

## INNOVATIONS IN TEACHING AND LEARNING

**Subject:** Signals & Systems

**Class:** S.Y. BTech E&TC

**Topics:** Continuous and discrete-time signals, LTI systems, Signal operations, Convolution, sampling, correlation, statistical parameters

### **NAME OF THE ACTIVITY: Matlab Simulator**

- I. **Concept:** MATLAB simulator is crucial for engineers and scientists because it allow for the creation and analysis of complex systems in a virtual environment before physical implementation.
- II. **Objective (Goal):** Understand the concepts of Signals & Systems on virtual platform.
- III. **Appropriateness (Relevance of Selected Method):** Signals and Systems is a heavy subject dealing with multiple mathematical concepts. These concepts are abstract and really heavy on mathematical visualization. Virtual platform like Matlab can enhance concepts understanding since it is interactive tool.
- IV. **Effective Presentation (Implementation Details):**

After completion of particular concept in the class, same concept is explained to students through the Matlab code and respective output in theory sessions itself. Students are asked to practice on the same topic with different signals. The Matlab tutorials solved by students are uploaded on ERP platform and the weight of 5 marks is given for insemester evaluation.



Fig.1 Concept explanation through Matlab coding







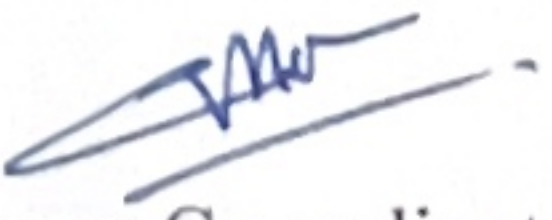
Question 1.Is this Innovative Teaching and Learning Methodology useful during content delivery?

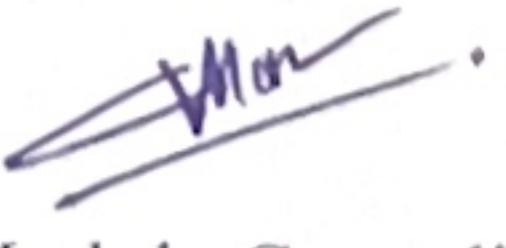
Question 2. Did this innovation increase student motivation or participation?

Question 3.Will it show improvement in student learning?

Question 4.Suggestions for improvement in future iterations.

Category	Name of Peer	Organiza tion	Q.1	Q.2	Q.3	Q. 4 Suggestion/Critique
Internal	Swapnane pattanaik	RSIOE	3	2	2	occurance of session should be more
External	M.S. Vena Kulkarni	PCCOE	3	3	2	Good initiative. Give flavor of simulink also
External	Dr-M. Rajput	DYPCOE	3	2	2	As SS is mathematical signal opmaly can be visualise shagh challes

  
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