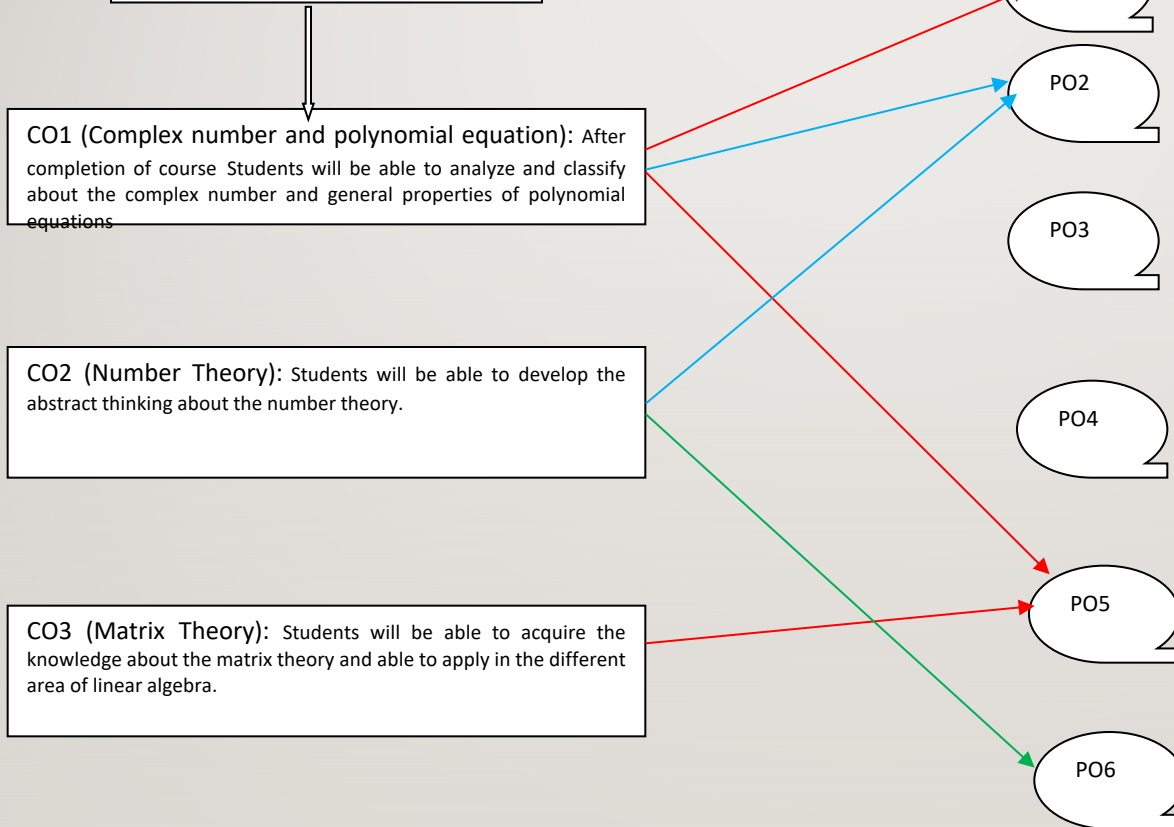




CO-PO Analysis


Semester-I, Major (Mathematics)

Course: Algebra (MTMDSC 101T)



 Highly correlated

 Moderate correlation

 Low correlation

Programme Outcome (PO)

PO1: Generate something original and new: Apply the knowledge of basic science, and fundamentals of specialization for the solution of social, economic, and environmental problems.

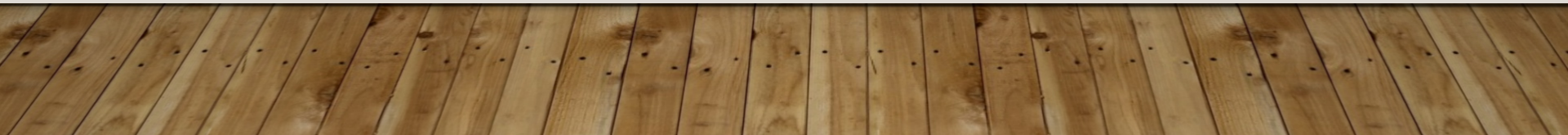
PO2: Critical thinking and problem solving: Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using principles of basic sciences and design solutions.

