

Course Code	TKIT165122	
Course Name	Web Application Development	
Course Instructors	Ridi Ferdiana	
Course Type	Elective	
Course Classification	Engineering Topics	
Credit / Contact Hour per Week	3 / 150 minutes per Week	
Course Description	This course discusses one of the software technology platforms known as Web technology. This course will discuss a collection of previous and current research findings that became the forerunner of web technology evolution. This course will provide knowledge on the background of web technologies, web implementation on the community, and technical skills to develop and implement web technologies in case studies to be studied in this course.	
Prerequisites Courses	-	
Covered Student Outcome	<b>Development of Engineering Solution (b)</b> <b>Engineering Design (c)</b> <b>Modern Tools Utilization (e)</b>	
<b>Learning Mapping</b>		
Code	Learning Outcome	Student Outcome
LO1	Students are able to explain and understand the various development of web technology and its difference in every generation.	Development of Engineering Solution
LO2	Students are able to propose the process of making web application development in engineering.	Development of Engineering Solution
LO3	Students are able to explain about web interface technology.	Engineering Design
LO4	Students are able to reveal various steps and approaches in integrating the concept of programming Object Oriented with web technology interface.	Development of Engineering Solution
LO5	Students are able to name and explain the different types of validation and apply it in the web programming code.	Modern Tools Utilization
LO6	Students are able to explain the concept and technical data access through the web.	Modern Tools Utilization
Topic	<ol style="list-style-type: none"> <li>1. Web Application Basic Framework</li> <li>2. Web Application Software Engineering</li> <li>3. Web Interface Technology</li> <li>4. Web Application Encoding</li> <li>5. Diagnosis of Web Applications</li> <li>6. Web Input Validation</li> <li>7. Web Control and Navigation</li> <li>8. Middle Semester Exam</li> <li>9. Accessing Data via Web</li> <li>10. Manipulation of Data Through the Web</li> <li>11. XML and Web</li> <li>12. Security On Web Applications</li> <li>13. Membership and Profiles</li> <li>14. Contemporary Web Technology</li> <li>15. Reusable Web Development</li> <li>16. Final Exam Semester</li> </ol>	
<b>Direct Assesment</b>		

	<b>Direct Assessment Plan</b>	<b>Measured Learning Outcome</b>
	Mid Exam	LO1, LO2
	Final Exam	LO3, LO4
	Homework	LO5
	Presentation	LO6
Indirect Assessment	Questionnaire and direct communication	
References	<ol style="list-style-type: none"> <li>1. Stephen Walther; Kevin Hoffman; Nate Dudek. 2010. ASP.NET 4 Unleashed. Sams.</li> <li>2. Shepherd, George. 2010. Microsoft® ASP.NET 4 Step by Step. Microsoft Press</li> <li>3. Adrian W. West. 2012. Practical HTML5 Projects. Apress</li> <li>4. Lyza Danger Gardner; Jason Grigsby. Head First Mobile Web. Oreilly Media, Inc.</li> <li>5. Ferdiana, R. 2008. Pengembangan Aplikasi Web dengan Visual Web Developer Express 2008 101, Elex Media. Indonesia.</li> <li>6. MacDonald, Matthew. 2012. Beginning asp.net 4.5 in c#. Apress. USA.</li> </ol>	