

		<b>Universitas Negeri Surabaya</b> <b>Faculty of Engineering,</b> <b>Electrical Engineering Undergraduate Study Program</b>					<b>Document Code</b>																		
<b>SEMESTER LEARNING PLAN</b>																									
<b>Courses</b>		<b>CODE</b>	<b>Course Family</b>		<b>Credit Weight</b>		<b>SEMESTER</b>	<b>Compilation Date</b>																	
Computer Programming Practicum		2020101375			T=1	P=0	ECTS=1.59	2 July 17, 2024																	
<b>AUTHORIZATION</b>		<b>SP Developer</b>		<b>Course Cluster Coordinator</b>			<b>Study Program Coordinator</b>																		
		.....		.....			Dr. Lusia Rakhmawati, S.T., M.T.																		
<b>Learning model</b>	Project Based Learning																								
<b>Program Learning Outcomes (PLO)</b>	PLO study program that is charged to the course																								
	Program Objectives (PO)																								
	PLO-PO Matrix																								
	<table border="1" style="margin: auto;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">P.O</td> <td colspan="16"></td> </tr> </table>									P.O															
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<b>Short Course Description</b>	This course teaches: Basic concepts of visual programming in C#,																								
<b>References</b>	<b>Main :</b>																								
	<ol style="list-style-type: none"> <li>1. Tony Gaddis dkk, Starting Out with Visual C# 2012, Third Edition, Boston, Pearson .</li> <li>2. Benyamin Perkins, Jacob V H, Jon D.Reid, Beginning Visual C# 2015 Programming , Canada, John Wiley.</li> <li>3. Karli Watson, dkk, Beginning Visual C# 2012 Programming, Canada, John Wiley.</li> <li>4. Andre Stellman, Jennifer Greene, Head First C#, Second Edition, USA, O 19Reilly.</li> <li>5. Barbara Doyle, C# Programming From Problem Analysis to Program Design, Fourth Edition , Boston, Cengage Learning</li> <li>6. Paul Deitel, Harvey Deital, Visual C# 2012 How To Program, Fifth Edition , Boston, Pearson</li> </ol>																								
	<b>Supporters:</b>																								
<b>Supporting lecturer</b>	Pradini Puspitaningayu, S.T., M.T., Ph.D. Parama Diptya Widayaka, S.ST., M.T.																								
<b>Week-</b>	<b>Final abilities of each learning stage (Sub-PO)</b>	<b>Evaluation</b>		<b>Help Learning, Learning methods, Student Assignments, [ Estimated time]</b>		<b>Learning materials [ References ]</b>	<b>Assessment Weight (%)</b>																		
		<b>Indicator</b>	<b>Criteria &amp; Form</b>	<b>Offline ( offline )</b>	<b>Online ( online )</b>																				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)																		

1	Students are able to understand the objectives of the course and apply Visual Studio.NET and Database programming	- Explaining Learning Contracts and RPS - Explaining Database Integration with the .Net Framework - Implementing query creation and relationships between tables		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%
2	Students are able to apply Database programming	- Explaining database concepts - Explaining ADO.NET - Creating databases and tables - Writing SQL commands - Creating application connections to databases Implementing dataGridView		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%
3	Students are able to apply Database programming	- Explaining database concepts - Explaining ADO.NET - Creating databases and tables - Writing SQL commands - Creating application connections to databases Implementing dataGridView		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%
4	Students are able to apply database programming to simple case studies	- Display data from the database - Create an application to insert data - Implement dataGridView to display data Create a CRUD application with C#		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%
5	Students are able to apply database programming to simple case studies	- Display data from the database - Create an application to insert data - Implement dataGridView to display data Create a CRUD application with C#		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%
6	Students are able to apply classes and objects to databases	- Explaining ORM Classes and Objects - Explaining constructors and destructors - Explaining ORM - Practice creating a simple ORM		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%

7	Students are able to apply classes and objects to databases	- Explaining ORM Classes and Objects - Explaining constructors and destructors - Explaining ORM - Practice creating a simple ORM		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%
8	Students are able to implement and create controller classes	- Explaining OOP (Object Oriented Programming) - Explaining the concept of controllers - Practice creating controller classes		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%
9	Students are able to implement and create controller classes	- Explaining OOP (Object Oriented Programming) - Explaining the concept of controllers - Practice creating controller classes		Scientific approach, lectures, questions and answers, discussions and problem-based learning 2 X 50			0%
10							0%
11							0%
12							0%
13							0%
14							0%
15							0%
16							0%

#### Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
		0%

#### Notes

- Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
- The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
- Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- Indicators for assessing** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities or performance of student learning outcomes accompanied by evidence.

6. **Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
7. **Forms of assessment:** test and non-test.
8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.