NIELIT, CHENNAI
ISTE COMPLEX, 25, GANDHI MANDAPAM ROAD, CHENNAI

Course Prospectus

Name of the Group: Data Science

Course Name: PG Diploma in Data Science & Analytics

Course Code: DS 500

Duration: 880 Hours, 48 Weeks (4 Hours per day)

Last Date of Registration: 20-09-2018

Admission Test: 22-09-2018, 24-09-2018, 25-09-2018

Display of Provisional Selection List: 26-09-2018

Payment of first instalment fee: 28-09-02018

Counselling & Admission: 28-09-2018

Start Date: 01-10-2018

Preamble: Data Science refers to extraction of knowledge from large volumes of data that are structured or unstructured, which is continuation of data mining and predictive analytics. It involves different categories of analytical approaches for modelling various types of business scenarios and arriving at solution and strategies for optimal decision-making in marketing, finance, operations, organizational behaviour and other managerial aspects. This new field of study breaks down into a number of different areas, from constructing big data infrastructure and configuring the various server tools that sit on top of the hardware, to performing the analysis and developing the right transformations to generate useful results.
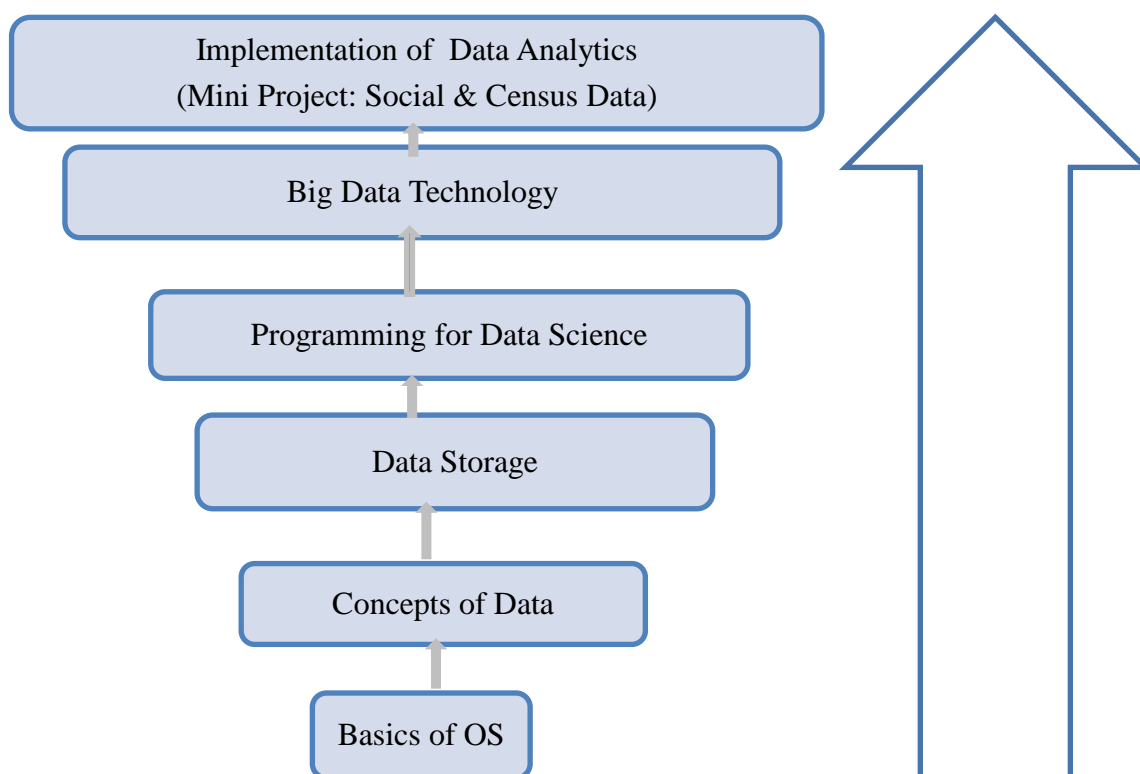
Objective of the Course: The **Post Graduate Diploma in Data Science & Analytics** a unique 12 month (880 Hours) program offered by NIELIT Chennai is an excellent blend of knowledge and practice in the field of Data Science and its industrial applications. The program is targeted for creating qualified Data Science professionals. The Program also offers six weeks of hands-on real – life analytical projects for participants to get equipped with strong analytical and programming which makes them highly demanding and employable on completion of the program.

