



# SYLLABUS

<b>Course Title</b>	<b>DISSERTATION ON MATERIAL PREPARATION AND CHARACTERIZATION</b>
<b>Course Code</b>	MPM 401
<b>Course Credit</b>	Lecture : 00
	Tutorial : 00
	Practical : 25
	Total : 25

## Detailed Syllabus:

<b>Sr. No</b>	<b>Name of chapter &amp; Details</b>	<b>Session Allotted</b>
	<b>Material Science Project</b>	

## Instructional Method and Pedagogy:

1. Project will be conducted in the Material Science Laboratory.
2. Synthesized material will be sent for characterization in various educational institute & National Research Institutes.
3. Use different software to calculate various parameters of synthesized material.

## Students Learning Outcomes:

After Successful completion of the above course, students will be able to:

- **Recall** and **Identify** physical properties of crystalline & oxide materials.
- **Choose** appropriate method to synthesize material.
- **Interpret** powder XRD, FTIR, CHN, magnetization, optical, dielectric results of material.
- **Calculate** particle size, force constant, Carbon-Nitrogen-Oxygen concentration, Curie temperature of synthesized material.
- **Compare** results of various characterization techniques

## Text book:

1. Research papers on material science.

## Reference Books:

1. Research papers on material science.