

**NIRMA UNIVERSITY**  
**Institute of Technology**  
**B. Tech. Computer Science and Engineering**  
**Semester – VI**  
**Department Elective-III**

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<b>Course Code</b>	2CSDE69
<b>Course Title</b>	LAMP Technology

**Course Outcomes:**

At the end of the course, students will be able to –

1. describe and interpret the basics of open source and LAMP technologies
2. Manage web server for different application scenarios
3. design and develop applications using open source technologies.

**Syllabus:**

**Teaching  
Hours: 30**  
**02**

**Unit I**

**Introduction to LAMP Technology:** Characteristics and Advantage of LAMP, Installation and Configuration of LAMP stack. Understanding of Apache Web Server, Understanding and setting of various configuration files of LAMP stack, Configuring nginx server.

**Unit II**

**PHP Programming fundamentals:** Understanding syntax and variables of PHP, Control statements and functions, passing information between PHP pages, String Handling, arrays, improving PHP/MySQL efficiency.

**Unit III**

**MySQL:** Introduction to MySQL, Creation of MYSQL database, Creating tables, Implementation of DDL and DML queries on MYSQL database. phpmyadmin to manage MySQL database. MySQL database administration.

**Unit IV**

**Object Oriented programming with PHP :** What Is Object-Oriented Programming?, Basic PHP Constructs for OOP, Advanced OOP Features, OOP Style in PHP, String and Regular Expression Functions, Handling Session and Cookies in PHP

**Unit V**

**File Handling:** Understanding PHP File Permissions, File Reading and Writing Functions, File system and Directory Functions.

**12**

**06**

**06**

**04**

**Self-Study:**



The self-study contents will be declared at the commencement of semester. Around 10% of the questions will be asked from self-study contents.

### **Laboratory Work:**

Laboratory work will be based on the above syllabus with minimum 10 experiments to be incorporated.

### **Suggested Readings<sup>^</sup>:**

1. PHP MYSQL Bible: Steve Suehring, Tim Coverse, Joyce Park, John Wiley & Sons
2. Beginning PHP6, Apache, MySQL Web Development: Timothy Boronczyk, Elizabeth Naramore, Jason Gerner, Yann Le Scouarnec, Jeremy Stolz, Michael K. Glass, Wiley
3. Eric Filson , Erick Rosebrock, Setting up LAMP: Getting Linux, Apache, MySQL, and PHP Working Together, SyBex
4. Jason Gerner, Elizabeth Naramore, Morgan L. Owens, Matt Warden, Professional LAMP Linux, Apache, MySql and PHP5 Web development , Wiley
5. James Lee , Brent Ware, Open Source Development with LAMP: Using Linux, Apache, MySQL, Perl, and PHP , Pearson Education

L=Lecture, T=Tutorial, P=Practical, C=Credit

<sup>^</sup>this is not an exhaustive list