

SRM UNIVERSITY
FACULTY OF ENGINEERING AND TECHNOLOGY
SCHOOL OF ELECTRONICS AND COMMUNICATION ENGINEERING
DEPARTMENT OF ECE

Course Code, Title : EC0323, Communication Lab II
Year & Semester : III & V semester
Course Time :

Day	Section							
	A		B		C		D	
	Hr	Time	Hr	Time	Hr	Time	Hr	Time
Monday	2,3,4	9.20 to 12.00 pm					5,6,7	1.30 to 4.00 pm
Tuesday			2,3,4	9.20 to 12.00 pm	5,6,7	1.30 to 4.00 pm		
Wednesday	5,6,7	1.30 to 4.00 pm			2,3,4	9.20 to 12.00 pm		
Thursday							2,3,4	9.20 to 12.00 pm
Friday			5,6,7	1.30 to 4.00 pm				

Location : communication/DSP LAB

Faculty Details:

Name of the staff	Section	Office	Office Hours	Mail ID
Mr.R.Ramesh	A	Tech park 706	12.30-1.30 Pm	ramesh7373@gmail.com
Mrs.Shirly Edward	B	Tech park 706	12.30-1.30 Pm	Shirly_a@rediffmail.com
Ms.K.Vadivukkarasi	C	ESB204	12.00PM-1.30PM	vadivukk10@rediffmail.com
Ms.J.Radhika	D	Tech park 03	12.30-1.30 Pm	radhikanehu@yahoo.com

Required Text Books:

1. Simon Haykin, "Communication Systems" (3/e) John Wiley & Sons, 1998.
2. Taub & Schilling, "Principle of Communication Systems" (2/e)
3. John G. Proakis, "Digital Communication", McGraw Hill Inc 2001.
4. Bernard Sklar, "Digital Communication, Fundamentals and Application", Pearson Education Asia, 2nd Edition, 2001.

Web Resource:

<http://www.cnx.org.com/>
<http://www.nptel.iitm.acl/>
www.mathworks.com
www.en.pudn.com
www.radio-1.ee.bal.ca

Assessment details

Prelab	20 marks
Lab Performance	30 marks
Post lab	25 marks
Total	75 marks

Outcomes

Students who have successfully completed this course

Course outcome	Program outcome
To carry out experiments on various digital communications modulation schemes using kits. MATLAB software is used to simulate the digital modulation techniques.	b. ability to identify, formulate & solve engineering plans c. ability to design & conduct experiments, analyze & interpret data. d. ability to design a Component or process as per needs & specifications f. Students will be able to demonstrate their skills to use modern engineering tools, MATLAB software's to analyze problems

Detailed Session Plan

Day	Name of the experiment	Reference
DAY 1	Time Division Multiplexing	✎ Simon Haykin, "Communication Systems" (3/e) John Wiley & Sons, 1998. ✎ Taub & Schilling, "Principle of Communication Systems" (2/e)
DAY 2	Pulse Code Modulation and demodulation	✎ Simon Haykin, "Communication Systems" (3/e) John Wiley & Sons, 1998. ✎ Taub & Schilling, "Principle of Communication Systems" (2/e)
DAY 3	Differential pulse code modulation and demodulation	✎ Simon Haykin, "Communication Systems" (3/e) John Wiley & Sons, 1998. ✎ Taub & Schilling, "Principle of Communication Systems" (2/e)
DAY 4	Delta Modulation and demodulation	✎ Simon Haykin, "Communication Systems" (3/e) John Wiley & Sons, 1998. ✎ Taub & Schilling, "Principle of Communication Systems" (2/e)
DAY 5	FSK Modulation and demodulation	✎ Simon Haykin, "Communication Systems" (3/e) John Wiley & Sons, 1998. ✎ Taub & Schilling, "Principle of Communication Systems" (2/e)
DAY 6	PSK Modulation and demodulation	✎ Simon Haykin, "Communication Systems" (3/e) John Wiley & Sons, 1998. ✎ Taub & Schilling, "Principle of Communication Systems" (2/e)
DAY 7	Data formatting	✎ Simon Haykin, "Communication Systems" (3/e) John

		Wiley & Sons, 1998. ⌘ Taub & Schilling, “Principle of Communication Systems” (2/e)
DAY 8	ASK Modulation and demodulation using MATLAB	Getting Started With MATLAB: Version 6 – Rudra Prathap www.mathworks.com
DAY 9	FSK Modulation and Demodulation using MATLAB	Getting Started With MATLAB: Version 6 – Rudra Prathap www.mathworks.com
DAY 10	PSK Modulation and Demodulation using MATLAB	Getting Started With MATLAB: Version 6 – Rudra Prathap www.mathworks.com
DAY 11	QPSK Modulation using MATLAB	Getting Started With MATLAB: Version 6 – Rudra Prathap www.mathworks.com
DAY 12	DPSK Modulation and demodulation using MATLAB	Getting Started With MATLAB: Version 6 – Rudra Prathap www.mathworks.com