The objective of this program is to make Data Scientists and Data Analysts. There is a huge demand for resources skilled in Data Science. The MCKINSEY Global Institute has predicted that in forthcoming years by 2020, the world will face a shortage of 38-40 million highly skilled manpower with deep analytical skills that can leverage data analysis to make effective decisions for their organizations. So it is quite obvious that existing resources along with new candidates who are interested in perusing career in this field needs to be trained. Our objective is to create a

pool of talent who can meet this demand. This course is meant to sensitize students for computational statistics applications and usage as well as provide hands-on experience with solving real world data science issues.

Outcome of the Course: On completion of the Course, the Participants will learn the concept of Data Analytics using open source statistical tools like R, Python and some very good visualization tools and techniques. They will be able to implement industry oriented Data Analytics Project.

Full Flow of Course

Course Structure

This course contains total six modules. After completing the first five modules, the students have to do a 120 Hours project using any of the topics studied to earn the PG Diploma.

DS 500	Module Name	Duration (in Hours)
DS 501	System Administration under Linux Operating System & Advance Shell Programming	120
DS 502	Data Analytics using R	120
DS 503	Data Storage Technique & Data Warehousing using MySQL	120
DS 504	Object Oriented Programming : Java & Python	200
DS 505	Big Data Technology using Hadoop and Spark	200
DS 506	Mini Project (Implementation of Data Analytics)	120
Total Duration		880

Course Fees

General Candidates: Course fee is Rs. 82,600/- (including GST)
[Fee: Rs.70, 000/- , GST: Rs. 12,600/- (18 % of Fee)]

SC/ST Candidates

Tuition Fees are waived for eligible SC/ST students under the reservation policy (SC: 15%, ST: 7.5% of total seats). However they are required to remit an amount of Rs. 7,000/- as advance caution/security deposit. This amount will be considered as caution/security deposit and will be refunded after successful completion of the course. If the student fails to complete the course successfully this amount along with any other caution/security deposits will be forfeited. Any other SC/ST candidates admitted over and above the reservation policy have to pay complete fee.

Module wise Course Fee

Modular admission is also possible for following modules. Participants should meet necessary eligibility criteria and pre-requisites.

DS 500	Module Name	Duration (in Hours)	Pre-requisite	Fee in Rs.
DS 501	System Administration under Linux Operating System & Shell Programming	120	NA	10,000+GST (11,800/-)
DS 502	Data Analytics using R	120	NA	14,000+GST (16,520/-)
DS 503	Data Storage Technique & Data Warehousing using MySQL	120	NA	12,000+GST (14,160/-)
DS 504	Object Oriented Programming : Java & Python	200	NA	22,000+GST (25,960/-)
DS 505	Big Data Technology using Hadoop and Spark	200	Good Knowledge of Java & Python	22,000+GST (25,960/-)

Registration Fee (non-refundable)
SC/ST: Rs.500/-.
Others: Rs.1000/-.
However the above registration fee shall be refunded on few special cases as given below
- ✓ Course postponed and new date is not convenient for the student.
- ✓ Course cancelled.

Eligibility

- ✓ BE/B.Tech/MCA/M.Sc/DOEACC B Level with Knowledge of Statistics and Computer Programming.
- ✓ Candidates who have appeared in the final semester examination and awaiting results may also apply. However they have to submit proof of passing all semester examination/final degree at the time of completion of the course. Otherwise no certificate will be issued.

✓ On the date of counselling/admission, the candidate must produce the original mark lists up to the last semester/year of examination.

Number of Seats   30 (Thirty)

How to Apply

Candidates are advised to download the Registration from our website www.nielit.gov.in/chennai. After filling the form with all documents and fees, it can be submitted to NIELIT Chennai office in person or through post before staring of the course. Payment towards non-refundable Registration and Course fee can be paid through any one of the following modes:

✓ DD drawn from a nationalized bank (preferably SBI) in favour of "NIELIT Chennai" payable at Chennai.
✓ Online transaction: Account No: 31185720641 Branch: Kottur (Chennai), IFS Code: SBIN0001669.
✓ Pay through Nationalized Bank Debit Card (Service charges applicable)
  Note: The Institute will not be responsible for any mistakes done by either the bank concerned or by the depositor while remitting the amount into our account.

Last date of Registration: 20th September, 2018

Registration Procedure
All interested candidates are required to fill the Registration form with registration fees before 20th September, 2018 with all the necessary following documents.
  ✓ Original and self-attested Copies of Proof of Age, Qualifications, etc.
  ✓ One passport size photograph and one stamp size photograph for identity card.
  ✓ Self-attested copy of Govt. issued photo ID card (AADHAR Identity proof must for SC/ST Candidates).
  ✓ Self-attested copy of community certificate (if availing SC/ST fee concession)

Note: Working days are from Monday to Friday (9.00 am to 5.30 pm.)

Selection Criteria of candidates

The selection to the course shall be based on the following criteria:

Selection of candidates will be based on their marks in the qualifying examination and the on-line admission test conducted by NIELIT subject to eligibility and availability of seats.

Test

- ✓ Duration: 30 Minutes, Mode: Online (MCQ)
- ✓ Venue: NIELIT Chennai
- ✓ **Test Date**: **22-09-2018,24-09-2018,25-09-2018**
- ✓ **Test Syllabus**
    - o Aptitude (20%)
    - o Logical reasoning (20%)
    - o Fundamentals of Computer (20%)
    - o Programming Logic (40%)
- ✓ The first list of Provisionally Selected Candidates on the basis of entrance test will be intimated on **26-09-2018** by email only. In case of vacancy, an additional selection list will be prepared and the selection will be intimated by email only.
- ✓ All selected candidates have to pay Rs 15,000/- on or before **28-09-2018** by direct payment into our account from any bank where core banking facility is available or through Demand draft. Selected candidates are requested to send the proof of remittance of fee as email to trng.chennai@nielit.gov.in.

Counselling/Admission: All candidates provisionally selected and paid the fees (full or first instalment) will have to be present personally for counselling and admission on **28-09-2018** with all the necessary documents (originals and attested copies). Working days are from Monday to Friday. Admission timings are from 9.30 am to 4.00 pm

Spot Admission: Unfilled/vacant seats are filled through spot admission. Spot admission (if open) will close within 05 (five) days of Counselling/Admission of a particular course. On spot admission students should provide an undertaking saying that he/she is fully aware that he/she missed so much days of class and will not ask for extra classes or further extension of course.

Admission Procedure: Students who have been selected for test test/interview/counselling/admission are required to report to the Institute on the prescribed day by 9:30 hrs along with the following documents

Discontinuing the course

- ✓ No fees (including the caution deposit) under any circumstances, shall be refunded in the event of a student discontinuing the course. No certificate shall be issued for the classes attended.

✓ A student can however, be eligible for module certificates which he/she has successfully completed provided, he/she has paid the entire course fees. SC/ST candidates availing fee concession are eligible for module certificates only after completing the full course with required attendance.

✓ SC/ST candidates availing fee concession discontinuing the course in between are eligible for modular certificates for the module for which they have successfully completed the course provided they pay the modular fee.

