



Complex Analysis

SWAYAM Prabha Course Code - S2

PROFESSOR'S NAME	Prof. Sudarshan Gurjar
DEPARTMENT	Mathematics
INSTITUTE	Indian Institute of Technology, Bombay
COURSE OUTLINE	<p>This course is intended to be a introduction to Complex Analysis. This is one of the most beautiful areas of mathematics. It is also a very important subject for both mathematics students at the UG/PG level and Engineering students working in Electrical Engineering and related areas as well as those in Mathematical Physics and Engineering Physics.</p> <p>The course will last 7 weeks (approx). I will give 2 lectures of 1.5 hours. I will also be giving many exercises in my lectures to boost understanding.</p> <p>The prerequisites for this course are familiarity with complex numbers and basic knowledge of Calculus (preferably also multivariable calculus but not absolutely necessary).</p>

COURSE DETAILS

S. No	Module ID/ Lecture ID	Lecture Title/Topic
1	L1	Introduction to the course.
2	L2	Cauchy-Riemann Equations
3	L3	Power Series
4	L4	Exponential Function
5	L5	Complex Analysis CR Equations
6	L6	Cauchy-Riemann Equations
7	L7	Introduction
8	L8	Power Series
9	L9	Exponential Function
10	L10	Logarithm (Contd)

References if Any: