

### NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL – 506 004, Telangana – INDIA DEPARTMENT OF COMPUTER SCIENCE& ENGINEERING



Campus Recruitment Training (Pre-Placement Training Programme (PPTP-2019) (13<sup>th</sup> May 2019 to 6<sup>th</sup> July 2019)

#### **Preamble:**

In the last 10 years, due to the advances in Information Technology (IT) and growing demand in customers' expectations to get more for less, there has been an enormous burden on both the academic institutions producing high quality of students to ensure 100% placements and the industry to get the right students. In our institution, a good number of students is getting placements through the Training & Placement Sections (T&P), whereas very less number of students from the weaker section are employable, with this motivation we are proposing a Campus Recruitment Training (Pre-Placement Training) for the needy including SC and ST students of National Institute of Technology-Warangal, under Equity Action Plan (EAP) of TEQIP-III.

### **Objectives:**

The objective of the programme is to make our B.Tech/M.Tech/MCA /MBA/M.Sc students belong to the needy including SC and ST are employable by imparting high-quality training in pragmatic with special emphasis on Industry needs. In this program comprise a rigorous training on Soft Skills and computer programming (C/C++, JAVA, Web Technologies, Databases, Al&Machine Learning open source tool etc.,) are included in tune with dynamically changing requirements of the Information Technology (IT) Industry. The Pre-Placement Training Program is a fully residential programme, spread over 8 weeks during the summer vacation.

#### **Benefits and Outcome:**

- Enhance and improve employable skills.
- The ability to communicate effectively with coworkers, employers, clients and customers, friends and family members.
- Gaining programming skills as per the industry needs.
- The opportunity to enhance organizational, communication and programming skills.
- Extensive practice sessions, Mock Tests and Mock Interviews keeps students ready for campus placements.

#### **Curriculum:**

The curriculum consists of Soft Skills, Industry skills by specialized teams from industries/consultancies. Faculty of NIT Warangal and in other reputed institutes teach Basics of business, project appraisal & cost accountancy, Introduction to Technology elements — Algorithms, Data Structures, Programming in C/C++, Web technologies, basics of OOP, OS, DBMS, Software Engineering, Network Programming &Security, Al&Machine Learning, Big Data and Analytical tools. This was designed by taking inputs from alumni and industries.



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#### **Detailed Syllabus:**

<u>Soft Skills:</u> Emotional Intelligence -Presentation Skills-Time Management-Interpersonal Skills-Leadership & Management Skills - Communication Skills-Problem Solving

#### **Aptitude & Reasoning:**

Numbers and Number Series-Percentage-Time and Work-Time and Distance- Average- Problem on Ages- Profit and loss-Pipes and Cisterns- Problem on Trains, Boats and Streams, Alligation or Mixture-Logarithms- Problems on Calendar and Clocks- Probability- Permutations and Combinations-Blood Relationship- Coding and Decoding-Syllogism-Data Sufficiency-Bar, Pie and Line chart-Data Interpretations-Next number in the series- Paragraph Based Puzzles-Seating Arrangement-Miscellaneous Puzzles-Reading Comprehension paragraphs-Jumbled Paragraphs Questions-Vocabulary- Antonyms and Synonyms-Group Discussion-Mock Interviews.

**Programming:** C/C++ **Programming:** Tokens-I/O statements-Control Structures-Functions-Arrays-Structures-Pointers-Files. OOP: Objects-Classes-Inheritance-Polymorphism. JAVA: Basics-Strings-Arrays-File handling-Collection-Packages.

**Algorithms & Data Structures:** Algorithm-Analysis-Time Complexity-Linear Data Structures-Nonlinear Data Structures-Sorting and Searching-Hashing-Indexing.

**Databases:** Database Management Systems Architecture- SQL-Relational Algebra-Functional Dependencies-Keys-Normalization-Transaction Processing- Query Processing- Database Recovery-Security& Authorization.

**Web Technologies:** HTML: Tags- Tables-Frames-Forms, Java Script: Objects-Functions-Arrays-CSS-Event Modeling, PHP: Client Side Scripting-Server Side-Database connectivity.

**Operating Systems:** Operating System Structures- Processes and Threads-deadlocks-CPU Scheduling-File System.

**Software Engineering:** Software development models-Software Testing.

Network programming and Security: Network Architecture-UDP-TCP/IP Protocol

**Big Data, Data Science and Analytical Tools:** Basics of Big Data- Basics of Analytics- Basics of Data Science-Data Science/Analytics Project development Phases- Fundamentals of R Programming & Python Programming.

**AI and Machine Learning Tools:** Basics of AI and Machine Learning- Machine learning using R and Python.



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## **Eligibility:**

Pre-final year B.Tech./M.Tech/MCA/MBA/M.Sc.(All Branches) students of NIT Warangal, without backlog courses.

- 1. All SC/ST/PWD (No CGPA constraint).
- 2. Open &OBC- Girls (CGPA below 7.5)
- 3. Open &OBC- Boys (CGPA below 6.5)

#### **Selection:**

Selection of the candidates will be done on the basis of academic performance and/or written test. A maximum number of seats are limited to 100 only.

# **Training Fee Particulars:**

No Registration Fee.

#### **Food and Accommodation:**

Accommodation is arranged for outstation students in the institute hostels. Breakfast, Lunch, and Dinner (In the institute mess) and Tea & Snacks would be provided during the training.

## How to Apply:

Eligible students may apply by filling the online (Click here: google form) application form on or before 1<sup>st</sup> April, 2019.

# **Training Coverage:**

This programme gives training on both theory and practical classes for a period of EIGHT weeks with 15 hours of practical classes per week and 27 hours of theory classes per week.

\*\* For any queries please contact Coordinators \*\*

Dr. Tene Ramakrishnudu

Coordinator PPTP-2019

Email: trk@nitw.ac.in

9866876842

Dr. A. Benerji Babu Co-Coordinator PPTP-2019

E-mail: abenerji@nitw.ac.in

9985359580