



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)
Dundigal, Hyderabad - 500 043

ELECTRONICS AND COMMUNICATION ENGINEERING ATTAINMENT OF COURSE OUTCOME- ACTION TAKEN REPORT

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|----------------------|--|---------------|-----------|
| Name of the Faculty: | Mr. M Venkata Chary | Department: | ECE |
| Regulation: | R20 | Batch: | 2020-2024 |
| Course Name: | Complex Analysis and Special Functions | Course Code: | AHSC12 |
| Semester: | IV | Target Value: | 60% (1.8) |

Attainment of COs:

| | Course Outcome | Direct Attainment | Indirect Attainment | Overall Attainment | Observations |
|-----|--|-------------------|---------------------|--------------------|--------------------------------------|
| CO1 | Identify the fundamental concepts of analyticity and differentiability for finding complex conjugates, conformal mapping of complex transformation | 0.9 | 2.4 | 1.2 | Attainment target is not yet reached |
| CO2 | Apply integral theorems of complex analysis and its consequences for the analytic function with derivatives of all orders in simple connected region | 0.9 | 2.4 | 1.2 | Attainment target is not yet reached |
| CO3 | Extend the Taylor and Laurent series for expressing the function in terms of complex power series | 0.9 | 2.4 | 1.2 | Attainment target is not yet reached |
| CO4 | Apply Residue theorem for computing definite integrals by using the singularities and poles of real and complex analytic functions over closed curve | 0.9 | 2.4 | 1.2 | Attainment target is not yet reached |
| CO5 | Determine the characteristics of special functions for obtaining the proper and improper integrals for obtaining the proper and improper integrals | 1.6 | 2.4 | 1.8 | Attainment target reached |
| CO6 | Apply the role of Bessel functions in the process of obtaining the series solutions for second order differential equation | 0.6 | 2.4 | 1 | Attainment target is not yet reached |

Action Taken Report: (To be filled by the concerned faculty/course coordinator)

CO 1: Additional inputs are provided on the fundamental concepts of analyticity and differentiability for finding complex conjugates, conformal mapping of complex transformation
CO 2: Giving assignments and conducting tutorial classes on the application of integral theorems of complex analysis and its consequences for the analytic function with derivatives of all orders.
CO 3: Additional inputs are provided on the Taylor and Laurent series for expressing the function in terms of complex power series.
CO 4: Conducting Guest lectures on Apply Residue theorem for computing definite integrals by using the singularities and poles of real and complex analytic functions
CO 6: Giving assignments and conducting tutorial classes on the application of the role of Bessel functions in the process of obtaining the series solutions for second-order differential equation

Course Coordinator

Mentor

HOD

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