National Institute of Electronics and Information Technology

Short Term Courses

Group Code: PRGL  Group Name: Programming Languages

Course Code: CT01  Course Name: Certificate Course in Programming through C Language

Objective of the Course:

The course is designed to provide programming fundamentals using C

Learning Outcomes:

After the completion of the course, students will be able to:-

Understand the basic terminology used in computer, write, compile and debug programs in C language and use different data types in a computer program.

Duration of the Course (in hours)  80 hrs

Minimum Eligibility Criteria and pre-requisites, if any  Basic Knowledge of computer
## Outline of Course

<table>
<thead>
<tr>
<th>S. No</th>
<th>Topic</th>
<th>Minimum No. of Hours</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to C</td>
<td>02 hrs</td>
</tr>
<tr>
<td>2</td>
<td>Data types &amp; operator</td>
<td>06 hrs</td>
</tr>
<tr>
<td>3</td>
<td>Logical &amp; looping constructs</td>
<td>15 hrs</td>
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<tr>
<td>4</td>
<td>Functions</td>
<td>06 hrs</td>
</tr>
<tr>
<td>5</td>
<td>Arrays &amp; Pointers</td>
<td>25 hrs</td>
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<tr>
<td>6</td>
<td>Structures &amp; union</td>
<td>10 hrs</td>
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<tr>
<td>7</td>
<td>Standard library &amp; header files</td>
<td>06 hrs</td>
</tr>
<tr>
<td>8</td>
<td>File Handling Operations</td>
<td>10 hrs</td>
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**Theory / Lecture Hours:** 40 hrs  
**Practical / Tutorial / Lecture Hours:** 40 hrs  
**Total Hours:** 80 hrs

### Recommended Hardware:
- Intel Core 13 Processor/O5 Processor/Dule Core
- 2 GB RAM
- 500 GB Hard disk
- DVD Writer
- LCD/LED Monitor
- Keyboard (Normal)/Multimedia Keyboard
- Optical Mouse
- LAN Card

### Recommended Software:
- Turbo C++ ver.3.0
- Visual C++ ver. 6.0
- LINUX gcc compiler

**Books recommended for reference and reading:**
"Problem solving with C"
By M.T.Somashekara(Phi)

**Suggested Fees (INR):** Rs.4000/-