PO3: Environment and sustainability: Understand the impact on the environment and find out new greener routes for sustainable development.

PO4: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO5: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of scientific change.

PO6: Communication: Communicate effectively in oral, written and electronic formats to both scientific community and the public at large.



Semester-II, Major (Mathematics)

Course: Calculus (MTMDSC 202T)

CO1 (Limits, Continuity and Differentiability): Able to acquire the knowledge to analyze the idea of limits, continuity and differentiability.

CO2 (Mean Value Theorems and its Applications): Students will be able to develop the abstract thinking about the applicability of different mean value theorems.

CO3 (Integral Calculus): Students will be able evaluate the proper and improper integral and can be able to apply these in different real field.

CO4 (Applications of Calculus): Students will be able to determine curvature, maxima minima, length of curve and volume and surface area.

PO1

PO2

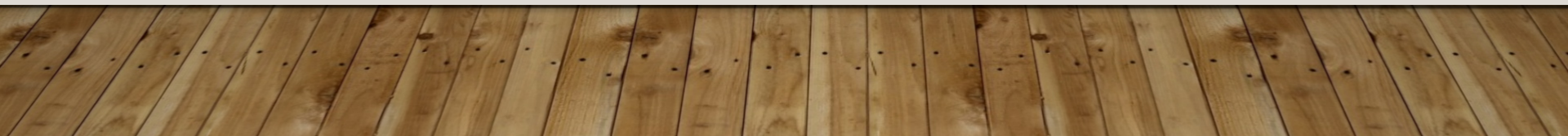
PO3

PO4

PO5

PO6

Highly correlated Moderate correlation Low correlation



Semester-III, Major (Mathematics)

Course: Analytical Geometry and Vector Calculus (MTMDSC 303T)

CO1 (Analytical Geometry, 2-D): After completion of course Students will be able to analyze the properties of different two dimensional geometrical figures.

CO2 (Planes, different properties of straight lines in 3-D): Students will be able to develop the knowledge about the properties of planes and straight lines in three dimensions.

CO3 (Sphere, Cylindrical surfaces, conoids, paraboloids): Students will be able to acquire the knowledge to analyze the different three-dimensional geometrical figures.

CO3 (Vector analysis): Students will be able to develop the idea between applicability of vector into real world regarding its physical properties.

