YAŞAR UNIVERSITY
FACULTY OF ENGINEERING
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

EEE 4920 SENIOR DESIGN PROJECT II

2018-2019 Spring Semester

AIM OF THE COURSE

To implement the product design realized as an engineering project through teamwork, test the prototype and to report their studies both orally and in written form.

LEARNING OUTCOMES OF THE COURSE

1. Experience on the implementation of an engineering project including software and/or hardware design.
2. Ability to design in order to meet desired needs under realistic conditions and limitations such as engineering standards and economic, environmental issues, sustainability, manufacturability, ethical, health, safety, social and political problems, etc.and apply test procedures
3. Ability to share responsibilities within a teamwork.
4. Experience on written and oral presentation techniques
5. Appreciation of the need for self and continuous learning.

ECTS : 7 (1 - 6)

COURSE COMITTEE :

Dr. Nalan Özkurt (Room : U-114)

ASSISTANT : Irmak Önal Korkut

GRADING POLICY

See Appendix 1 at the end of the document

A. General Approach :

a. EEE 4920 Senior Project Design II course can be taken only by the students who successfully passed EEE 4910.

b. At the end of the semester, the students should complete the implementation and test studies of their project designed in the first semester. Also, the students should submit a Graduation Thesis.

c. The flow of the course is organized by a committee. The advisor supervises the design/improvement/implementation and test processes.

d. Teams present their progress in the project in an interim presentation to the Academic Committee of the Department. At the end of the semester, teams present their studies in Final Year Projects Presentation and Exhibition both orally and in a poster session with the attendance of guests from industry and academy.

e. During the semester, the teams should continue their weekly meeting with their academic advisor and company advisor and upload signed (scanned) minutes of meeting to the lectures.yasar.edu.tr.

f. Each team submits an Execute Summary in Turkish and one Graduation Thesis for each team in English at the end of the semester. The templates are loaded in lectures site.

g. Digital version of reports, poster and presentations are submitted to lectures.yasar.edu.tr regarding the announced deadlines. In case of late submissions penalty is applied (See Other conditions)

h. Letter grades are determined by the Academic Committee of the Department, regarding the

- Weekly meeting performance
- Presentation performance
- Report performance
- Evaluation of Project studies,

according to the Grading Table given in Appendix 1.

B. EEE 4920 Senior Design Project II

1.-5. Week:

Teams will update their work plan and design prepared in EEE 4910 with their advisor and company advisor in order to complete their implementation and test studies until the end of the semester.

Each week, teams will meet their academic advisor and company advisor; and will submit minutes of meeting signed by their advisor to lectures website.

Teams will prepare an Executive Summary for their projects in Turkish, using the guidelines announced in lectures website.

6-7. Week:

Each team will load the Executive Summary to lectures website, the academic advisor will review the document and the team will upload the final version to the lectures website due to deadline.

8.-9. Week :

Teams and committee will make preparations for interim presentations.

10. Week:.

Teams will present their progress in their projects in an interim presentation in English to the Academic Committee of the Department. The Academic Committee will evaluate the performance of the teams according to the criteria listed in App.1.

11. – 14. Week:

Teams will complete their project implementations and test studies taking into account the feedbacks provided during the interim presentation.

Teams will prepare their Graduation thesis and will submit to the lectures website until **10th May 2019, 17:00.**

The committee will prepare the Senior Project Summary Booklet and will sent this booklet to the guests from industry and academy with the invitation of Final Year Projects Presentation and Exhibition.

Teams will prepare their poster in Turkish for the Final Year Projects Presentation and Exhibition. The poster should be approved by the advisor before submission.

15. Week – 16. Week (Final Exam period) :

Advisors will review the submitted thesis and teams will finalize their thesis with the comments of the advisor. The printed and soft version of the thesis is submitted to advisor and jury members announced by the committee.

17. Week

The final evaluation of the teams and decision on grades will be completed by the Academic Committee of the Department and then grades will be submitted to the student information system.

C. Other conditions

Evaluation: The final evaluation of the students is made by the Academic Committee of the Department. Each member of the team may have different grades. A successful student may have one level upper or lower grade than his/her team member. In cases where problems arise, the course committee may intervene.

Meetings: Each team should regularly meet with their advisor at least 1 hour per week. The company visits should be at least 2 half days a week.

Attendance: Weekly meetings are obligatory and 80% attendance is required for success at course.

Report Submission: Reports should be submitted to the system or to the course assistants until the due date. The late submissions will be penalized 5% for every 30 minutes (at most 30%), 30% for each day.

Report submissions will be in pdf form and should be compatible with the templates in lectures site.

