE 300		
Period of Training <i>Staj Dönemi</i>	Starting Date <i>Staj Başlama Tarihi</i>		
	Finishing Date <i>Staj Bitiş Tarihi</i>		
	Duration of Training <i>Staj Süresi (iş günü)</i>		
Company Name			
Address			
City	Postal code	Internet Address	
Phone	Fax		
DECLARATION OF THE STUDENT			
<p>I hereby declare that:</p> <ul style="list-style-type: none">The company owners and the top managers (Member of the Board of Directors, General Manager, Assistant General Manager, Factory/Plant Manager, etc.) are not my relatives by blood or marriage, andI worked as a trainee in the company during the period of time indicated above. <p><i>İşyeri sahipleri ve üst düzey yöneticileriyle (Yönetim Kurulu Üyesi, Genel Müdür, Genel Müdür Yardımcısı, Fabrika/Tesis Müdürü, v.b.) akrabalık ilişkimi olmadığını ve yukarıda belirtilen tarihlerde sözkonusu işyerinde stajyer olarak çalıştığımı beyan ederim.</i></p>		<p style="text-align: center;">Affix a color photograph <i>Renkli fotoğrafınızı yapıştırınız</i></p> <p style="text-align: center;">Compulsory <i>Zorunludur</i></p>	
Student's Signature <i>Öğrencinin İmzası</i>		Declaration Date <i>Bildirim Tarihi</i>	



To the Supervisor	Stajyer Amirinin dikkatlerine
<p>Dear Supervisor,</p> <p>This document is to be used to keep a record of the activities of student trainees during their training period, which is a minimum of 20 working days. Our students who are practicing in MSE 200 and MSE 300 training programs are asked to answer a set of questions and do several tasks, which are stated in the Training Booklet. Furthermore, our students who are practicing in MSE 300 training program are asked to search an MSE-related problem in your company and to solve it using scientific methods taught in our MSE curriculum.</p> <p>The Supervisors of the trainees are kindly asked to complete all the information requested in this Log Book and return it directly to the Department, or give it to the student in a sealed and stamped envelope.</p> <p>We would like to express our sincere thanks for the interest that you have shown in advising our trainee student.</p> <p>The Summer Training Committee</p>	<p>Değerli Stajyer Amiri meslektaşımız,</p> <p>Bu doküman, staj yapan öğrencilerimizin en az 20 iş günü olan staj süresince yaptıkları çalışmaların öğrenci ve işyerindeki amirleri tarafından rapor edilmesi amacıyla hazırlanmıştır. MSE 200 ve MSE 300 stajını yapan öğrencilerimizden Staj Kılavuzunda belirtilen bir dizi soruyu yanıtlamalarını ve çeşitli görevleri yapmalarını beklemekteyiz.</p> <p>Ayrıca, MSE 300 stajını yapan öğrencilerimizden, eğer mümkünse, işyerinizde Malzeme Bilimi ve Mühendisliği'ni ilgilendiren bir problemi araştırmalarını ve tespit ettikleri probleme Malzeme Bilimi ve Mühendisliği'nin bilimsel yöntemlerini kullanarak bir çözüm önermelerini talep etmekteyiz.</p> <p>Gerekli bilgilerin doldurularak bu dokümanın doğrudan Bölümümüze postalanmasını veya kapalı ve mühürlü bir zarf içerisinde öğrenciye verilmesini Stajyer Amirlerinden içtenlikle rica ederiz.</p> <p>Stajyer öğrencimize göstereceğiniz inandığımız ilginizden dolayı size şimdiden teşekkür etmek isteriz.</p> <p>Staj Komitesi</p>

Part II. Company Information [To be filled by the Supervisor]
İşyeri Bilgileri [Stajyer Amiri tarafından doldurulacaktır]

