

Department of Mathematics with Computer

Govt. Autonomous College, Rourkela

Program outcome

PO1: Provides technology-oriented students with the knowledge and ability to develop creative solutions. Develop skills to learn new technology.

PO2: Apply MATLAB and software development concepts to construct graphs by coding.

PO3: Design and develop different models based systems in the areas related to codings,

PO4: Students will attain an understanding of professional, ethical, legal, security and social issues and responsibilities.

Program Specific Outcome

PSO1. Applying theoretical concepts and technology for real world problems
PSO2. Possess skill sets in programming

PSO3. Inculcate skills for team work and leadership

PSO4. Providing computing solutions at par with global standards

PSO5. Promote continuous learning and innovation in research in the field of technology

BSC (Mathematics with computer) M.T.C

SEMISTER I:

Core 1: Calculus- To be able to know about differentiation, integration, Different shape of curves.

Core 2: Discrete mathematics – To understand the basics of mathematics in terms of Graph theory

SEMISTER II:

Core 3: Real Analysis- To be able to know about countable set, open set, closed set, Sequence and Series.

Core 4: Differential Equation with Mathematical Modelling- To understand the basics concept of order and degree, 1st order and 1st degree differential Equation, 1st order and higher degree and different types of models.

SEMISTER III:

Core 5: Real Analysis- To be able to know sequence , limit of a sequence and series,

Core 6: Group Theory- To know about set concept, Group and different types of groups

Core 7: Partial Differential Equation- To be able to know about order and degree and linear and non-linear partial differential equations, 2nd order non-linear equations.

SEMISTER IV:

Core 8: Numerical Analysis- To know about error and its types, Different interpolation formulae and Numerical integration.

Core 9: Advanced Real Analysis- To be able to know about integrability of piece wise continuous and monotonic function, convergence of sequence and series.

Core 10: Ring Theory and Linear Algebra- To know about Ring theory and its properties ,vectors and vector spaces and linear Transformation.

SEMISTER V:

Core 11: Multivariate Calculus- To know about limit and continuity of more than one variables, double and triple integration.

Core 12: Probability and Statistics: To know about the concept of probability and statistics

DSE 1: Number Theory-To know about gcd and lcm, and about different numbers

DSE 2: Discrete Mathematics- – To understand the basics of mathematics in terms of Graph theory

SEMISTER VI:

Core 13: Metric Space and Complex Analysis: To know about metric space and complex analysis

Core 14: Operation Research: .To be able to know about solving equation/ in equations of more than one variable by Graphical and Simplex Method. Transportation and Assignment problems,

DSE 3: Differential Geometry- To know about space curves, involute and evolute

DSE 4: PROJECT- - Building software project and their Application in different fields.