Program	Level	Third cycle		
	Name of the program	SEE Doctoral Studies in Mathematical Science		

COURSE

Course title	**Integral operators**			
Course code	Semester	Course status	ECTS	Contact hours
PMAT 635	I	Elective course	10	30
Lecturer				
Course Goals	The primary aim of this course is to familiarize students with concepts and methods that are central to the area of integral operators.			

COURSE CONTENT

- Introduction to integral operators: definition and properties of integral operators
- Integral operator kernels
- Boundedness
- Compactness
- Carleman kernels
- Symmetric kernels
- Unitary equivalence
- Examples of integral operators

LITERATURE

[1] P.R. Halmos, V.S. Sunder: Bounded Integral Operators on L 2 Spaces, Springer-Verlag, 1978.
[2] E.M. Stein: Singular Integrals and Differentiability Properties of Functions, Princeton University Press, Princeton, New Jersey, USA, 1970.

GRADING			REMARKS
Criterion	Maximum points	Minimum points	
Homework	60	35	
Project	40	20	
T o t a l	100	55	