

DEPARTMENT OF ECE

ACTIVITY BASED LEARNING

Course Code & Course Title : EC8501 & Digital Communication
Year/Sem/Branch : III/V/ECE
Name of Faculty : Dr. V.Samuthira Pandi
Designation : Assistant Professor (S.G)
Unit Title : Error Control Coding
Topic : Viterbi decoder
LO : Implement the code tree, code trellis and state diagram
Bloom's Taxonomy Level : Apply

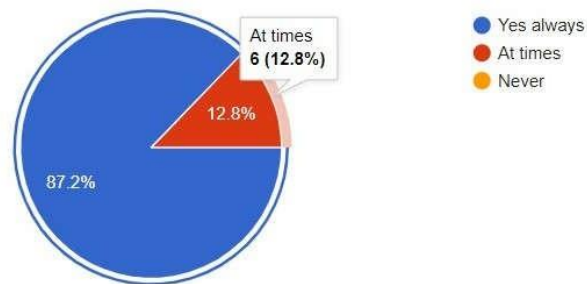
| S.No. | Title | Description |
|-------|------------------------------------|--|
| 1 | Concept | The Viterbi algorithm provides an efficient way of finding the most likely state sequence in the maximum a posteriori probability sense of a process assumed to be a finite-state discrete-time Markov process |
| 2 | Challenges Faced | The students felt conventional method of Chalk and board teaching or PPT to be very vague and not able to grasp concepts clearly. |
| 3 | Name of the Activity | Group Discussion As an introduction the algorithm was be taught in the beginning of the class with code trellis asexamples. One relevant topic for implement of any other state diagram application was given for them to discuss as teams and come out with their ideas. |
| 4 | Description of the Activity | Class Strength: 59 5 groups each with 11 to 12 members The entire class of 59 students was divided into heterogenous groups with all levels of students. Each student in the group will come out with their own idea and the best of all shall be chosen for presentation. At the end of the class each group will share their own presentation and ideas and other groups can ask their queries and get clarified or the group can improvise their learning knowledge. |

| | | |
|---|--|---|
| 5 | Feedback from Learners (Consolidated) | <p>Feed back forms were circulated to each student with following questions:</p> <p>Explanation of the concept: Very well explained/ Vague/ Not understandable</p> <p>Were Real time examples explained relevant to topic: Yes always/ At times/ Never</p> <p>Were Regular assessments conducted: Yes / No</p> <p>Were All your queries and doubts answered and clarified? Give your rating out of 5</p> <p>On the whole how far have you understood about the concepts in this subject? Give your rating out of 5</p> |
| 6 | Feedback of the Faculty about this activity | <p>Earlier when I handled the same subject I adopted conventional methods only where students never interacted in between or even when asked questions. This showed their lack of understanding. This made me adopt a different methodology so that the students would involve among themselves keep themselves active and interact frequently by asking their doubts. I feel Activity based learning is very good for application oriented subjects.</p> |

Analysis Report Chart (Generated using Google Form):

Were Real time examples explained relevant to topic? Give rating

47 responses



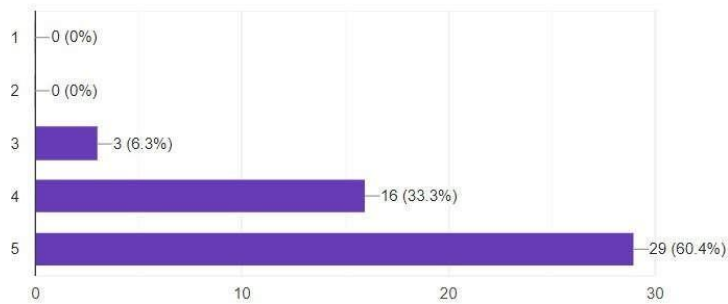
Explanation of the concept

46 responses



On the whole how far have you understood about the concepts in this subject? Give your rating out of 5

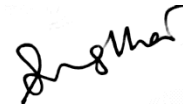
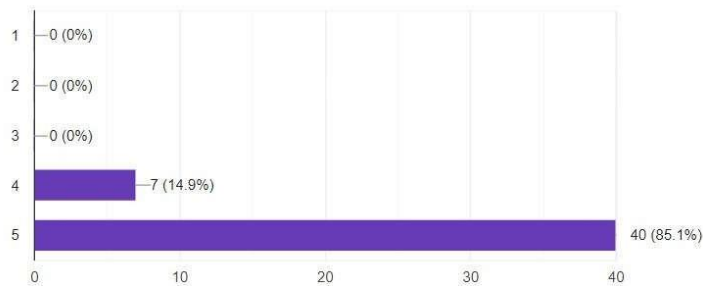
48 responses