PO1


PO2


PO3


PO4

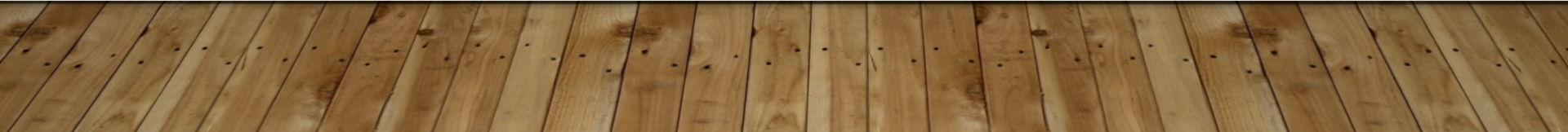
PO5

PO6

 Highly correlated

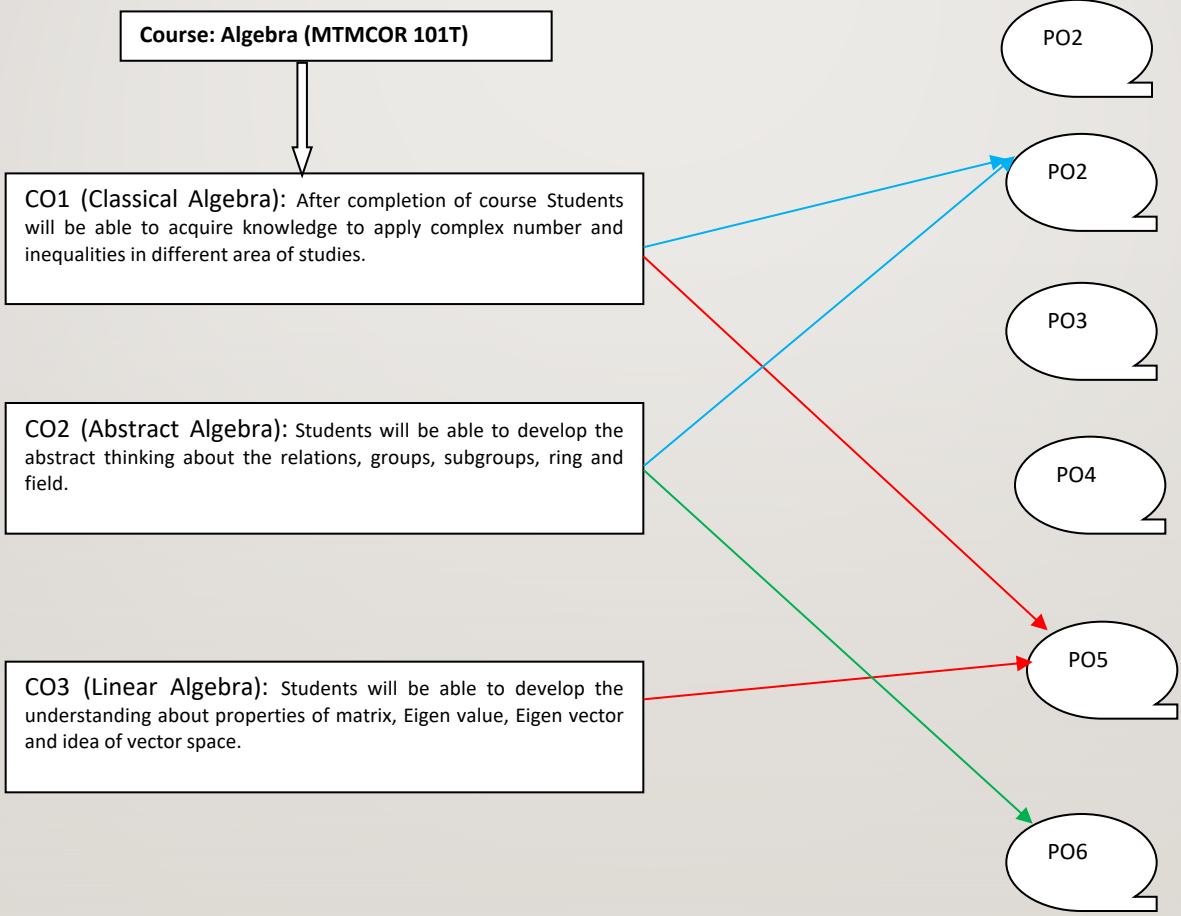
 Moderate correlation


 Low correlation





Semester-I, Minor (Mathematics)

Course: Algebra (MTMCOR 101T)



 Highly correlated

 Moderate correlation

 Low correlation

Semester-II, Minor (Mathematics)

Course: Calculus (MTMCOR 202T)

CO1 (Limits, Continuity and Differentiability): Able to acquire the knowledge to analyze the idea of limits, continuity and differentiability.

CO2 (Mean Value Theorems and its Applications): Students will be able to develop the abstract thinking about the applicability of different mean value theorems.

CO3 (Integral Calculus): Students will be able evaluate the proper and improper integral and can be able to apply these in different real field.

CO4 (Applications of Calculus): Students will be able to determine curvature, maxima minima, length of curve and volume and surface area.

PO1




PO2

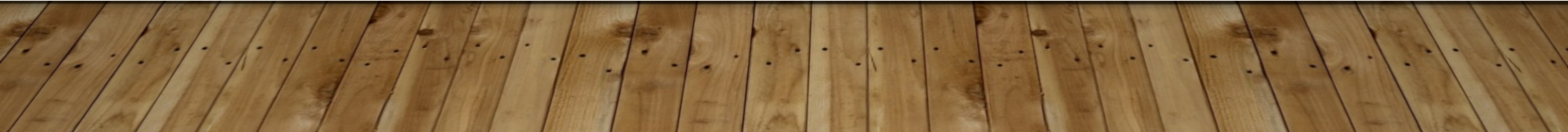
PO3

PO4

PO5

PO6

 Highly correlated  Moderate correlation  Low correlation



Semester-III, Minor (Mathematics)

Course: Differential Equations-I and Mechanics-I (MTMCOR 303T)

CO1 (First order ODE and its applications): After completion of course, Students will be able to apply first order ODE in different area of applications.

CO2 (Linear and nonlinear homogenous ODEs): Students will be able to develop the knowledge to solve higher order differential equations.

