



National Institute of Technical Teachers
Training and Research Chandigarh
(Ministry of Education, Government of India)

Computer Science & Engineering Department

4 to 6 Months Industrial Training Programme for Students

Title: Application Development, Data Analytics & Security using Open Source

Mode: Online/Offline

Structure: Hands-on Training + Project Development

Tentative Topics to be covered

➤ **Application Development**

- Introduction to Web Based Designing, Standards & Guidelines
- Web page designing using HTML, Template Designing
- Form Input validations using JavaScript, JQuery
- Styling of Web Pages using CSS, Editing Web Graphics
- Web server Installation
- Programming in PHP through Command line
- PHP Variables, Operators, Loops
- Web designing using HTML & Integration with PHP
- Form Handling using PHP, AJAX
- MySQL Database, Create, Insert, Retrieve & Update
- Dynamic Website designing using PHP & MySQL
- Responsive Page Designing, Bootstrap
- Sending E-mail and SMS using Programming
- Payment Gateway Integration Programming

➤ **Website Security**

- Introduction to Website Security & Audit
- OWASP Top 10 Risks
- Website Vulnerability Assessment Tools
- Secure Coding & Security Measures
- Word Press CMS for dynamic website creation
- Customizing Word Press websites using PHP

➤ **Python Programming**

- Introduction to Python Programming
- Variable & Constants, Data Types, Strings & Operators
- Decision Control Structures, loops
- Data structures: Lists and Tuples, Dictionaries, Sets
- Functions & Arrays, Python Modules
- OOPS Concept: Classes & Object, Inheritance
- File Handling
- Error & Exception Handling

➤ **Data Analytics & Machine Learning**

- Introduction to Data Analytics
- Data Visualization
- Data Pre-processing and Normalization Techniques
- Data Analysis using Linear Regression
- Introduction to Machine Learning
- Classification using Supervised Learning & Unsupervised Learning

Fee: Rs.36,000 + 18% GST for 6 Months
Rs.24,000 + 18% GST for 4 Months (@ Rs.6000 + GST per month)

Registration Link: <https://nitttrchd.ac.in/studentcorner/stdtrg.php>

Note:

1. Fee includes only Training Cost
2. Certificate will be provided to the students who successfully complete the Training & Project Development
3. Daily 2 hrs classes will be held. 100% attendance is compulsory.
4. A very limited Hostel accommodation may be provided (if available) to those students who are coming from far off areas or from other States on payment basis
5. If any student use Institute Mess then charges will extra as per the Institute norms.