INTEGRAL TRANSFORMATIONS											
1	Course Title:	INTEGR	AL TRANSFORMATIONS								
2	Course Code:	MAT305	0								
3	Type of Course:	Optional									
4	Level of Course:	First Cyc	le								
5	Year of Study:	3									
6	Semester:	6									
7	ECTS Credits Allocated:	5.00									
8	Theoretical (hour/week):	3.00									
9	Practice (hour/week):	0.00									
10	Laboratory (hour/week):	0									
11	Prerequisites:	Different Different	ial Equations I ial Equations II								
12	Language:	Turkish									
13	Mode of Delivery:	Face to f	ace								
14	Course Coordinator:	Prof. Dr.	MEHMET ÇAĞLIYAN								
15	Course Lecturers:										
16	Contact information of the Course Coordinator:	nisa@ulu 0-224-29 U.Ü. Fer	udag.edu.tr 941764 9-Ed. Fak. Mat. Böl. Görükle Yerleşkesi Nilüfer/BURSA								
17	Website:										
18	Objective of the Course:	Obtainin equation transform	g of the solutions of ordinary and some partial differential s occuring mathematics, physics engineering with Laplace nations.								
19	Contribution of the Course to Professional Development:										
20	Learning Outcomes:		-								
		1	Knows Laplace transformations.								
		2	Knows inverse Laplace transformations								
		3	Applied Laplace transformations to differential equations.								
		4	Applied Laplace transformations to ordinary differentia equation systems.								
		5	Calculates Laplace and inverse Laplace transformations with Maple.								
		6	Solves differential equations with Laplace and inverse Laplace transformations using Maple.								
		7									
		8									
		9									
		10									
21 Course Content:											
		Co	ourse Content:								
Week	Theoretical		Practice								
1	Laplace transforms, definations, the	orems.									
2	Some important properties of Laplac transforms. Calculates of Laplace tra	e ansforms.									

3	Defina Some transf	atior e imp form	n of th portar s.	e Inve t prop	erse L perties	aplace of inve	trans erse L	forms aplac	e									
4	Partia	rtial fractions methos, convolution property.																
5	Applio const	plications to differential equations with stant coefficients of Laplace transforms																
6	. Appl variat	licat ole c	ions t coeffic	o diffe	rentia of Lap	l equat	tions v ansfoi	vith ms										
7	Differ disco functi	entia ntinu ons	al equ Jous I	ations rigt ha	s whic nd sic	h has le. Peri	iodic											
8	Repe	ating	g cou	rses a	nd mi	dterm e	exam											
9	The H	leav	viside	functi	ons, E	Dirac de	elta fu	nction										
10	Applic with c transf	plications to differential equation systems h constant coefficients of Laplace nsforms																
11	Applic equat Lapla	catic tions ice ti	ons to s with ransfo	some consta orms	partia ant co	al differ efficier	ential nts of											
12	Calcu Lapla	alculates of Laplace transforms and inverse aplace transforms with Maple.																
13	Solve invers	olves differential equations with Laplace and verse Laplace transformations using Maple.																
14	Gene	ral e	exerci	ses.														
Activites									Numb	per	Daald	Dura	ition (hour)	Total Work Load (hour)			
1 heore 22		sme	nt							4			3.00			42.00		
Practicals/Labs									0						0.00			
Self study and preperation R										14			4.00			56.00		
Homew	VORKS						0			0.00						20.00		
Field S	s						0			0						0.00		
Field S	Field Studies									100			11.00			11.00		
Others										0			0.00			0.00		
Email: Term (Year) Learning Activities to									40	40100				1	11.00			
Total V	Vork Lo	oad		,												148.00		
Contrib	Contribution of Final Exam to Success Grade									.00				4.93				
ECTS	ECTS Credit of the Course															5.00		
Measu Course	remen [.]	t an	d Eva	luatio	n Tecl	hnique	s Use	d in th	e									
24	ECT	S/	WO	RK L	OAD	TAB	LE											
25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME																		
	QUALIFICATIONS													-				
	P	Q1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16	
ÖK1	3		3	1	3	4	1	2	5	2	1	0	0	0	0	0	0	
ÖK2	3	Ī	3	1	3	4	1	2	5	2	1	0	0	0	0	0	0	
ÖK3	2		4	1	3	4	1	3	4	3	1	0	0	0	0	0	0	

ÖK4	2	4	1	3	4	1	3	4	3	1	0	0	0	0	0	0
ÖK5	2	3	4	3	2	1	2	2	2	2	0	0	0	0	0	0
ÖK6	2	3	4	3	2	1	4	2	2	2	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	ib 1 very low 1 I:		2 low		3 Medium		4 High		5 Very High							