QUALTY IMPROVEMENT AND OPTIMIZATION IN SPINNING

1	Course Title:	QUALTY IMPROVEMENT AND OPTIMIZATION IN SPINNING
2	Course Code:	TEK4027
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	4
6	Semester:	7
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. ERHAN KENAN ÇEVEN
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	rceven@uludag.edu.tr, 02242942062, Uludağ Üniversitesi, Mühendislik Mimarlık fakültesi, Tekstil Mühendisliği Bölümü, Görükle kampusü, 16059, Nilüfer-Bursa
17	Website:	
18	Objective of the Course:	Ensure that the students will be able to comprehend the concept and the importance of the process control in spinning, the factors affecting spinning production quality and will be able to analyse the statistical datafor quality control purposes.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Being able to comprehend the concept of process control
	2	Being able to list the control points and the controls for the quality of production in spinning
	3	Being able to interpret the periodic variations in the yarn
	4	Being able to evaluate the machine settings and optimization
	5	Being able to analyse the statistical data for quality control purposes
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Concept and Importance of Process Control in Spinning	
2	Mixture Quality Control in Spinning	
3	Optimum fiber mixture according to the needs of various end uses	

4	Bale Management	
5	Control of Foreign Material in Cotton	
6	Cleaning Efficiency and Waste Control in Blowroom and Carding Machine	
7	Nep Control in Ribbon	
8	Unevenness in Spinning and Error Control	
9	Repeating courses and midterm exam	
10	Control of Yarn Count, Strength and Periodic Mass Variations	
11	Machinery and Energy Audit	
12	Quality Improvement by the Optimization of the Raw Materials, Machinery, Components and Settings	
13	Statistical Data Analysis and Estimation for the Quality Control Purposes I	
14	Statistical Data Analysis and Estimation for the Quality Control Purposes II	

22	Textbooks, References and/or Other Materials:	1.Booth, J.E " Textile Mathematics " The Textile Institute Manchaster 1979 2.Locker, B, Oellers,K. and " Tecnische Berecknunjen " Bussesche Verlagshandlung Gmblt Herford 3.Ugan, M., Pamuk İplikçiliğinde Kalite Kontrol,Bitirme Tezi, Uludağ Üniversitesi, 2004 4.Şahutoğlu, Ö, Pamuk İplikçiliğinde İşlem Dışı Kalite Kontrol, Bitirme Tezi, Uludağ Üniversitesi, 2003 5.Özdemir Ö., Kimyasal Liflerin Ring İplikçilikte işlenmesi, Lisans Ders Notları, Uludağ Üniversitesi 6.Akçakoca, N., İplik İşletmelerinde İşlem İçi (On-Line) Kalite Kontrol Sistemleri, Bitirme Tezi, Uludağ Üniversitesi, 2006
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

24	**ECTS / WORK LOAD TABLE**

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	12	2.00	24.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	12.00	12.00
Others	1	10.00	10.00
Final Exams	1	16.00	16.00
Total Work Load			102.00
Total work load/ 30 hr			3.00
ECTS Credit of the Course			3.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
ÖK2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
ÖK3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
ÖK4	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
ÖK5	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**