



# A SHORT LECTURE SERIES ON CONTOUR INTEGRATION IN THE COMPLEX PLANE

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**TYPE OF COURSE** : New | Elective | PG

**COURSE DURATION** : 4 weeks (29 Jul'19 - 23 Aug'19)

**EXAM DATE** : 29 Sep 2019

**PRE-REQUISITES** : Basic Engineering Mathematics

**INTENDED AUDIENCE** : Masters and PhD students

**COURSE OUTLINE :**

This course involves a very brief theory on complex variables and several examples on contour integration that use branch cuts and indentations in the complex plane. There are several elaborate courses on complex variables but not enough on this particular application.

**ABOUT INSTRUCTOR :**

Prof. Venkata Sonti is an Associate Professor at Indian Institute of Science, Bangalore with an Academic identity of 37 journal articles. He did his Ph.D in Purdue University. His research interests lies in the area of vibration and wave propagation in plates and shells, asymptotics in sound structure interaction.

**COURSE PLAN :**

**Week 1:** Theory : Theory of complex variables

**Week 2:** Theorems

**Week 3:** Examples

**Week 4:** Examples and Laplace transform