Company Name <i>İşyeri Adı</i>								
Address <i>Adres</i>								
City <i>Şehir</i>		Postal code <i>Posta Kodu</i>		Internet Address <i>İnternet Adresi</i>				
Phone <i>Telefon</i>					Fax <i>Faks</i>			
General Manager <i>Genel Müdür</i>				Director of Human Resources (Personnel Dept.), if any <i>Varsa, İnsan Kaynakları/Personel Bölümü Müdürü</i>				
Supervisor Assigned <i>Stajyer Amiri</i>			Supervisor's Title <i>Amirin Ünvanı</i>		Supervisor's Occupation <i>Amirin Mesleği</i>			
Number of Materials Scientists and Engineers Employed by the Company <i>İşyerinde Çalışan Malzeme Bilimcisi ve Mühendisi Sayısı</i>	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	more than 2 <i>(ikiden fazla)</i>
Number of Engineers Employed by the Company <i>İşyerinde Çalışan Mühendis Sayısı</i>	<input type="checkbox"/>	0	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	more than 2 <i>(ikiden fazla)</i>
Total Number of Employees in the Company <i>İşyerinde Çalışanların Toplam Sayısı</i>	<input type="checkbox"/>	1 – 10	<input type="checkbox"/>	11 – 25	<input type="checkbox"/>	25 – 100	<input type="checkbox"/>	more than 100 <i>(yüzden fazla)</i>

Part III. Certification of Training [To be filled by the Supervisor or the Director of Human Relations/Personnel Department]

Stajın Onaylanması [Stajyer Amiri veya İnsan Kaynakları/Personel Bölümü Yöneticisi tarafından doldurulacaktır]

CERTIFICATION OF THE TRAINING			
Student Name <i>Öğrencinin Adı</i>		Starting Date <i>Başlama Tarihi</i>	
Surname <i>Soyadı</i>		Finishing Date <i>Başlama Tarihi</i>	
I certify that the following records of work done by the student are true. <i>İlerideki sayfalarda belirtilen çalışmaların adı geçen öğrenci tarafından yapıldığını tasdik ederim.</i>			
Certified by <i>Onaylayan Amir</i>		Job Title <i>İş Ünvanı</i>	
Signature <i>İmza</i>		Date <i>Tarih</i>	

Part IV. Student (Trainee) Evaluation [To be filled by the Supervisor]

Öğrencinin (Stajyerin) Değerlendirilmesi [Stajyer Amiri tarafından doldurulacaktır]

	Very Good <i>Çok İyi</i>	Good <i>İyi</i>	Moderate <i>Orta</i>	Poor <i>Zayıf</i>	Not Observed <i>Gözlenemedi</i>
PERSONALITY KİŞİLİK ÖZELLİKLERİ					
Self Confidence/Kendine Güven <i>Ekip İçinde Çalışma Yeteneği</i>					
Ability to Work in a Team <i>Öneri Getirme Yeteneği</i>					
Leadership <i>Liderlik Vasıfları</i>					
Presentability <i>Dış Görünüş ve Genel Davranış</i>					
COMMUNICATION SKILLS / İLETİŞİM YETENEKLERİ					
Communication with Supervisors <i>Amirleri ile İletişimi</i>					
Communication with Peers <i>Çevresi ile İletişimi</i>					
Self-Expression <i>Kendini İfade Edebilme</i>					
Listening Skills <i>Dinleme Becerisi</i>					
Speaking Skills <i>Sözlü İfade Becerisi</i>					
Writing Skills <i>Yazılı İfade Becerisi</i>					
WORK PERFORMANCE / İŞ PERFORMANSI					
Adaptation to Working Hours <i>Mesai Saatlerine Uyumu</i>					
Interest and Devotion in the Job <i>İşe Karşı İlgisi ve Özveri</i>					
Learning Skills <i>İşlemleri Çabuk Kavrama Becerisi</i>					
Computer Skills <i>Bilgisayar Kullanımı Becerisi</i>					
Responsibility towards Work <i>Görev Sorumluluğu Bilinci</i>					
Adaptation to New Tasks <i>Yeni İşlere Adaptasyonu</i>					

OVERALL PERFORMANCE GENEL DEĞERLENDİRME				
Very Good <i>Çok İyi</i>	Good <i>İyi</i>	Moderate <i>Orta</i>	Poor <i>Zayıf</i>	Not Observed <i>Gözlenemedi</i>

