

21AID14	NODE JS	L	T	P	C
		3	0	0	3
<p><b><u>Course Objectives</u></b></p> <ul style="list-style-type: none"> <li>• Understand the JavaScript and technical concepts behind Node JS</li> <li>• Structure a Node application in modules</li> <li>• Understand and use the Event Emitter</li> <li>• Understand Buffers, Streams, and Pipes</li> <li>• Build a Web Server in Node and understand how it really works</li> <li>• Use npm and manage node packages</li> <li>• Build a web application and API more easily using Express</li> <li>• Connect to a SQL or Mongo database in Node</li> <li>• Understand how the MEAN stack works</li> </ul>					
<b>UNIT I</b>	<b>INTRODUCTION AND MODULES</b>	<b>9 Hours</b>			
Introduction -What is Node JS? -Advantages of Node JS -Traditional Web Server Model - Node.js Process Model. Modules- Functions -Buffer Module -Module Types -Core Modules - Local Modules -Module.Exports					
<b>UNIT II</b>	Node Package Manager and Creating Web server	<b>9 Hours</b>			
What is NPM -Installing Packages Locally -Adding dependency in package.json - Installing packages globally - Updating packages Creating web server -Handling http requests - Sending requests					
<b>UNIT III</b>	File System	<b>9 Hours</b>			
Fs.readFile - Writing a File - Writing a file asynchronously - Opening a file - Deleting a file - Other IO Operations					
<b>UNIT IV</b>	Events and Express.JS	<b>9 Hours</b>			
Event Emitter class - Returning event emitter - Inhering events - Configuring routes - Working with express					
<b>UNIT V</b>	Database connectivity	<b>9 Hours</b>			
Connection string - Configuring - Working with select command - Updating records - Deleting records					
<b>UNIT VI</b>	<b>CASE STUDIES</b>				
<b>Case studies</b>					
<p><b><u>Course Outcomes:</u></b></p> <ul style="list-style-type: none"> <li>• Develop a web application which involves database operations</li> </ul>					
<p><b><u>Text books:</u></b></p> <ol style="list-style-type: none"> <li>1. Azat Mardan, Practical Node.js: Building Real-World Scalable Web Apps, Apress; 1st ed. edition , 2014.</li> <li>2. Basarat SyedBeginning Node.js Apress; 1st ed. edition 2014.</li> </ol>					
<p><b><u>Reference Books:</u></b></p> <ol style="list-style-type: none"> <li>1. Caio Ribeiro Pereira Building APIs with Node.js Apress; 1st ed. Edition, 2016.</li> <li>2. David HerronNode.js Web Development Packt Publishing Limited; 5th edition 2020.</li> </ol>					