CO3 (First Order PDE): Students will be able to classify, analyse and solve the first order PDE.

CO4 (Second Order PDE): Students will be able to develop the idea for solving different real-world problem.

PO1

PO2

PO3

PO4

PO5

PO6



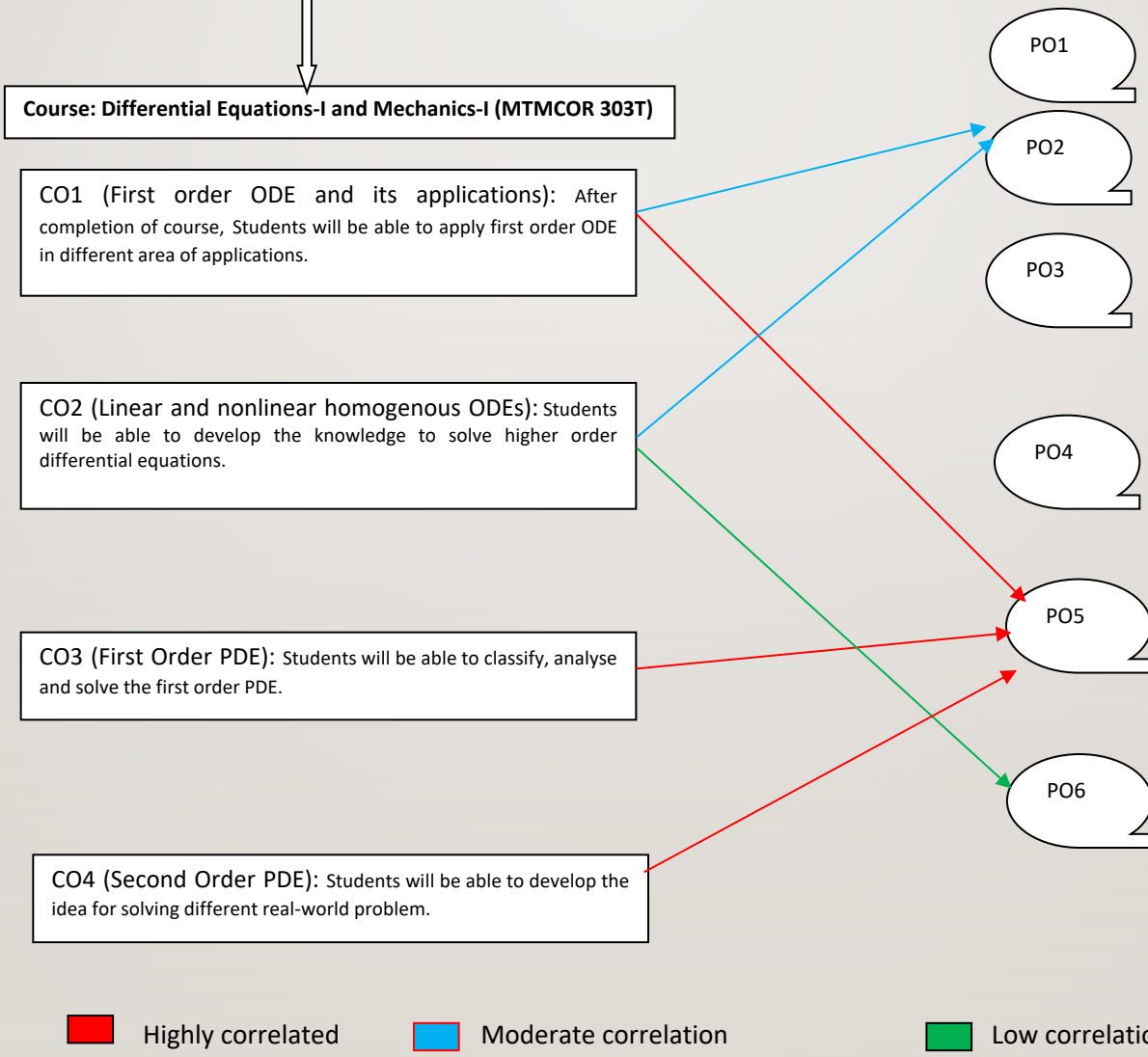
Highly correlated



Moderate correlation



Low correlation



Semester-I, Skill Enhancement Course (Mathematics)

