Module Name (Computer Engineering/IT)	Total Hours
Web Application Development with Open Source Frameworks	**30**

Objectives:
- Develop web applications using LARAVEL Framework
- Storing and using data by creating data tables and raw SQL statements
- Using controllers and routes for APIs and URLs
- Displaying views and loading nested views
- Creating and using composer packages
- Implementing security and sessions effectively using encryption/decryption

Topic	Sub Topic	Hours
Installation	Server Requirements Installing Laravel Configuration Web Server Configuration Pretty URLs	4
Configuration	Environment Variable Types Retrieving Environment Configuration Determining The Current Environment Hiding Environment Variables From Debug Pages Accessing Configuration Values Configuration Caching Maintenance Mode	4
Directory Structure		4
Request Lifecycle		4
Service Container	Binding Binding Basics Binding Interfaces To Implementations Contextual Binding Tagging Extending Bindings Resolving The Make Method Automatic Injection Container Events	4
Service Providers	Writing Service Providers The Register Method The Boot Method Registering Providers Deferred Providers	4
Facades	When To Use Facades Facades Vs. Dependency Injection Facades Vs. Helper Functions How Facades Work Real-Time Facades Facade Class Reference	4
Contracts	When To Use Contracts Loose Coupling Simplicity	4

Topic	Sub Topic	Hours
	How To Use Contracts	
	Contract Reference	
Basic Concepts	Routing	2
	Middleware	
	CSRF Protection	
	Controllers	
	Requests	
	Responses	
	Views	
	URL Generation	
	Session	
	Validation	
	Error Handling	
	Logging	
Frontend	Blade Templates	2
	Localization	
	Frontend Scaffolding	
	Compiling Assets	
Security	Authentication	2
	API Authentication	
	Authorization	
	Email Verification	
	Encryption	
	Hashing	
	Password Reset	
Advance Concepts	Artisan Console	4
	Broadcasting	
	Cache	
	Collections	
	Events	
	File Storage	
	Helpers	
	Mail	
	Notifications	
	Package Development	
	Queues	
	Task Scheduling	
Database	Getting Started	4
	Query Builder	
	Pagination	
	Migrations	
	Seeding	
	Redis	
	Total Hours	46