Were All your queries and doubts answered and clarified? Give your rating out of 5



47 responses



Signature of the Course Faculty

Signature of HOD

Evidences/Proofs :

| Team No. | Team Score (20) | Positives observed in Team | Negatives observed in team |
|----------|-----------------|--|--|
| 1 | 15 | Good Coordination | Nil |
| 2 | 14 | Good attention in class | Lack of motivation and hesitation to present |
| 3 | 18 | Extreme involvement in discussion | No |
| 4 | 17 | Sincerity and effort to think more than what is taught | No |
| 5 | 14 | Involvement in discussion | Lack of Confidence |

| | | | |
|----|----|---|------------------|
| 6 | 13 | Trying to think better related to topic | Language problem |
| 7 | 18 | Good Team work | No |
| 8 | 19 | Good Team work | No |
| 9 | 19 | Good Team work | No |
| 10 | 15 | Sincerity and good effort | No |

Student Feedback Form

Date: 12.03.2021

Name: Divya S

Branch: ECE

Year/Sem: III/V

Subject Code & Name: EC8501 Digital Communication

Faculty: Dr. V.Samuthira Pandi

Activity: Team based Learning

Topic: Viterbi decoder

Rate the activity from 4 to 1. (4 being the highest)

NA – Not Applicable

| S.No. | Description | 4 | 3 | 2 | 1 | NA |
|-------|---|---|---|---|---|----|
| 1 | Relevance of the activity to the concept | 4 | | | | |
| 2 | How far this activity is understandable when compared to chalk & board method of Teaching | 4 | | | | |
| 3 | Faculty was able to explain the concept very easily through this activity. | 4 | | | | |
| 4 | I was able to easily correlate the activity and the concept | | 3 | | | |
| 5 | The team work was interesting | 4 | | | | |
| 6 | This activity helped me to have better Understanding | 4 | | | | |
| 7 | Overall, I would rate this activity as | 4 | | | | |

*What did you like most about today's session?

The activity given to us gave much confidence when discussed as team.

*What are the dislikes of today's session?

Nothing

Student Feedback Form

Date: 12.03.2021

Name: Dharani

Branch: ECE

Year/Sem: III/V

Subject Code & Name: EC8501 Digital Communication

Faculty: Dr. V.Samuthira pandi

Activity: Team based Learning

Topic: Viterbi decoder

Rate the activity from 4 to 1. (4 being the highest)

NA – Not Applicable

| S.No. | Description | 4 | 3 | 2 | 1 | NA |
|-------|---|---|---|---|---|----|
| 1 | Relevance of the activity to the concept | 4 | | | | |
| 2 | How far this activity is understandable when compared to chalk & board method of teaching | | 3 | | | |
| 3 | Faculty was able to explain the concept very easily through this activity. | 4 | | | | |
| 4 | I was able to easily correlate the activity and the concept | 4 | | | | |
| 5 | The team work was interesting | 4 | | | | |
| 6 | This activity helped me to have better Understanding | 4 | | | | |
| 7 | Overall, I would rate this activity as | 4 | | | | |

*What did you like most about today's session?

Nice Subject. Method of teaching is remarkable

*What are the dislikes of today's session?

Nil

Student Feedback Form

Date: 12.03.2021

Name: Divagar Y

Branch: ECE

Year/Sem: III/V

Subject Code & Name: EC8501/Digital Communication

Faculty: Dr. V.Samuthira Pandi

Activity: Team based Learning

Topic: Viterbi decoder

Rate the activity from 4 to 1. (4 being the highest)

NA – Not Applicable

| S.No. | Description | 4 | 3 | 2 | 1 | NA |
|-------|---|---|---|---|---|----|
| 1 | Relevance of the activity to the concept | | 3 | | | |
| 2 | How far this activity is understandable when compared to chalk & board method of Teaching | | 3 | | | |
| 3 | Faculty was able to explain the concept very easily through this activity. | 4 | | | | |
| 4 | I was able to easily correlate the activity and the concept | | 3 | | | |
| 5 | The team work was interesting | 4 | | | | |
| 6 | This activity helped me to have better Understanding | 4 | | | | |
| 7 | Overall, I would rate this activity as | 4 | | | | |

*What did you like most about today's session?

Interesting Activity to learn concept in simple way

*What are the dislikes of today's session?

Nil
