

GUJARAT TECHNOLOGICAL UNIVERSITY

TEXTILE PRODUCTION

B. E. SEMESTER: VII

Subject Name: **Computer Aided Designing & Computer Colour Matching**
[CAD/CCM]

Subject Code: **172802**

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	University Exam (E)		Mid Sem Exam (Theory) (M)	Practical (Internal)
				Theory	Practical		
4	0	3	7	70	30	30	20

Sr. No	Course Content	Total Hrs.
1.	Brief Discussion Of Colour Science, Perception Of Colour, Colour Mixing Laws, Metamarism, Colour Order Systems, Colour Difference Measurements Etc.	06
2.	Colour Assessment In Textile- Visual And Instrumental Colour Assessment. Method Of Visual Assessment. Standard Conditions For Visual Evaluation. Colourants Formulation By Visual Assessment.	08
3.	Optical Theory For Colour Matching. Reflectance Curves, Tristimulus Values, Kubelka- Munk Theory Etc.	06
4.	Computer Colour Matching-Study Of Various Accessories Like Spectrophotometer, Software & Hardware Systems Etc In CCM. Theory And Process Of Pass/Fail And Shade Sorting, Dye Strength & Tone Analysis, Recipe Formulation, Recipe Correction, Etc. Assessment Of Whiteness And Degree Of Yellowness. Advantages And Limitations Of CCM Techniques.	08
5.	Computer Aided Designing For Printed Fabrics. Scanning, Colour Separation, Separation Of Printing, Interface, Combination Etc.	08
6.	Computer Aided Designing For Dobby & Jacquard Fabrics.	08

Practical:

This shall be based on prescribed syllabi.

Text Books:

Sr. No.	Title	Author
1.	Instrumental Colour Measurement & Computer Aided Colour Matching	H. S. Shah

Reference Books:

Sr. No.	Title	Author
1.	Computer Colour Analysis	A.D.Sule
2.	Watson-Textile Design & Colour	Z. Grosicki
3.	CAD in Clothing & Textiles	Winifred Aldrich