MSE PROBLEM (FOR MSE 300 ONLY) <i>MALZEME BİLİMİ VE MÜHENDİSLİĞİ PROBLEMİ (SADECE MSE 300 STAJI İÇİN)</i>	
Was the MSE Problem studied by the trainee a real problem of your company or a hypothetical one? <i>Stajyer tarafından çalışılan Malzeme Bilimi ve Mühendisliği ile ilgili Problemi işyerinizin gerçek bir problem midir yoksa teorik midir?</i>	
Is the proposed solution applicable at your company? <i>Önerilen çözümün işyerinizde uygulanabilme olasılığı nedir?</i>	
General comments on the MSE Problem studied by the trainee. <i>Stajyer tarafından çalışılan Malzeme Bilimi ve Mühendisliği Problemi hakkında genel değerlendirme.</i>	

TRAINING LOG**Part V. Work Done [To be filled by the Student, and approved by the Department Directors]*****Yapılan İş [Öğrenci tarafından doldurulacak ve Bölüm Yöneticileri tarafından onaylanacaktır]***

Day <i>Gün</i>	Date <i>Tarih</i>	Department <i>Bölüm</i>	Brief Description of Training in the Department <i>Bölümde Yapılan İşin Kısa Tanımı</i>	Name and Job Title of the Department Director <i>Bölüm Yöneticisinin Adı ve İş Ünvanı</i>	Approval (Signature) of the Department Director <i>Bölüm Yöneticisinin İmzası</i>
1	___ / ___ / _____				
2	___ / ___ / _____				
3	___ / ___ / _____				
4	___ / ___ / _____				
5	___ / ___ / _____				

Day <i>Gün</i>	Date <i>Tarih</i>	Department <i>Bölüm</i>	Brief Description of Training in the Department <i>Bölümde Yapılan İşin Kısa Tanımı</i>	Name and Job Title of the Department Director <i>Bölüm Yöneticisinin Adı ve İş Ünvanı</i>	Approval (Signature) of the Department Director <i>Bölüm Yöneticisinin İmzası</i>
6	___ / ___ / _____				
7	___ / ___ / _____				
8	___ / ___ / _____				
9	___ / ___ / _____				
10	___ / ___ / _____				

Day <i>Gün</i>	Date <i>Tarih</i>	Department <i>Bölüm</i>	Brief Description of Training in the Department <i>Bölümde Yapılan İşin Kısa Tanımı</i>	Name and Job Title of the Department Director <i>Bölüm Yöneticisinin Adı ve İş Ünvanı</i>	Approval (Signature) of the Department Director <i>Bölüm Yöneticisinin İmzası</i>
11	___ / ___ / _____				
12	___ / ___ / _____				
13	___ / ___ / _____				
14	___ / ___ / _____				
15	___ / ___ / _____				

Day <i>Gün</i>	Date <i>Tarih</i>	Department <i>Bölüm</i>	Brief Description of Training in the Department <i>Bölümde Yapılan İşin Kısa Tanımı</i>	Name and Job Title of the Department Director <i>Bölüm Yöneticisinin Adı ve İş Ünvanı</i>	Approval (Signature) of the Department Director <i>Bölüm Yöneticisinin İmzası</i>
16	___ / ___ / _____				
17	___ / ___ / _____				
18	___ / ___ / _____				
19	___ / ___ / _____				
20	___ / ___ / _____				



ÇANKAYA UNIVERSITY
Faculty of Engineering
Department of Materials Science and Engineering
Summer Practice Grade Form



Student Name and Surname		Student Number	
Type of Summer Training	<input type="checkbox"/> MSE 200	<input type="checkbox"/> MSE 300	
Evaluator		Signature	
		Date	

Part A. Evaluation of the Practice		
<i>Answer the following questions (1 for “Yes” and 0 for “No”)</i>		
Is the work done related to MSE? (Y/N)		1
Is the log book filled and received? (Y/N)		1
Is the report submitted to Summer Practice Coordinator? (Y/N)		1
Total		3
Part B. Evaluation of the Report		
Style, format and organization of the report		20
Command of English		10
Content of the Report		70
Total		100
Part C. Conditions for Satisfactory		
Total Grade from Part A	3	
Minimum Total Grade from Part B	50	
Revision	If revision is required, the student must make corrections and changes needed on the report and resubmit the report for second evaluation.	
PART D. Overall Evaluation		
Satisfactory <input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>	Revision required <input type="checkbox"/>