

| Course Number and Name   |   |   |   |   |   |               |   |   |   |   |   |   |
|--|---|---|---|---|---|---------------|---|---|---|---|---|---|
| BEC007 - DIGITAL IMAGE PROCESSING  |   |   |   |   |   |               |   |   |   |   |   |   |
| Course Objectives  |   |   |   |   |   |               |   |   |   |   |   |   |
| <ul style="list-style-type: none"> <li>To study the image fundamentals and mathematical transforms necessary for image processing.</li> <li>To study the image enhancement techniques</li> <li>To study image restoration procedures.</li> <li>To study the image compression procedures.</li> </ul> |   |   |   |   |   |               |   |   |   |   |   |   |
| Prerequisites  |   |   |   |   |   | Co-requisites |   |   |   |   |   |   |
| BEC505-Digital Signal Processing   |   |   |   |   |   | Nil           |   |   |   |   |   |   |
| Course Outcomes (COs)  |   |   |   |   |   |               |   |   |   |   |   |   |
| CO1: Review the fundamental concepts of a digital image processing system.   |   |   |   |   |   |               |   |   |   |   |   |   |
| CO2 : Analyze images in the frequency domain using various transforms.   |   |   |   |   |   |               |   |   |   |   |   |   |
| CO3 : Evaluate the techniques for image enhancement and image restoration.   |   |   |   |   |   |               |   |   |   |   |   |   |
| CO4 : Categorize various compression techniques.   |   |   |   |   |   |               |   |   |   |   |   |   |
| CO5: Interpret Image compression standards.  |   |   |   |   |   |               |   |   |   |   |   |   |
| CO6 : Interpret image segmentation and representation techniques.  |   |   |   |   |   |               |   |   |   |   |   |   |
| Student Outcomes (SOs) from Criterion 3 covered by this Course   |   |   |   |   |   |               |   |   |   |   |   |   |
| COs/SOs  | a | b | c | d | e | f             | g | h | i | j | k |   |
| CO1  | H |   |   |   |   | M             |   | H |   |   |   |   |
| CO2  | M | M | H |   |   |               | H |   | L |   |   |   |
| CO3  | M | H | M |   |   |               | M | M | M |   |   | H |
| CO4  | M | H |   |   | M |               |   |   | M | H |   | M |
| CO5  |   | M |   |   | M | M             | M |   | L |   |   | M |
| CO6  |   |   |   | M | M | H             | M |   |   |   |   |   |