Course Timings: This program is a practical oriented one and hence there shall be more lab than theory classes. The classes and labs are from 9.30 am to 1:30 pm and Monday to Friday.

Fee Payment

✓ **Total Fee: Rs. 82,600/-** (Rupees Eighty Two Thousand Six hundred only including GST, Tuition Fee: Rs. 70,000/- GST: Rs. 12,600/-).

✓ **Payment Schedule :** The Fee can be paid in one instalment or in 5 instalments as given below:

Instalment No	Date	Amount (In Rs.)
1	28-09-2018	15,000.00
2	01-11-2018 to 06-11-2018	16,900.00
3	01-01-2019 to 04-01-2019	16,900.00
4	04-03-2019 to 08-03-2019	16,900.00
5	06-05-2018 to 10-05-2018	16,900.00

✓ For Individual Module Complete Fee is to be paid at the time of admission.

   Payment Mode

   ✓ DD drawn from a nationalized bank (preferably SBI) in favour of "NIELIT Chennai" payable at Chennai.

   ✓ Online transaction: Account No: 31185720641 Branch: Kottur (Chennai), IFS Code: SBIN0001669.

   ✓ **POS :** Credit Card, Debit Card etc. accepted at Centre (Service charges applicable)

   Note: The Institute will not be responsible for any mistakes done by either the bank concerned or by the depositor while remitting the amount into our account

Location and how to reach: NIELIT Chennai is located at Gandhi Mandapam Raod, Kotturpuram, Chennai (Landmark: Opp. To Anna Centenary Library)

NIELIT, CHENNAI
ISTE COMPLEX, 25, GANDHI MANDAPAM ROAD, CHENNAI

Address: National of Electronics and Information Technology

ISTE Complex, No. 25, Gandhi Mandapam Road, Chennai – 600025

E-mail: trng.chennai@nielit.gov.in/Phone: 044-24421445

Contact Person: Sanjeev Kumar Jha, Mobile: 7765803105

Course enquiries

Students can enquire about the various courses either on telephone or by personal contact between 9.15 A.M. to 5.15 P.M. (Lunch time 1.00 pm to 1.30 pm) Monday to Friday.

Placement: Placement assistance is provided to students who qualify our courses.

Important Dates

- A. **Date of Advertisement: 05-09-2018**
- B. **Last Date of Registration: 20-09-2018**
- C. **Admission Test: 22-09-2018 , 24-09-2018,25-09-2018**
- D. **Provisional Selection List: 26-09-2018**
- E. **Payment of first instalment fee : 28-09-02018**
- F. **Counselling & Admission: 28-09-2018**
- G. **Commencement of classes: 01-10-2018**

Examination & Certification

- ✓ Certification Body : Examination Section, NIELIT Chennai
- ✓ PG Diploma Certificates will be issued after successful completion of all the modules including mini project. For getting PG Diploma certificate a candidate has to pass each module individually. At least 75 % marks are essential for appearing in examination. Each module consists of 100 Marks. Examination scheme for each module is as follows:

Examination

Theory

- ✓ **Mode**: Online and Multiple Choice Question
- ✓ **Total Marks:** 50
- ✓ **Number of Questions:**50
- ✓ **Duration:** 01 Hour
- ✓ **Negative Marking:** 25%

Practical
- ✓ **Total Marks**: 30
- ✓ **Number of Questions**: 02
- ✓ **Duration**: 01 Hour

Class Performance
- ✓ Total Marks:10
- ✓ Attendance:10

Grading Scheme

Grade	Total Marks
S	85% and above.
A	75% – 84%
B	65% – 74%
C	55% – 64%
D	50% – 54%
Fail	< 50%

Final Grading as per above grading scheme will be given on the basis of total marks obtained in all modules. For last module (DS 506) grade will be given on the basis of project demonstration.

Course Contents: Please click here to see the Course Syllabus.