

**ELECTRONICS AND COMMUNICATION ENGINEERING  
DEPARTMENT  
Lesson plan**

<b>Name of Faculty</b>	<b>Expert</b>
<b>Discipline</b>	<b>Electronics And Communication Engineering</b>
<b>Semester</b>	<b>Third Sem (3rd sem)</b>
<b>Subject</b>	<b>PROGRAMING IN C</b>
<b>Lesson Plan Duration</b>	<b>From Sep 2023</b>
<b>Work Load [Theory + Practical] Per Week</b>	<b>[03+04]</b>

<b>Week</b>	<b>Day</b>	<b>Theory Topic/ Assignment/ Test</b>	<b>No.</b>	<b>Practical</b>
<b>1<sup>st</sup></b>	<b>1</b>	<b>UNIT 1: Steps in development of a program.</b>	<b>1.</b>	<b>Programming exercises on executing and editing a C program.</b>
	<b>2</b>	<b>Flow charts, Algorithm development.</b>		
	<b>3</b>	<b>Programme Debugging, I/O statements.</b>		
<b>2<sup>nd</sup></b>	<b>1</b>	<b>REVISION</b>	<b>2.</b>	<b>Programming exercises on defining variables and assigning values to variables.</b>
	<b>2</b>	<b>Constants, variables and data types.</b>		
	<b>3</b>	<b>Operators &amp; Expressions.</b>		
<b>3<sup>rd</sup></b>	<b>1</b>	<b>Unformatted and Formatted IOS, Data Type Casting</b>	<b>3.</b>	<b>Programming exercises on arithmetic and relational operators.</b>
	<b>2</b>	<b>Decision making with IF – statement.</b>		
	<b>3</b>	<b>IF – Else and Nested IF.</b>		
<b>4<sup>th</sup></b>	<b>1</b>	<b>While and do-while, for loop, Break.</b>	<b>4.</b>	<b>Programming exercises on arithmetic expressions and their evaluation.</b>
	<b>2</b>	<b>Continue, goto and switch statements.</b>		
	<b>3</b>	<b>REVISION</b>		
<b>5<sup>th</sup></b>	<b>1</b>	<b>REVISION</b>	<b>5.</b>	<b>Programming exercises on formatting input/output using printf and scanf and their return type values.</b>
	<b>2</b>	<b>UNIT 2: Introduction to pointers.</b>		
	<b>3</b>	<b>Introduction to Address operator.</b>		
<b>6<sup>th</sup></b>	<b>1</b>	<b>Declaring and initializing pointers, Single pointer.</b>	<b>6.</b>	<b>Programming exercises using if statement.</b>
	<b>2</b>	<b>Introduction to functions, Function Declaration.</b>		
	<b>3</b>	<b>Introduction to calling, definition.</b>		
<b>7<sup>th</sup></b>	<b>1</b>	<b>Parameter Passing, Call - by value/reference.</b>	<b>7.</b>	<b>Programming exercises using if – Else.</b>
	<b>2</b>	<b>Global and Local Variables.</b>		
	<b>3</b>	<b>REVISION</b>		
<b>8<sup>th</sup></b>	<b>1</b>	<b>REVISION</b>	<b>8.</b>	<b>Programming exercises on switch statement.</b>

	2	<b>UNIT 3: Introduction to Arrays</b>		
	3	<b>Array Declaration, Length of array</b>		
<b>9<sup>th</sup></b>	1	<b>Single and multi-dimensional array</b>	<b>9.</b>	<b>Programming exercises on do – while, statement.</b>
	2	<b>Arrays of characters</b>		
	3	<b>Introduction of Strings</b>		
<b>10<sup>th</sup></b>	1	<b>String declaration and definition</b>	<b>10.</b>	<b>Programming exercises on for – statement.</b>
	2	<b>String related function i.e. strlen, strcpy, strcmp</b>		
	3	<b>Passing an array to</b>		
<b>11<sup>th</sup></b>	1	<b>function Pointers to an array and strings.</b>	<b>11.</b>	<b>Simple programs using pointers.</b>
	2	<b>REVISION</b>		
	3	<b>CLASS TEST/ ASSIGNMENT</b>		
<b>12<sup>th</sup></b>	1	<b>UNIT 4: Declaration of structures</b>	<b>12.</b>	<b>Programs on one-dimensional array and two-dimensional array.</b>
	2	<b>Accessing structure members</b>		
	3	<b>Structure Initialization</b>		
<b>13<sup>th</sup></b>	1	<b>Pointer to a structures</b>	<b>13.</b>	<b>Programs for putting two strings together. (ii) Programs for comparing two strings.</b>
	2	<b>Unions</b>		
	3	<b>REVISION</b>		
<b>14<sup>th</sup></b>	1	<b>Opening and Closing of File</b>	<b>14.</b>	<b>Simple programs using functions, structures and unions.</b>
	2	<b>Modes of Accessing Files</b>		
	3	<b>Reading and Writing in the File</b>		
<b>15<sup>th</sup></b>	1	<b>REVISION</b>	<b>15.</b>	<b>Program on Reading and Writing data to a file.</b>
	2	<b>REVISION OLD QUESTION PAPER</b>		
	3	<b>REVISION OLD QUESTION PAPER</b>		