Electronic Documents: Final version of the thesis, poster, presentation and the project materials such as codes, data sheet, photos should be attached to the Graduation thesis in a DVD.

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GRADING

Meeting Minutes	%10
Interim Presentation	%20
Poster Presentation	%30
Graduation Thesis	%30
Advisor Evaluation	%10

EEE 4920- Interim Presentation Evaluation Form

40p	Experience on the implementation of an engineering project including software and/or hardware design.
40p	Ability to design in order to meet desired needs under realistic conditions and limitations such as engineering standards and economic, environmental issues, sustainability, manufacturability, ethical, health, safety, social and political problems, etc.and apply test procedures
20p	Experience on oral presentation techniques

EEE 4920- Final Poster Presentation Evaluation Form

40p	Experience on the implementation of an engineering project including software and/or hardware design.
40p	Ability to design in order to meet desired needs under realistic conditions and limitations such as engineering standards and economic, environmental issues, sustainability, manufacturability, ethical, health, safety, social and political problems, etc.and apply test procedures
20p	Experience on written and oral presentation techniques

Graduation Thesis Evaluation Criteria

EEE 4920- Tez Değerlendirme Formu

Tez Adı			
Öğrencilerin Adı			
Tez Danışmanı			
chapter	Section		Puan
1. Introduction	1.1 Description of The Problem 1.2 Aim of the Project 1.3 Project Output 1.4 Project Activities and Schedule 1.5 Risks Management	***Experience on project management and project planning.*** Problem tanımlanmış mı? Projenin amacı verilmiş mi? Proje çıktıları (prototip, model vs.) açıkça tanımlanmış mı? Proje planlaması, iş bölümü yapılmış mı, anlamlı mı? EEE 4910 içinde verilen proje planında değişiklikler olmuş mu? Riskler ile karşılaşılmış mı? Risk yönetimi nasıl yapılmış? (proje planı tasarım raporunda yapılmış olandan farklı ise güncel olan kullanılmalı)	15
2. Design	2.1 System Specifications 2.2 High Level Design 2.3 Item Design	***Experience on the implementation of an engineering project including software and/or hardware design.*** Blok diagramlar ve grafikler kullanılarak tasarım açıklanmış mı? Hangi ürünlerin tasarlanacağı, hangilerinin satın alınacağı gerekçeleriyle belirlenmiş mi? Her bir parça ayrı ayrı tasarlanmış mı? Proje çıktılarının elde edilmesi için gerek donanım gerekse yazılım parçalarının nasıl gerçeklenediğini gösteren diagramlar, fotoğraflar, ekran çıktıları var mı?	25
	2.4 Realistic Restrictions and Conditions in The Design - Engineering Standards - Economical Effects - Manufacturability, Productivity and Sustainability Issues - Ethical, Health and Safety Issues - Social and Political Effects	***Ability to design in order to meet desired needs under realistic conditions and limitations such as engineering standards and economic, environmental issues, sustainability, manufacturability, ethical, health, safety, social and political problems, etc.and apply test procedures.*** Tasarımda mühendislik standartları, üretilebilirlik, ekonomik, sürdürülebilirlik, çevresel etkiler, etik konuları, güvenlik, sosyal ve politik etkileri dikkate alınmış mı?	10
3. Tests, Results and Discussions	3.1 Implementation of the Product 3.2 Experimental Setup and Results of the Tests 3.3 Cost Analysis 3.4 Discussions	Test için nasıl test düzeneklerinin hazırlanacağı ve uygulanacak prosedürler tanımlanmış mı? Results (Test / deney tasarımları yeterince açıklanmış mı ? Sonuçları tablo ve grafiklerle uygun şekilde anlatılmış mı) Malzeme fiyatları, işgücü kullanımı (adam-ay değerleri), hizmet alımı ya da özel ekipman kullanım ücretleri cinsinden yapılan harcamalar analiz edilmiş mi? Elde edilen sonuçlar ve beklenen sonuçlar karşılaştırılmış mı? Maliyet analizi tartışılmış mı?	25
4. Conclusions and Future Works 5. References		Projede yapılan işler özetlenip, projeye devam edilirse, hangi çalışmaların yapılabileceği açıklanmış mı? Kaynaklar liste olarak ve yazı içinde kullanılmış mı?	15
Overall Formatting Requirements		***Experience on written and oral techniques.*** Kapak (Formata uygun mu), Özet (Tezi uygun şekilde özetliyor mu), Abstract (İngilizceye uygun şekilde çevrilmiş mi) Formata dikkat edilmiş mi (Resim ve tablolar metin içinde açıklanmış mı, Referanslar metin içinde ve kaynakçada uygun şekilde yazılmış mı) İngilizce yeterli mi?	10
		Toplam	100