

PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems



Module PMRF-ISSS028/2024

<u>Digital Electronics - Problem Solving</u>

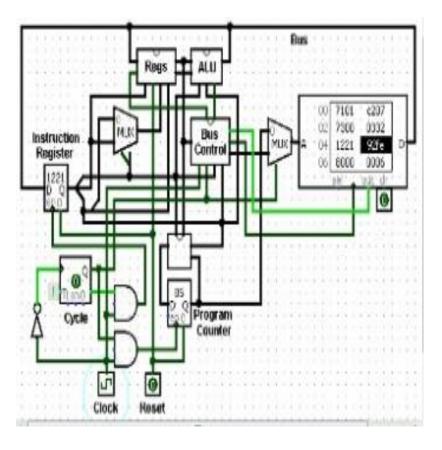
Name of the PMRF student

Details of the content of the module

Sachin Sampath H

Required background of the students taught

ECE, EE, EECS



Each Lecture will briefly brush-up the theory, followed by a problem-solving tutorial on the following topics:

Week 1: Gates and functions

(Boolean algebra, SOP, POS)

Week 2: K-maps and combinational circuits

(mux/demux, encoders, decoders)

Week 3: Number systems and arithmetic

circuits

(adder, comparator, ALU)

Week 4 : Sequential circuits

(flip-flops, registers)

Week 5 : Counters and state models

(Mealy and Moore models)

Week 6: Converters and memory

Schedule of the module

Start Date: February 29, 2024

End Date: April 6, 2024

Timings: Every Thursday and Saturday, 6 p.m. – 8

p.m.

Meeting link: Will be shared later

Link

Contact email ID: <u>isss.forum@gmail.com</u>

Registration link:

https://forms.gle/L8tvVYN5mhrai61D8