



SWAMI VIVEKANAND SUBHARTI UNIVERSITY
SUBHARTI INSTITUTE OF TECHNOLOGY & ENGINEERING

(Approved by AICTE)

Subhartipuram, NH-58 Delhi-Haridwar Bypass Road, Meerut -250 005

Ph.: 0121-2439157, Ext. 2222, 2221, Fax: 0121- 2439108

E-mail: principal.site@gmail.com, principal.engg@gmail.com, Website : www.subharti.org



R/NO: SITE/CSE/VA/2018/1(C)

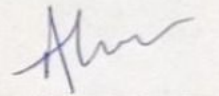
Department of Computer Science Engineering

Date: 29/08/18

NOTICE

The department is organizing a Value Added Course on 'R Programming' from 30th September '18 to 9th December'18. The students of V semester can join the course by filling the registration form and submitting it before 20th September'18.

Coordinators are Er. Garima Jain & Er. Diksha Maurya


H.O.D.(CSE)

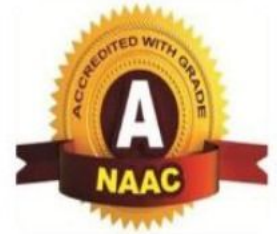
CC: The Principal, SITE (for information)



Subharti Institute of Technology and Engineering
Swami Vivekanand Subharti University, Meerut
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2. REGISTRATION FORM:

REGISTRATION ELIGIBILITY

For all students of CSE, no registration fees.

HOW TO REGISTER

Interested participants should send their duly completed registration form through their respective Head of the Department to Dr. Udai Shankar, HoD, CSE for registering their names as a participant in the "VALUE ADDED COURSE ON R" organized by Department of CSE, SITE, SVSU, Meerut.

IMPORTANT DATES

Last date for receipt of application:
20th September 2018
Last date for acceptance notification:
25th September 2018
Last date for receipt of confirmation
from the applicants 27th
September 2018, before 4 pm

VENUE

Subharti Institute of Technology and Engineering, SVSU, Meerut

PATRONS

Dr. Bikas Prasad, Principal, SITE
Dr. Udai Shankar, HoD, CSE

CONVENER

Er. Amit Kishor, CSE

COORDINATOR (S)

Er. Garima Jain, Asst Prof(CSE), SITE
Mob:-919971164620

Er. Diksha Maurya, Asst Prof(CSE), SITE
Mob:-917454876688

ORGANIZING COMMITTEE

Er. Amit Kishor, Asst Prof(CSE), SITE

Er. Archita Bhatnagar, Asst Prof(CSE), SITE

Er. Surabhi Agarwal, Asst Prof(CSE), SITE

Er. Ashutosh Shukla, Asst Prof(CSE), SITE

SUBHARTI INSTITUTE OF TECHNOLOGY
AND ENGINEERING, SWAMI VIVEKANAND
SUBHARTI UNIVERSITY

VALUE ADDED COURSE ON

R LANGUAGE



R Programming

30th September 2018

to

9th December 2018



Organized by

Department of
Computer Science and Engineering



SWAMI VIVEKANAND
SUBHARTI UNIVERSITY

M. Kishor



Subharti Institute of Technology & Engineering

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Department of Computer Science & Engineering/Information Technology

Value Added Course on

“R Language-2018”

Program Code
CSV-18

Course objective:-

- To aware and spread the knowledge about the Data Science and leverage the power of R.
- To provide hand-on experience of various statistical analysis, graphics representation, Data manipulation and reporting.

S.NO	Syllabus	Duration (hours)	L	T	P
1	R basics: Math, Variables, and Strings-Vectors and Factors-Vector operations	3	3	0	0
2	Data structures in R: Arrays & Matrices-Lists-Dataframes	3	3	0	0
3	R programming fundamentals: Conditions and loops-Functions in R-Objects and Classes-Debugging	4	2	0	2
4	Working with data in R: Reading CSV and Excel Files-Reading text files-Writing and saving data objects to file in R,Data Visualization (ggplot2 package), Data manipulation (dplyr, reshape2 packages)	6	2	0	4
5	Strings and Dates in R: String operations in R-Regular Expressions-Dates in R	3	1	0	2

Course outcome:-

- Installation R Studio and its packages
- Explore and understand how to use the R documentation
- Read Structured Data and data types into R from various sources
- Import the data sets online and offline both.
- Exploring the various packages of R
- Use of various functions across data
- Reshape data to support different analyses
- Dealing with missing data
- Manipulate strings in R
- Understand how to link data, statistical methods, and actionable questions
- Graphical representation for the results

SUMMARY:

VALUE ADDED COURSE- "R Language"

Course Motivation:

R is a programming language and free software environment for statistical computing and graphics supported by the R Foundation for Statistical Computing. The R language is widely used among statisticians and data miners for developing statistical software and data analysis. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS

It includes machine learning algorithm, linear regression, time series, statistical inference to name a few. Most of the R libraries are written in R, but for heavy computational task, C, C++ and Fortran codes are preferred.

Prerequisites: It is a basic understanding of Computer Programming terminologies

R is not only entrusted by academic, but many large companies also use R programming language, including Uber, Google, Airbnb, Facebook and so on.

Data analysis with R is done in a series of steps; programming, transforming, discovering, modeling and communicate the results

In a nutshell, R is a great tool to explore and examine the data. Elaborate analysis like clustering, correlation, and data reduction are done with R. This is the most crucial part, without a good feature engineering and model, the deployment of the machine learning will not give meaningful results.



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VALUE ADDED COURSES

SESSION : 2018-19

COURSE NAME: R LANGUAGE

COURSE CODE: ET-VA-16

LIST OF STUDENTS

S.NO	ENROLMENT NO.	NAME
1	1601010000193	ABHISHEK SHRIVASTVA
2	1601010000212	ANSHIKA GUPTA
3	1601010000216	ARCHIT GUPTA
4	1601010000240	HARSHIT RAI
5	1601010000248	KM OMAL
6	1601010000258	LUCKY BHAN SINGH
7	1601010000288	MOHIT KUMAR
8	1601010000295	NAVEEN JUGRAN
9	1601010000321	RAHUL KUMAR
10	1601010000356	SHAGUN TYAGI
11	1601010002454	SHIFA NAAZ
12	1601010000365	SHIVANI SAINI
13	1601010000373	SIDRA BATOOL
14	1601010000374	SUAIB ALI
15	1601010000384	TANYA RAJPUT