Course Code	40119205		
Category	Core Subject		
Course Title	**Advance Web Development in Laravel**		
Scheme and Credits	Theory	Tutorial	Lab	Credits
	1	0	4	3
Pre-requisites (if any)	Strong background and Knowledge of HTML, CSS, JavaScript and PHP is mandatory.		

1. **Course Objectives:**

1.	To understand the LARAVEL framework
2.	To understand the concept of MVC framework
3.	Creating an authentication system for your application
4.	Student should be able to design and code responsive website
5.	Student should be able to send mail and notification to user.
6.	Student should be able to create database using migrate or Eloquent.
7.	Student should be able to meet current modern market requirement and create

2. Course Contents

Unit	Course Content	Weightag
Unit I	**Introduction to LARAVEL** What is laravel, features of laravel MVC architecture, structure of laravel application (laravel directory structure) **Installation** Basic requirements for laravel, using laravel installer, using composer, how does composer work? Installation on Windows, finding and installing new packages **Configuration** Introduction, environment configuration, protecting sensitive configuration, maintenance mode, database configuration (setting database connection parameter for laravel and artisan) **Artisan** Artisan command line tool, database creation, artisan Migration, migration structure, creation migration, database seeding	15%
Unit II	**Laravel Routing, Controllers** Route definitions, route groups, controllers, route model binding, route caching, form method spoofing, csrf protection, redirects, aborting the request, custom responses **Laravel views** Laravel views, passing data to view **Blade template :** Template inheritance, master layout, extending the master layout, display variables, blade conditional statements, blade loops, executing php functions in blade	20%
Unit III	**Laravel Migration** Laravel migration, migration structure, generating migrations, migration commands **Laravel file upload, laravel session** **Laravel database** Laravel database, laravel eloquent, laravel relationship model, laravel tinker **Eloquent orm eloquent orm models:** Naming conventions, table name & primary keys, timestamps **Basic operations:** create, retrieve, update, delete using models, displaying data from models in views	25%

Unit IV	**User authentication and authorization :** Using the auth() global helper and the auth façade **Validation** Defining the routes, creating the controller, writing the validation logic, displaying the validation errors, array validations, creating new validators, error messages & custom errors **Available validators:** Accepted, after (date), alpha, alpha dash, alpha numeric, array, before (date), between, boolean, date, date format, different, digits, digits between, e-mail, exists(database), image (file), integer, max, min, not in, numeric, regular expression, required, string custom validation rules.	**20%**
Unit V	**Advanced LARAVEL** **Request and response:** Laravel's request lifecycle, the request object, the response object, laravel and middleware **Mail , notifications** **Storage and retrieval:** Basic file uploads and manipulation sessions, cache, cookies, full-text search with laravel scout	**20%**

Desirable:

3. Text Books:
1. Matt Stauffer, "LARAVEL Up and Running, A framework for building modern PHP Apps", 1st Edition, O'REILLY (ISBN: 978-1-491-93608-5)
2. Martin Bean, "Laravel 5 Essentials", Packet Publishing, ISBN 978-1-78528-301-7

4. Webilography :
1. Web Reference : https://www.tutorialspoint.com/laravel/index.htm
2. Web Reference : https://www.javatpoint.com/laravel
3. Web Reference : https://laravel.com/docs/7.x/quickstart

5. Accomplishment of the student after completing the course: :
1. Students will understand LARAVEL framework.
2. Student will understand MVC framework.
3. Student will understand how to design and develop responsive web application using LARAVEL.

6. Laboratory Exercises
1. General Guidelines
- Group: 3-4 Person.
- The project should be free from plagiarism of any kind.

- It is mandatory that the project should be developed using LARAVEL 7.1 or later
2. Version on Linux or Windows Platform.
3. This may not be a live project
4. Use any database for storing data.