| Semester | AUG 2022 |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Open to semester | 13,21 |
| Course code | MT6154 |
| Course title | Topology - I |
| Credits | 4 /4 |
| Course Coordinator & participating faculty (if any) | Rama Mishra |
| Nature of Course | Lectures and Tutorials |
| Pre-requisites | Basic Point Set Topology |
| Objectives (goals, type of students for whom useful, outcome etc) | To make students familiar with basic algebraic Topology as well as differential Topology notions. This course is meant for First year PhD students as well as second year iPhD students. |
| Course contents (details of topics /sections with no. of lectures for each) | Homotopy Theory, Fundamental Groups, Covering spaces, Differentiable manifolds, Tangent bundle, Vector fields and smooth forms, Integration on Manifolds, DeRham Cohomology. |
| Evaluation /assessment | End-Sem Examination-40% Mid-Sem Examination-40% Others-Tow quizes 10% each% |
| Suggested readings (with full list of authors, publisher, year, edn etc.) | Algebraic Topology by Hatcher Differential Topology by Gullimen and Pollack |